This volume of the Writing Center Review marks exciting changes for the publication as we reach our fourth year. As always, the Review presents examples of fine student writing on the Kent State University, Stark Campus. We have a selection of papers that demonstrate our students' abilities to write skillfully and originally with appropriate attention paid to the academic standards in their disciplines.

What is most interesting about this year's Review is the scope of writing presented here. The writing assignments contained within cover a variety of disciplines: Art, Biology, Communications, Education, English, French, Mathematics, Philosophy, U.S. History, and Political Science. Many of these disciplines (Art, Education, French, Philosophy, Political Science) have not been represented in the Review before. Furthermore, many of the selected writings were completed in response to varying assignments; for example, for the first time the Review is publishing an exam question response, a journal entry, and art created in response to students' poems, along with more traditional academic papers. At the same time, the Review editorial staff, composed of the Writing Center tutors, have created introductions to each writing selection that provide information about the class and the assignment for which the selection was written. Also, while we edited for sentence level errors, we left students' sentence constructions and language choices, for the most part, intact. We made this decision in order to accurately represent students' diverse voices, which are influenced by their class standings. As a result, readers will better understand the objectives of the selections and will also be able to examine the types of writing expected in Kent Stark's various disciplines. The editorial staff has also created a contributors list at the end of the journal, which offers biographical information about each writer and thoughts about each writer's future goals.

We would like to point out that we work hard to make the selection process objective and anonymous. All submissions are read by a committee composed of both faculty members and Writing Center staff members, and the submissions are ranked according to standards.
outlined by the Review editorial board. These standards are available to the public on our web page at http://stark.kent.edu/writing. The Writing Center Staff would also like to take time to thank the following faculty members who volunteered as readers of the submissions:

Denise Ben-Porath, Professor of Psychology
Andrew Burns, Professor of Chemistry
Virginia Carroll, Professor of English
Lee Fox-Cardemone, Professor of Psychology
Michael Caudill, Professor of Geology
John Carson, Professor of English
Leslie Heaphy, Professor of History
Robert Miltner, Professor of English
Jayne Moneysmith, Professor of English
Leslie Rolf, Instructor of English
Peter Smith, Instructor of Mathematics
Terry Sosnowski, Professor of English
Robert Sturr, Professor of English
Kathleen Torrens, Professor of Communication
Joe Wagner, Professor of English
Jen Welsh, Instructor of English

As the Director of the Writing Center, I would like to thank the tutoring staff, whose efforts created this journal. Due to the hard work of this year’s Writing Center staff, the Review became entirely student directed and run. Working as a team, the Writing Center staff directed the submission processes, selection committees, and editorial processes (each tutor worked with a writer to edit his/her paper), while also recreating the format of the Review itself — all of which they accomplished while maintaining their weekly hours tutoring in the Center. I am fortunate to be able to work with such talented tutoring students:

Tim Bailey - Selections Committee
Robert Berens - Co-Editor
Beth Crookston - Layout
Julie Fisher - Biographies and Introductions
Melissa Fry - Co-Editor
Jonathan Judy - Selections Committee
Cindi Lewis - Layout
Jacqui Mullane - Advertising/Art
Pam Wilfong - Standards/Submissions
A final note: as we pointed out in the last volume of the Review, much academic writing is written, graded, and returned, only to end up in a filing box somewhere. We are pleased to offer a place where Kent Stark students may share their scholarship with their peers and other members of the campus community. We are particularly pleased that we have met our own goals to create a journal representative of writing across the curriculum on campus. We hope that you enjoy seeing these works in print, and that Kent Stark students and faculty alike find themselves conversing about the models of academic writing offered here. Finally, we encourage the students of Kent State University, Stark Campus to submit their work in February 2000 for the next volume of the Writing Center Review!

Jeannette E. Riley  
Writing Center Director
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Dr. Robert Sturr asked his students in Major Modern Writers, British and U.S. (English 22073) to write an essay studying a chosen character. Here, Carolyn Adelman has examined Alice Munro’s The Beggar Maid and the actions of Flo, one of the main characters. In doing so, she argues that the family interactions are created by Flo’s need to control her environment. Led by Flo, the family moves through trauma to peace to find that their “respite, however temporary” creates “some semblance of normalcy.”

Why Royal Beatings?

In Alice Munro’s The Beggar Maid, this sing-song is used by Rose to taunt her stepmother in a scene which eventually leads to what Flo calls, “one Royal Beating” (3). Almost every child has learned something similar at school and could not wait to repeat to siblings and parents the naughty ditty, knowing full well there would be censure, or worse, when it was done. But in Rose’s home, the consequences of such actions take on ominous overtones when they trigger emotional responses in Flo that are completely unrelated to the childish behavior.

“Royal Beatings” is the first of the compilation of stories that comprise the novel, and it provides the reader with insight into a dysfunctional family and Rose’s background. Munro, in her inimitable manner, describes the various roles played by the family in the beating of Rose. Ostensibly the beating is punishment for Rose’s humiliation of Flo. Upon closer scrutiny, however, we find that the beating is less a punishment for misdeeds than it is a form of release, an almost therapeutic cleansing, an agent for ridding Flo of her frustrations over her unhappy life. Although Flo perpetrates it, each family member has his or her particular role to fulfill, and each plays his or her part to bring
the incident to its awful conclusion; yet it is Flo who determines the timing and actually orchestrates the entire episode. With these facts in mind, "Royal Beatings" is a drama, directed by Flo and masterfully performed by this family.

We know that Flo, the stepmother, and Rose have been antagonists for a lifetime, for Munro relates that "there was a long truce between Flo and Rose in the beginning" (7). But Rose is the bane of Flo's existence. Rose is definitely her father's daughter, in the habit of slipping into a world of her own, dreaming and compartmentalizing her life, disconnecting from reality when it suits her. Munro creates a humorous example when she describes the many noises emanating from the bathroom in the corner of the kitchen. Embarrassment is the most likely response to that predicament, yet it bothers Rose not at all; she simply decides, "the person creating the noises...was not connected to the person who walked out" (6). This tendency to ignore reality sparks an ongoing conflict with Flo, who is an opinionated, hard-working, no-nonsense woman with a distinctly crotchety demeanor. Since she is a realistic, practical person, her views on life are completely opposed to Rose's fantasy life. Yet she is subjected daily to the flights of fancy of a child who "had a need to picture things, to pursue absurdities, that was much stronger than the need to stay out of trouble" (3).

The frustration Flo feels over her lot in life is also a source of friction between her and the family. Although she seldom complains about her circumstances, we know that she has a husband who has more or less abdicated his family responsibilities. He sits working in his shed, talking under his breath, and daydreaming. He is more concerned with pride in his accomplishments than he is about supporting his family. Charging ridiculously low prices for his furniture repairs, "he never discussed with Flo what he charged or what was owing" (4). It is apparent that the family is poor; they live in an impoverished neighborhood, and Flo is forced to open a store in the front of the house to make ends meet. In addition to being industrious, Flo is clever in making do for her family, for Munro describes the free linoleum scraps she "ingeniously trimmed and fitted together" to cover the kitchen floor (16).

Most days Flo seems to take all in stride, exhibiting her knack for storytelling and occasionally even singing. But what is she really feeling? Perhaps she misses her carefree days of single life, living in the city, fun with friends and experiencing life on the edge. Where did it all go? Was it for love that she gave up her former life to come to

http://digitalcommons.kent.edu/wcr/vol4/iss1/1
Hanratty, to live on the wrong side of the tracks? Was it for love that she chose to raise a child not her own for a man who lives in a dream world? Was it for love that she chose a life of unacknowledged struggle to keep his family going? Flo now seems to scoff at love, and Munro reveals, "It was love she sickened at. It was the enslavement, the self-abasement, the self-deception" (38). Flo obviously harbors these emotions and brings these feelings of frustration and entrapment with her on the day of the beating.

On that particular day, something has happened that prevents Flo from taking her usual trip to town for shopping and socializing, something she enjoys. Instead she is in the kitchen scrubbing the floor, in a bad mood, and quite ready to continue a long-running quarrel with Rose. According to Munro, "The wrangle with Rose has already commenced, has been going on forever..." (13). Flo initiates today's battle, and Rose responds in kind. Flo accuses Rose of teaching Brian filth, and Rose repeats the Vancouver ditty; Flo gets angry, she yells, Rose hums it again. Onward and upward it escalates, each player using a line guaranteed to produce the desired response in the other. It is the prelude to all-out confrontation that the two are rushing headlong into. This is not an isolated incident; this same drama has played out many times before. As Flo shouts another warning, Brian runs out of the house; he has seen it all before. But no one notices:

They don't need him anyway, except to use against each other....They can't help continuing, can't leave each other alone. When they seem to have given up they are really just waiting and building up steam. (15)

As mentioned, Brian, the recipient of Rose's melodic knowledge of Vancouver, has witnessed all he cares to see; therefore, he completes his role by abruptly leaving the scene. Alone at last, Flo and Rose face each other for the inevitable clash that will pit stepmother against stepdaughter.

In the silence that ensues, Rose awaits her cue. That it will come soon there is no doubt; the timing, however, will be decided by Flo. The seconds drag on – and then – finally, out it comes! Flo "becomes amazingly theatrical...saying it was for Rose that she sacrificed her life. She saw her father saddled with a baby...and here she is, on her knees" (15). Rose taunts Flo by smiling sweetly, and responding with "poisonous reasonableness and...displays theatrical unconcern" (15). Rose, knowing full well that the royal beating is coming, continues the display, and plays the role as expected of her. It is interesting that
Munro treats the two combatants equally, as though they are two adults rather than acknowledging Rose’s youth (Rose is somewhere around ten years old). She thus gives evidence of the strength of Rose’s character and also of the depth of emotions raging between the two. Munro has now set the stage for the horrifying second act of her drama; it is time for Flo to enlist the aid of the unseen family member.

Flo, sensing that she has carried out the tirade as far as she can with the recalcitrant Rose, decides now is the time to bring the father into the fray. After all, this entire situation and her frustrations have originated with him; let him be the one to resolve it. Without hesitation, she interrupts his reveries and calls him to carry on, to play his part in the beating. The executioner has been summoned. Flo knows the appropriate words to use to infuse him with anger so that he will get on with the beating. She comes up with a new voice, “enriched, hurt, apologetic, it seems to have been manufactured on the spot” (Munro 16). Up to this point the father has had no part in the confrontation, has no idea what they are fighting about or what the problem is. He knows only that Flo insists “things that Rose has said to Flo are such that if Flo had said them to her mother...her father would have thrashed her into the ground” (16). Thus the punishment has been suggested, and Flo finally comes up with a justification: “She humiliates me” (17).

With an air of satisfaction, Flo steps back to let the father, the true root cause of her frustration, carry out the punishment of Rose, the daily reminder of her frustration. Meanwhile, Rose, caught in the middle, reflects that how they got to this point is irrelevant, for “it is the struggle itself that counts, and that can’t be stopped, can never be stopped” (17). At her young age, she recognizes the futility of trying to bring about any change in the scene. Consequently, the beating takes place, severe, humiliating, abusive, while Flo and Rose beg the father to stop. By this time, Flo has had enough. The violence has had a cathartic effect on her; her rage has spent itself. She now proceeds to mollify the father and attempts to minister to Rose’s wounds.

We know that the aftermath of the beating is as much a part of the ritual as the beating itself; for Rose realizes that Flo’s “step on the stairs...contains...a sure knowledge of the whole down-spiraling course of events from now on” (Munro 20). Flo, in her regret of the incident, and perhaps to assuage her guilt, offers Rose delicacies from the store on an anonymous tray outside her door. This, too, is part of the ritual; Rose knows in advance what the tray will contain. She is all too
familiar with the internal struggle she will have trying to reject the goodies (as symbols of appeasement from her parents) while she consumes them one by one. Rose’s intention of never speaking to the parents goes unfulfilled, and the parents find themselves blaming each other for the severity of the beating.

In spite of the complex emotions aroused this day, Rose eventually calms herself and remembers the outcomes of all the similar incidents which she has endured:

Rose will understand that life has started up again, that they will all sit around the table eating again...They will be embarrassed, but rather less than you might expect considering how they have behaved. They will feel...not far off satisfaction. (21)

Thus, Munro brings down the curtain on a chilling event in the life of this family. So much has been said, yet few words have been spoken. Messages have been sent and actions taken in response to Flo’s cues. Tragically, not one person in the family recognizes what has actually taken place, even though they have unwittingly contributed to the outcome.

A family feeling satisfaction from an act of violence is a strange conclusion to this story, but from the depths of emotions explored by the author, it seems frighteningly real. It seems impossible for someone who has never experienced this type of encounter to be able to describe in such infinite detail the innermost thoughts of an abused child. Since the narrator speaks to us from the child’s perspective, we know little of what Flo is thinking when she interacts with Rose, but Rose, although not particularly fond of Flo, does not speak badly of her. Rose does not blame Flo; it seems Rose has come to expect this kind of treatment.

Flo acts from frustration over emotional and physical needs left unmet by her husband. These frustrations are taken out on the child, who is the focal point between Flo and the actual source of her disappointments, her husband. Yet as real as these feelings are, she seems unable to verbalize them or resolve them in a normal manner. Rather she resorts to role-playing and violence within the family to bring about an atmosphere in which she feels secure. Almost like following the script of a play, we see an example of every character in the family having a definite part to play in the beatings, the scene never varying. Each player comes away having gained something, although it is Flo who gains the most. Following the beating, Flo has once again gained some measure of control over Rose. By having her husband administer the beating, she has compelled him to take an active role in the household.
She has also forced him into conversation with her if only to argue the blame and harshness of the beating. Moreover, she has certainly reestablished the fact that she is in total control, although she would want the father to think otherwise (thus her act of humility and hurt when wanting the father to beat Rose). The father has pleased his wife by doing her bidding and Rose has, for a short time, been the center of concern by her parents, something that probably did not happen at any other time.

In the closing paragraphs of the story, Munro paints a picture of familial bliss; the group sits at the table conversing and having fun, again led by Flo. After all the trauma of the day, we find that from the depths of the shameful and disgusting actions of this family has come a respite, however temporary, during which there appears some semblance of normalcy.

Works Cited

Robert A. Berens

In Dr. John Carson's Short Story class (English 34031), Robert Berens was asked to pose a question about a story that was covered in the course and then answer it using supporting details from that story. "Looking Through the Smoke in 'Sonny's Blues,'" the result of Berens' response, examines the existence of cigarette smoke "as a character in the story rather than a mere byproduct of another habitual vice."

Looking Through the Smoke in "Sonny's Blues"

James Baldwin's story of redemption and musical epiphany is filled with gritty realism and thematic uses of music and imagery. One of the strongest themes throughout the story is the use of cigarette smoking as a symbol of interpersonal barriers and depravity. The specific act of smoking not only provides substance to a number of characters within the story, but also symbolizes the dishonesty and unapproachable nature of each particular smoker. Likewise, each time a cigarette is tossed away or extinguished, the act is accompanied by brutal honesty and revelation. Cigarette smoke, then, exists as a character in the story rather than a mere byproduct of another habitual vice.

As the clichéd phrase "smoke screen" suggests, the presence and creation of smoke are a character's subconscious way of distancing him or herself from others within the story. Nearly every scene depicts a character in the act of smoking, particularly when confronted with difficult dialogue or when attempting to hide his or her feelings. When the narrator first learns of Sonny's arrest, he immediately encounters a former associate of his brother's. After learning through his narration how angry and contemptuous the narrator feels toward this shady character, "...now, abruptly, I hated him," it becomes apparent how further irritated he is by the boy's smug manner (75). His reply to the boy's "repulsive" grin is to effectively disassociate himself from him through a wall of cigarette smoke: "I offered him a cigarette and I
watched him through the smoke” (75). It is as if the unsavory drug addict and his irritating familiarity with the narrator’s brother are only tolerable through this protective veil.

The boy is aided by the smoke in a different manner. Through his “smoke screen,” he is able to deceive the narrator regarding the fate of his brother. He retains the cigarette as a means by which he can skirt the issue of what is to become of Sonny. At this point, the boy becomes openly honest only as he finishes the cigarette: “Maybe he’ll even think he’s kicked the habit. Then they’ll let him loose’ — he gestured, throwing his cigarette into the gutter. ‘That’s all.’” (77). With that disposable gesture, it is as if the boy is either able to or can’t help telling the painful truth.

Baldwin’s narrator, feeling his mother’s burden of protector and keeper of his little brother, seems to have always utilized this strategic and subliminal defense mechanism. As the reminiscent order of the narrative shows, this is a device that has been used by Sonny and his older brother throughout their relationship. Following the death of their mother, the first time that the older brother must act out her request, the conversation between him and Sonny is punctuated by the lighting and smoking of cigarettes. Beginning openly and honestly, the brothers discuss Sonny’s future plans. When Sonny suggests that he dreams of being a musician, tension is created between the two. The narrator, feeling that his authority is being questioned and threatened, displays a tone of condescension, imploring Sonny to “Be serious”. He further preaches to his defensive little brother: “Well, you may think it’s funny now, baby, but it’s not going to be so funny when you have to make your living at it, let me tell you that” (84). His lack of understanding and parental chiding increase the unease between them, and, almost as if on cue, the cigarettes appear.

At Sonny’s mention of one of his favorite Jazz musicians, his older brother is bemused and lights a cigarette while smugly quipping, “You’ll have to be patient with me. Now. Who’s this Parker character?” ‘He’s just one of the greatest jazz musicians alive,’ said Sonny, sullenly, his hands in his pockets, his back to [the narrator]” (85). As the narrator creates his protective screen, behind which he is able to dole out authoritarian advice, Sonny further distances himself by literally turning his back. Possibly recognizing his error, the narrator attempts to rationalize with his brother asking, “Doesn’t all this take a lot of time?” (85). The emotional damage, however, has been done.
Sonny responds: "He stopped at the kitchen table and picked up my cigarettes" (86), ironically not with just any cigarettes but the very ones which the narrator uses to create his own impenetrable veil of smoke. Testing his "courage to smoke in front of [the narrator]," he questions the very integrity of his supposed guardian (86). Sonny turns the tide of the conversation, inquiring about his older brother's youthful activities, "Come on, now. I bet you was smoking at my age, tell the truth" (86). Grinning defensively at having his dreams of Jazz discounted, he jabs his elder where he is most sensitive. He threatens to join the army, which is his brother's worst fear. When the narrator is able to ground him with the mention of school, the honesty returns, as Sonny relinquishes his cigarette and begins to reveal what is happening to him there.

There is a notable change in Sonny's and the conversation's tone at this point. Sonny's mood becomes remarkably somber, and through his uncharacteristically serious comments, he reveals the very root of his problem. He implies that he feels trapped and helpless, accented by his discarding of the cigarette. The narrator remembers:

"I ain't learning nothing in school," he said. "Even when I go." He turned away from me and opened the window and threw his cigarette out into the narrow alley. I watched his back. "At least, I ain't learning nothing you'd want me to learn." He slammed the window so hard I thought the glass would fly out, and turned back to me. "And I'm sick of the stink of these garbage cans!" (86)

Sonny's desperation and awareness of his fate surface as he flicks his cigarette symbolically into the alley below. Landing amid the "stink of [the] garbage cans", the fading source of enveloping smoke seems to remind Sonny of the inescapable street, "black and funky and cold," that he is resigned to (92).

Later, the narrator witnesses the depravity of the street firsthand while watching a tambourine revival meeting that takes place below the window of Sonny's room. As the revivalists dance and sing praise, he notices the contrasting element of "street" people who are unable to be moved by the joyful noise. Again, the appearance and mannerisms of cigarette smoking are used to describe some of the more detached, unmoved spectators: "The barbecue cook, wearing a dirty white apron, ... and a cigarette between his lips, stood in the doorway, watching them" (89). Baldwin's narrator continues to observe the cold reaction from some of the street members— "Neither did they especially believe in the
holiness of the three sisters and the brother”—and the seemingly small degree of enlightenment that separates the revivalists from them: “The woman with the tambourine, whose voice dominated the air, whose face was bright with joy, was divided by very little from the woman who stood watching her, a cigarette between her heavy, chapped lips...” (90).

The narrator observes the changing effect that the music has on one particular bystander: “The barbecue cook half shook his head and smiled, and dropped his cigarette and disappeared into his joint” (90). Ironically, he spots Sonny among the crowd “very faintly smiling, standing very still” without the habitual cigarette (90). The remarkable air of peace that he gets from the music is even further portrayed as he appears in the house to invite his older brother to accompany him that evening. In the absence of smoke, in the soothing atmosphere of the revival’s musical redemption, there is a comfortable understanding between the two.

It is in this figuratively “smoke free” environment that the two final scenes of revelation take place. Somehow finally able to communicate, Sonny explicitly describes to his brother the need to play music, and its relevant similarity to his drug addiction. The narrator begins to realize Sonny’s plight, and arrives at a moment of understanding and forgiveness:

I wanted to say more, but I couldn’t. I wanted to talk about will power and how life could be — well, beautiful. I wanted to say that it was all within; but was it? or rather, wasn’t that exactly the trouble? And I wanted to promise that I would never fail him again. But it would all have sounded — empty words and lies. (92)

Recognizing his lack of compassion, the narrator ultimately sees Sonny’s implicit humanity.

Thus, when accompanying him to the nightclub “[squeezing] through the narrow, chattering, jam-packed bar to the entrance” with “all that atmospheric lighting,” it is interesting to note that nowhere in the description of the setting is the mention of smoke (94). With the brothers’ new understanding of one another, the smoke literally fades, and even in a barroom atmosphere it is unnoticeable to the narrator as he observes “Sonny’s world. Or, rather: his kingdom” (94).

Baldwin’s story of “Sonny’s Blues,” the story of ultimate salvation, ends in a very clear field of vision. Having finally been able to comprehend and accept one another, the smoke between the brothers dissipates, and clarity is reached. The narrator passively observes
Sonny's musical triumph. Baldwin achieves the greatest effect by first allowing the reader to view life through the cloudy film of his characters' lives. Each of their personal withdrawals and withholdings of emotion is accented by their communication through this seemingly perpetual smoke. When Baldwin clears the air, in a literary sense, at the conclusion of the story, there is a very real, refreshing feeling of honesty and openness that might not have been achieved without the integral part that cigarette smoke plays throughout. It is this masterful device that allows the reader to almost unconsciously experience the discomfort of the murky discord and the comfort of resolution. When "the smoke is cleared," the reader can not only observe but also experience and feel.

Work Cited

Erika Bodollo

For Dr. Bathi Kasturiarchi’s Elementary Probability and Statistics class (Math 10041), Erika Bodollo was asked to develop a statistical analysis of SAT data using three components: producing data, analyzing data, and making inferences from data. As a result of her work, Bodollo concludes that “the existence of other variables . . . may have a profound influence in a study of this nature.”

Average SAT Scores

INTRODUCTION

The Scholastic Assessment Test (SAT) is a standardized exam administered to high school students in the United States. It is also offered to U.S. college bound students from other countries. The SAT exams are designed and administered by Educational Testing Services (ETS). Many colleges around the country use the scores from the SAT exams together with students’ high school records to make admissions decisions. The exam itself consists of two main parts – the verbal and the math. The scoring system ranges from 200 (lowest) to 800 (highest) with a penalty of one-quarter point for each incorrect answer.

The purpose of this statistical study is to see if there is a relationship between SAT scores and the percentage of students taking the exam. The College Board conducted a study where the average math and verbal scores were taken from each state in 1987, 1993, 1994, 1995, and 1996. The scores varied through these years and between the states as shown in Table 1. There may be several reasons for this. For instance, the data does not explicitly show the breakdown according to gender, age, or race. Certain states around the country encourage their college bound students to take the ACT (American College Testing) in place of the SAT. These and other factors may have an influence on the SAT scores of a given state.

In this article, the verbal, math, and cumulative scores will be analyzed. These three categories will be summarized statistically with the hope of gaining insight into trends in the SAT scores. Finally, the connection between SAT scores and the Percentage Taking will be explored.
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STATISTICAL ANALYSIS

The first thing one must explore when analyzing the SAT scores is the difference of scores between the states. The state with the highest total average SAT score was Iowa. The state with the lowest score was South Carolina. Does this mean that Iowa students receive a better education? It is apparent by the scatter plot that Iowa has a smaller number of people taking the test while South Carolina has more than half of all college bound students taking it. Figure 1 is a scatter plot of Total Average SAT scores versus Percentage Taking SAT. The data points for the line of best fit is also shown. According to the graph in Figure 1, the more people that take the exam, the lower the scores are. This proves the correlation between the percentage of students taking it and the scores. In fact, it shows a negative correlation. Our state, Ohio, has a score close to the mean, which is 1053, and has a percentage of students taking the exam that is close to the median, which is 30.5. The reason the SAT scores and the percentage taking are correlated might be because of the number of students taking the test. Many states do not require students to take the SAT; therefore, only the students who want to take it do, causing the percentage to be less than that of the other states. The score may be higher, however, because only those students who want to take it do. These students are usually the smarter and more ambitious students. In the states where the students are required to take the test, the percentage of students taking the SAT is higher. The scores are also lower in these states. This may be because many students take the test, even those who do poorly in school, causing the average to be lower.
When looking at the average verbal scores, it is important to look at the analysis of all the states combined. As seen in Figure 2, the box plot (drawn using data from Table 2) indicates the scores are skewed to the right. This shows that most of the students taking the test tend to score higher than the average. This is a good sign for students who are worried about taking the test and doing poorly. A student’s chance of doing well on the verbal part is good. By looking at the lowest score and the highest score, as well as the median and mean shown in Table 2, a student can estimate how well he or she will do on the test.

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<th>Mode</th>
<th>Minimum</th>
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<th>Range</th>
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Table 2: Summary of Verbal Scores
Knowing these statistics is not only important for the verbal scores, but they are also important for the math scores. It is important to keep several things in mind when analyzing the average scores because the extremes, high or low, may affect the average scores. Looking at the range, the maximum and minimum values, and the standard deviation shown in Table 3 will help to determine whether or not the averages are accurate. These scores are also skewed to the right as shown in the box plot of Figure 3, showing that students tend to do better than the average on the math portion of the test.

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Table 3: Summary of Math Scores

Finally, to understand a student's chances on the SAT, one must examine the details of the total average scores. Of all the states, the total average score was 1054 while the most common average score was 1101. The median of all the scores was 1036 and the range was 233. The scores also have a standard deviation of 63.46, and a variance of 3990. The true mean has a standard error of 8.89, and at a confidence level of 95.0%, the true mean $m$ is $1045.11 < m < 1062.89$. These things are important in understanding the scores and their usefulness. Once again the scores are skewed to the right as shown in the box plot in Figure 4. This confirms that more students tend to do well compared to the average.
Table 4: Summary of Total Average Scores

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Figure 4: Box Plot for Total Scores

In conclusion, SAT scores are correlated to the number of students taking it. There is strong evidence to show that as the number of students taking SAT increases, the scores tend to get lowered. This is important to keep in mind when comparing the SAT scores of the states. One cannot say that one state is doing better than another state simply because its scores are higher. It may be because that state has fewer students taking the test. Another significant factor that is not reported here is a comparison of the ACT scores and SAT scores in each state. Such a comparison shows that there is a connection between the percentages taking ACT and SAT exams. In turn, these percentages are related to the performance on each exam. This only goes to show the existence of other variables that may have a profound influence in a study of this nature.
Vanessa N. Gliatta

For Professor Jack McWhorter's Painting II (Art 24060#), Vanessa Gliatta was asked to complete a black and white color scale painting using one to twenty different shades.

Untitled
Wendi Canon

In Spring 1998, Wendi Canon completed this paper for Professor Melissa Kemp's English II class, which focused on theories of reading books. (English 10002). After attending a lecture on I vs. We theory in North Canton, Canon created this paper, which examines how the theory operates in three different novels.

I Versus We Theory is Hidden Everywhere

Although each author gives him- or herself the goal to write a very unique piece of work, we the readers can see similarities amongst writings stretched over decades. Created characters, settings, and circumstances tend to change from one piece of work to the next, but themes, more often than not, all deal with the same everyday problems. These repeated themes are not by accident. Writers analyze what the public likes to read about. In fact, probably one of the most common themes is the I vs. We theory, which is simply the idea that people can change from being selfish into looking out for the whole group, such as a certain race, family, friends, or age group. Because the theme is so intense, it is usually found in novels, where there is plenty of room to express numerous examples to totally convince the readers that the main character has truly changed. By looking at J.D. Salinger’s *The Catcher in the Rye* and John Steinbeck’s *The Grapes of Wrath*, we can show how they, too, write about this transition, as does Sam Greenlee in *The Spook Who Sat By the Door*. Although these three novels were published over the span of three decades with varying cultural groups, they all illustrate the exact same issue.

*The Spook Who Sat by the Door* by Sam Greenlee shows the I vs. We theory by establishing the problem of one man, Dan Freeman, who is only concerned with his well-being, but unfair treatment of others turns him into a military hero. At first, in chapter two, Freeman concentrates primarily on his acceptance into the CIA. This selfish attitude is still portrayed in chapter five when the Dahomey Queen, a nearby hooker, is used for pleasure purposes only. In this same chapter, Joy, Freeman’s girlfriend, shows up and asks him to quit the CIA. Although he loves her,
he refuses to give up his dream to be the only black employee in the CIA. The transition to the "We" phenomenon occurs in chapter eight when Freeman chooses to leave the CIA and decides to work as a social worker. The pay, as well as his social climbing, takes a fall, but his hunger to help others does an about-face.

A local gang keeps Freeman eager and energetic to fight for all blacks, not just for a few kids. Without even realizing his change, Freeman lives for the children. He truly cares to see them succeed. One of the kids drops out of college, and Freeman tries to persuade him to go back by stating, "Black people are going to have to get like that because whites are never going to share the wealth with us" (127). The same teenager is upset from being teased because he is very light-skinned. Freeman deals with this by telling him, "You're black because you think black, feel black, and act black" (126). Because this gang and the whole black population mean so much to Freeman, he risks his whole life to see the people he cares about receive equal treatment. The giving of such an outstanding commitment creates the I vs. We theory. His personal growth goes from his self-centered goals to a worldwide helping for hundreds. The point that Freeman does not want recognition proves that his heart is in his work for the people that mean the most to him. The idea of I vs. We does not need to be a single-minded man turning into a military hero, but it must show the dramatic comparison. The exact situation occurs in The Catcher in the Rye but in a less modified story line.

The Catcher in the Rye by J.D. Salinger also stresses the I vs. We issue by concerning itself with young children throughout the novel. Holden Caulfield, a student at Pency Prep School, located in Pennsylvania, transforms from a drunken, flunking out student to a young man who wants to help a young child. In chapter two, Holden goes to beg his history professor to pass him even though he has skipped classes and failed all his tests. He expects everyone to hand him A's. However, Holden is faced with a rude awakening when he flunks out of school and his parents disown him. The one person who keeps Holden from going crazy is his younger sister Allie. Holden misses her so much that he sneaks into his house at night and lets her skip school during the day just to get to see her. She convinces their parents to give Holden another chance, as well as convincing Holden to go back to school.

Holden feels like he owes Allie something for turning his life around. By the end of the novel, one of Allie's friends dies, and she must lean on
her big brother. This is Holden's big chance to return the favor. He misses a huge party and travels hours just to be able to hold Allie and tell her "I'd just be your catcher in the rye" (173). This line shows the difference in Holden's attitude. He is willing to give up something that means so very much to him to help another. Throughout the end of the novel, Holden continues to look out for everyone else. One late night, Holden notices this condition and thinks to himself, "The mark of the immature man is that he wants to die nobly for a cause, while the mark of the mature man is that he wants to live humbly for one" (188). This quote can be applied to Dan Freeman as well because he, too, was not looking for glory, but was very humble although his accomplishments were extreme.

The Catcher in the Rye proves that when discussing the I vs. We theory, it need not be to organize a military movement as in The Spook Who Sat by the Door, but simply a change of attitude, caring, and giving. The novel does not come out and give too many examples, but it does give an excellent overview of the I vs. We theme. The Grapes of Wrath shares much stronger examples to point out the main idea of I vs. We.

The Grapes of Wrath by John Steinbeck emphasizes the I vs. We theory significantly throughout the whole novel by following a poor family who must all work together to get to a new homeland. The thirteen members of the Joad family must move to California because their land is all dried up from a lack of rain. The trip includes long and hardship days. Along the way, the Joads stop to spend the night at a camp. By this time, their food is running low along with many others in the camp. Ma Joad experiences guilt one night at dinner when all the hungry children see her and her family eating stew. The children come from all directions to watch the stew being cooked. Finally, Ma says, "I dunno what to do. I can't rob the family..." (332). After a little thinking, she then yells, "I'm gonna set this here kettle out, an' you'll get a little taste, but it ain't gonna do you no good" (332). This is just one example of how the Joad family changes from having hardly anything to making it last not just for themselves but for others as well.

The whole point to the I vs. We philosophy is the willingness to give no matter how small the amount is. The I vs. We principle is also shown by all the other migrants. Families had to learn to share with one another for support, food, and shelter. They understood that as long as they stayed tied as one huge group (or family), they could accomplish almost anything. Each other's support gave them the hope to travel on looking for work, as well as a positive attitude. This can
also be compared to *The Spook Who Sat by the Door* in the fact that the Cobras and Freeman worked together and helped each other out to gain something better for themselves. This book shows how one single family learned to incorporate hundreds of other families to survive. The mass majority of the characters have to change from an "I" person to a "we" person.

All three of these authors write to suggest the I vs. We theory. The story lines and the types of people who are helped are quite different, but the central idea of an individual developing into someone who is more concerned for another's well being is amongst all three novels. *The Spook Who Sat by the Door* might have a totally different plot line, but all of these novels are so very closely related. The I vs. We phenomena will continue to show up in our literature because it is well expressed within the public. This common idea can be traced back for years. It does not need to be a military hero or a poor family traveling across the country, but it does need simple characters who decide they want to help others. This theme can be applied to life. If everyone could make this change, many of our worldwide problems could be eliminated.

**Works Cited**


In Dr. Jayne Moneysmith’s 19th Century British Novel course (English 39395), Beth Crookston was asked to write a paper about any book and any topic from the assigned books. Crookston chose Charlotte Brontë’s novel Jane Eyre and focused upon the madwoman in the attic — Bertha Mason, Rochester’s wife. In the end, Crookston asserts that Bertha “is the enigma that makes Jane and Mr. Rochester’s happiness possible.”

Bertha Mason: The Enigma

In Charlotte Brontë’s novel Jane Eyre, the author introduces a mysterious character. This character, mistakenly thought by Jane to be someone else (Grace Poole), is actually Bertha Antoinetta Mason Rochester — Mr. Rochester’s wife! The discovery of Bertha is heartbreaking to Jane, but also more positively life altering. Bertha is the representation of many ideas in the novel: she is the insane, mysterious character in the attic. She is the raw sexuality suppressed by Jane and Mr. Rochester, which Charlotte Brontë represents as a sort of evil in her novel. Bertha’s craziness and sensuality are what bring Jane and Mr. Rochester together, which Brontë shows through the similarities and differences between Jane and Bertha, the use of imagery to enhance their descriptions, and how Bertha brought Jane and Mr. Rochester to God.

Bertha is a madwoman. According to Mr. Rochester, she comes from a long line of mad people: “Bertha Mason is mad; and she comes of a mad family; - idiots and maniacs through three generations! Her mother, the Creole, was both a mad woman and a drunkard! - as I found out after I had wed the daughter: for they were silent on family secrets before” (Brontë 289). Bertha and her whole family are insane, but for different reasons. Bertha is considered insane because of her intense sensuality.

Bertha is represented as a sort of taboo sexuality that is forbidden to the others. Brontë describes this when Bertha attacks Mr. Rochester: “One never knows what she has, sir: she is so cunning: it is
not in mortal discretion to fathom her craft...the lunatic [Bertha] sprang and grappled his throat viciously, and laid her teeth to his cheek: they struggled” (290). This sounds like sado-masochistic foreplay. In “Angel or Vampire—the Portrayal of Women’s Morality and Sensuality in Jane Eyre,” Debra G. Waller elaborates on this insane/sexuality idea when she says: “The reference to sexuality as insanity is a clear link to Bertha Mason but Jane rejects it where Bertha did (or could) not and, shorn of her excessive passions, is awarded a happy, contented and conventional future as Rochester’s wife/nurse and the mother of his children” (1). This point is proven more in the description of Bertha’s appearance. When Jane first sees Bertha, thinking the incidence a dream, Bertha is described as “Fearful and ghastly to me – oh, sir, I never saw a face – it was a savage face” (Brontë 281). Jane rejects sexuality and insanity by showing her fear of Bertha. Jane is truly frightened of Bertha because she is ignorant not only of Bertha’s identity, but also of the way Bertha makes her feel: uncomfortable and scared. Helene Moglen writes of this same scene in her book length work Charlotte Brontë: The Self Conceived: “Bertha tears the wedding veil in two then leans over Jane’s bed in an attitude that suggests a fantasy of sexual violation” (126). It is obvious that there is a feeling of strong sexual taboo to Bertha’s character, be it violation, suggestive lesbianism, or just making Jane and Mr. Rochester uncomfortable with their feelings.

Whereas Jane rejects the sexuality/insanity issue with her fear and ignorance, Mr. Rochester is the one who introduced it into Thornfield Hall:

He recognized too late that Bertha’s sensuality, exciting before their marriage, is immoral, but his naïveté and the family pressures he experienced do not absolve him of the responsibility for his choice. His marriage and subsequent liaisons are ultimately unsatisfactory because they are based on sexual gratifications; none of the women offer the stability and morality necessary for true happiness. (Waller, “Avoiding Dangerous Sexuality in Jane Eyre”)

It is through his sensual desire for Bertha that he becomes trapped in his marriage, a marriage where he locks her in the attic because Bertha’s emotions have become raw and uncontrollable. In speculation, maybe Bertha became “insane” when she realized that her husband only married her for sex and money. This can be seen when Bertha destroys
Jane’s wedding veil: “she took my veil from its place; she held it up, gazed at it long, and then she threw it over her own head, and turned to the mirror...it removed my veil from its gaunt head, rent it in two parts, and flinging both on the floor, trampled on them” (Brontë 281). Bertha tries the veil on and becomes irate. The woman obviously still has thinking processes (or at least feelings for Rochester) if she can try on the veil and look at herself in the mirror. Bertha destroys the veil, a symbol of marriage and purity, but does not hurt Jane, only causing fear and maybe a touch of foreshadowing.

There is a definite yin-yang, opposites-in-harmony feel to Bertha and Jane. As Moglen asserts, “it is the classic distinction between the Virgin Mary and the Whore of Babylon: man projecting his own bifurcated nature onto women: Rochester divided between the elfin Jane and the vampire Bertha” (164). The differences between the two women are obvious: Bertha is a mad woman from the West Indies, locked in the attic, whereas Jane is an orphaned governess free to roam the gardens; Bertha is a black woman (or “purple” (281), as Brontë describes her), while Jane is a white woman. The opposites-in-harmony part of their relationship is more beneath the surface: Bertha is trapped physically and emotionally in the attic and her mind; Jane is trapped physically and emotionally in social classes – somewhere between the rich upper class and the poor lower class, depending on whether she is married or not.

The most interesting part of their relationship is that they both take it into their powers to escape the man who oppressed and disgraced them: Jane leaves on her own account in Chapter 27 after the secret of Bertha is exposed, and Bertha sets the house on fire and jumps to her death in Chapter 36. This is an opposites-in-harmony relationship because both women have opposite qualities and use opposite methods of doing what they want, but the outcomes of such situations are similar or at least harmonious. This is important because it shows how Bertha and Jane play off each other in the novel.

Mark Jackson, in his article “Passion, Contradiction, and Imagery in Charlotte Brontë’s Jane,” adds another similarity by saying, “Jane appears almost as emotionally overwrought as the crazed Bertha. Such uncontrollable emotions, of course, play a crucial role in the novel” (1). To Jane, there is a possibility of madness with her feelings, which is shown when she seems on the edge of emotional sanity as she leaves Mr. Rochester:

May your eyes never shed such stormy, scalding, heart-wrung tears as poured from mine. May you never
appeal to Heaven in prayers so hopeless and so agonized as in that hour left my lips: for never may you, like me, dread to be the instrument of evil to what you wholly love. (Brontë 317)

Jane has reached the breaking point in her emotions because she feels Mr. Rochester used her. This passion is also shown with the imagery of fire.

Fire is an image used throughout the entire novel. In the beginning, there is a sense of fire in the “red-room”: “Daylight began to forsake the red-room...My habitual mood of humiliation, self-doubt, forlorn depression, feel damp on the embers of my decaying ire” (Brontë 28). Jane is confined to the “red-room” for punishment and this dampens the fire within her angry soul. This specific fire image foreshadows the rest of the images in the story.

The next major image is the burning of Mr. Rochester’s bed: “Tongues of flame darted round the bed: the curtains were on fire. In the midst of blaze and vapour, Mr. Rochester lay stretched motionless, in deep sleep” (Brontë 153). Jane saves Mr. Rochester from this fire, when he seems unaware of the danger since he was in a “deep sleep.” This part is significant because the fire represents Bertha – both the fire and Bertha being passionate (with the “Tongues of flame” darting “round the bed” calling up sensual imagery) and insane. Jane saving Mr. Rochester from the fire is also like Jane saving him from Bertha.

One of the last images of fire is the burning down of Thornfield Hall: “Thornfield Hall is quite a ruin: it was burnt down just last harvest time...The fire broke out at dead of night...the building was one mass of flame” (Brontë 415). It is in this fire that Bertha dies:

She was a big woman, and had long, black hair: we could see it streaming against the flames as she stood. I witnessed, and several more witnessed Mr. Rochester ascend through the skylight on the roof: we heard him call “Bertha!” We saw him approach her; and then, ma’am, she yelled, and gave a spring, and the next minute she lay smashed on the pavement. (Brontë 417)

Bertha makes an unforgettable exit, using the fire and the height of the building to her advantage. In her article “Images of Passion in Jane Eyre,” Wendy Vaughan theorizes:

The image of fire might symbolize signifying first sinfulness, then rebirth. Since the passionate love that
Rochester and Jane first held was sinful, it was accomplished by images of fire and burning – possibly a portrait of Hell. In the fire that destroyed Thornfield, Rochester proved his worthiness to Jane by attempting to save Bertha from the blaze. (1)

And it is through the fire that Mr. Rochester is crippled, which weakens him and causes him to turn to God and to Jane.

It is the intense sensual vibe of Bertha that brings out the Christianity in Jane and Mr. Rochester. It is after Jane finds out about Bertha’s existence that she leaves because she “finds God.” “I lay faint; longing to be dead. One idea only still throbbed life-like in me – a remembrance of God...’What am I to do?’ But the answer my mind gave – ‘Leave Thornfield at once’ – was so prompt, so dread, that I stopped my ears” (Brontë 193).

George P. Landow, in his article “Typology and Characterization (1): Moral Placement in Jane Eyre,” says this appealing to God occurs because “Jane worshipped a man instead of God, and she made an idol of Rochester, worshipping a false god and as it turned out, a false man as well” (1). Therefore, Jane turns to God in order to save herself.

Mr. Rochester also turns to God after he is crippled in the fire. He shows his new spirituality to Jane when he says, “The world may laugh – may call me absurd, selfish – but it does not signify. My very soul demands you: it will be satisfied: or it will take deadly vengeance on its frame” (Brontë 424). Mr. Rochester finds God when he realizes he did wrong by lying:

My heart swells with gratitude to the beneficent God of this earth just now. He sees not as man sees, but far clearer: judges not as man judges, but far more wisely. I did wrong: I would have sullied my innocent flower – breathed guilt on its purity: the Omnipotent snatched it from me...I was forced to pass through the valley of the shadow of death...I began sometimes to pray: very brief prayers they were, but very sincere. (Brontë 435)

At the end of the novel, Mr. Rochester recognizes that he has a soul, whereas in the beginning, he seemed unsure if it existed – until he met Jane.

In his article “Spiritual Revelation in Jane Eyre,” Mark Jackson writes:
Rochester's newly found faith and his ensuing change of character make possible his marriage with Jane. The discovery of God, then ties together all the loose ends of the novel, fulfills true love, and closes the book with an overall affirming message that two impassioned souls can unite in marriage after all, if the Lord wills it.

(1)
The ending of the novel does have nice closure: Jane and Mr. Rochester are happy, they start a family, Mr. Rochester gets (some) of his sight back, and Bertha is dead and gone. The absence of Bertha's sexually insane presence is what allows Jane and Mr. Rochester to finally come together. Jane no longer has sexual aggressions to hide, and Mr. Rochester is no longer a bigamist. It is Bertha who caused them to separate and do some soul searching before they could be together. Once she was gone, they were united at last. It is Bertha who is the enigma that makes Jane and Mr. Rochester's happiness possible. Bertha Antoinetta Mason Rochester was more than just the madwoman in the attic.

Works Cited


Mark C. Draggi

Draggi wrote this exam answer (transcribed here from an actual "blue book," with brackets indicating subsequent changes) for Dr. Hart's Introduction to World Politics course (Pol 10410) during the Fall 1998 semester. His submission was based upon a question that asked students to "peruse any of the wonderful and insightful issues that have been assigned from John T. Rourke's Taking Sides: Clashing Views on Controversial Issues in World Politics."

Upon Rourke's Issue #3, America's Superpower Status

While reading Rourke, I found that the most interesting, debatable, and insightful issue from Rourke was Issue #3. "SHOULD AMERICA ABANDON ITS SUPERPOWER STATUS?" This is presented by Doug Bandow and Anthony Lake, in which Bandow takes the affirmative side of the issue and Lake the opposing stance. To fully explain this issue, I will not only look at the authors, but their stances on the issues, how their stances fit into the World System, Hegemons, and basic Perceptions. I will then go into the future looking at such items, as well as some thoughts of my own. Basically, I will show that a simple 'yes' or 'no' question is much more complicated and in-depth than one might think. So, with no further ado, let's get Rourking!

I will first look at the 'Yes' [America should step down as a superpower] answer to our question, as presented by Doug Bandow. He presents a situation where America is the "Big Protector" and the source for assistance (in many situations) throughout the world. But, in a time when there is no war, no Cold War, and no need for a U.S. policeman, why should we continue on this path? Bandow wants us to bring our troops home who are on foreign soil, change our 'worldly' ways and concentrate on America. Sure, there may be people in the world who need our help, but there are people right here in America who need that same help. He wants us to step down as a superpower. This does not mean to become Isolationist, but certainly more self-centered. His
situation is one where you are not a superpower, but just a (non-influential) power: a partner in the world and not its savior.

With that said, we will move on to Anthony Lake. Lake is quite different from Bandow because Lake is a current Clinton administrator who gave a speech to the press and Bandow is a former Reagan administrator who wrote for a foreign research institute. [Bandow writes with educated intent; Lake writes/speaks to confirm current foreign policy.] Lake's speech does not dive deep into its own theory: Not to step down as a superpower. Lake presents a situation of America being one of two things. The first of which is an Isolationist country, which keeps to itself. This, of course, is not good because it leaves no room for trade, world relations, a prosperous America, or an up-beat Global Political Economy. The second choice is Lake's version of a sugarcoated Non-isolationist U.S. This of course follows that it allows for prosperity, justice, and the Good of America to be spread throughout the world. In his own argument, he wins. Non-isolationist is better than just Isolationist. Yet, when compared to Bandow and other categories, not just Lake's argument, but both arguments find fault.

Now is the time when I agree or disagree with either side. As always, I am going to disagree with both. My first point can be seen by putting on our hegemonic goggles™. With these we will analyze Bandow and Lake's arguments as applied to the Hegemonic Theory. Let us first look at Bandow. If we know that a Hegemon, by definition, will rise and fall, then the only chance to save it is to change the Hegemon itself. The problem we run into is the World System created by the U.S. Bandow suggests we "pull out" our military, aid, and foreign endeavors; this all goes against America's own Hegemonic System and Perceptions. When looking at Self-Interest-Cooperation, those troops and aid are there specifically so that other countries will take part in our World System and get a share of the benefits—while the U.S. gets the lion's share [of the benefits]. Moving on to American perceptions and [American] Capitalism, we cannot step down [as a superpower]. Capitalism's [underlying] goal is to always get more. If we step down, then how can we get more if we do not control the World System and the Global Political Economy [which is the route to getting more]? Moving on to Perceptions, however you label it...Limited Assimilation Expansionism, Iso-organic Expansionism, etc., it has always been our intent to expand and civilize, or to make people like us [westward expansion of the U.S.]. Especially during the Post WWII era, we rebuilt those who showed the most promise to be like us. So why would we pull
out our troops and our aid, when ultimately — we want everyone to be like us? Once that happens, we can incorporate them into our World System. Let’s move on to Lake.

With our Hegemonic Goggles™, we also see major flaws with the argument by Lake. His argument of Isolationist vs. Non-isolationist [U.S.] is convincing, but the Non-isolationist conclusion has faults. He preaches that what has worked in the past fifty years will work for the next fifty years. Past 50 = Next 50. Going back to part of the definition of a Hegemon, what creates its rise will create its fall. So his simple equation for success is actually the key to America’s fall. Unfortunately, it coincides with the path of Capitalism as well as our own perceptions.

O.K., so now what? If the answer is not Bandow’s, ‘yes,’ and is not Lake’s, ‘no,’ then what is it? Is it the mid-point between their arguments? Is there a way to save ourselves from our condemned fate? Ultimately this questions the systemic cycle of the Hegemonic System, and the perceptions which create the American Hegemony. Only by stepping down can America save itself from the final fall. But that will not and cannot happen. By definition, as Liberal-Democratic, Capitalist, Limited Assimilation Expansionism people, we must be ahead and in control. So the only way to save ourselves is through Change and Continuity. As Americans we must remain the Hegemon, but change what it is to be a Hegemon, thus breaking the cycle and saving ourselves. As Dr. Hart once proposed, “Hegemons have not always been around, who is to say that they will always be around?”

The only problem is my Back To The Future theorem. Basically, you’re damned if you do and damned if you don’t. First, remember that in Back to the Future, when they went into the future they saw problems. So they tried to change the future in the present. The only problem is, are those changes you tried to make the actual cause of the problems in the future? Let’s apply this to Hegemons. We know that we will fall. If we do not do anything, then we will fall (Past 50 = Next 50 [=FALL]). So if we try to change now, perhaps we will cause our fall in the future. For example, America tries to change the World System and in doing so changes its status as a Hegemon. It is no longer a Hegemon, but a power insuring that there is and will not be another Hegemon. But, some country rises up and opposes the U.S. and [the opposing country] wants to be a superpower/Hegemon. This goes against the World System of the U.S. and causes what? WAR. The exact Global War which was supposed to end the original U.S. hegemony.
[On another thought, is it better to act and do something, then to never do anything at all? If one does nothing, then the already known and inevitable will happen. So, by doing something to change the known outcome, the worst one can do is only as good as doing nothing, meaning that if you do something, that outcome can only turn out as good, if not better, than doing nothing at all. Besides, the future has yet to come and yet to be written; what it holds no one truly knows nor can predict.]

In conclusion, I have not yet conquered the Hegemonic System; neither have Bandow and Lake. But ultimately it falls onto Perceptions, Economics (capitalism), and the Hegemonic System [with times and events still to come].

Works Cited

Stephen Branham
Stephanie Johnson
Mollie Roth

Writing as Muse: Printmaking I
Student Art in Response to Poetry I
Student Writing

In Printmaking I (Art 24020#), students discover an art-making process that draws upon and merges a variety of skills. More than any other two-dimensional art form, printmaking is surface-intensive. Printmaking provides a strong foundation in primary media—intaglio, woodcut, and monotype and at the same time, encourages students to stretch their expressive capabilities. Printmaking allows for a great deal of versatility in the use of media, surface process, and methods.

Examples of student assignments examine several working surfaces, which vary according to the printmaking process. These intaglio prints cover a multitude of processes using metal plates for traditional techniques, such as etching, dry-point, aquatint, and soft-ground printing. Student assignments draw from two broad categories of intaglio processes that use acid techniques and nonacid techniques. Intaglio prints are open to endless possibilities. Professor McWhorter's students discover that just about everything from feathers, crushed cans and parts of their own bodies are suitable as images for printing. Seeing objects together and systematizing the collected images are ways to discover ideas for images.

The printmaking images represented here were created in response to poems written in Dr. Robert Miltner's Introduction to Creative Writing (English 20021) Fall 1998 course. We have quoted the most influential lines, when possible, under each image.
Stephen Branham, The Fisher ‘Variation 4’
Stephanie Johnson, Spirit House

On my way home I see the horizon at eye level;
I see the clouds and the dark hue of the sky.

... On my way home I feel the pavement move downhill under my feet;
I feel the ache in my soles after a long day of walking.

—Cheryl Householder, Introduction to Creative Writing I student
In rivers of asphalt and concrete
Through and around silent monuments
To dead men
And ideas still alive
Like: life; liberty;
And the pursuit of happiness
On the hallowed grounds
Of freedom and democracy

—Keith McGuire, Introduction to Creative Writing I student
Beth Ann Fisher

In Dr. Russ Hurd's *Inquiry into the Profession* (EDPF 19525), Beth Ann Fisher's assignment was to construct a personal philosophy, expressing her beliefs about teaching, learning and schooling in the context of current American society. Fisher's work resulted in a mobile of "elements of squares, movement and the outer green ring," which, she explains, "symbolize how I hope my beliefs will take form as a teacher."

What I Believe (For Now) About Teaching, Learning, and Schooling: Mobile Interpretation

I have constructed this mobile to describe my current beliefs about teaching, learning, and schooling. The elements of the squares, movement, and the outer green ring symbolize how I hope my beliefs will take form as a teacher.

Squares: The squares symbolize the diversity in our society that is reflected in classrooms. All of the squares are the same size since everyone involved with the education process (students, teachers, parents, administrators, community members) has contributions to make; all are equally important for the success of the class, school, and society. The equality of the squares reflects the need for equity in education. Students, regardless of their race, ability, class, or any other factor, are entitled to a quality education – the best that our society, as a whole, can provide. The squares are on the same level; the teacher in a facilitator role prepares students for leadership and aids them in taking ownership of their own learning process. The bright colors represent the ability of all students to succeed and develop to their potential.

Movement: The mobility of the squares within the ring depicts many levels of movement. Students are in different places, having different needs at different times. The role of the teacher is to begin with students where they are and provide learning experiences that allow
them to develop their knowledge and understanding of both subject matter and how it relates to their world. The movement also reflects the interdisciplinary nature of knowledge; students learn best when new information is connected in meaningful ways to known information and when connections among various subjects are made. The constantly changing dynamics of the mobile illustrate the societal factors brought into the classroom; these factors should be recognized, respected, and, in the case of problems, addressed as necessary. Interactions within the safe learning environment utilize group-process skills, developing the socialization of students; in the context of the community, these interactions can also develop democracy skills, as well. There exists a spirit of interdependence and cooperation among the learning community — what affects one member affects all. The ripple effect that actions create is also experienced in the school, the district, and society.

Green Outer Ring: The outer ring symbolizes the larger community and the society in which schooling takes place; teachers and schools work within society's framework for education. Learning that takes place in a close relationship with society has relevance; it is learning that has value now and in the future. The enveloping ring also embodies the overarching, metaphysical reason for education (which everyone engaged in education should have) that gives meaning and structure to the learning process.
Carley M. Kindler

Kindler's assignment, written for Professor Waite's Oral Discourse (Comm 15000), asked her to demonstrate an understanding of the relationship of the theory and practice of oral discourse using Ronald Reagan's 1992 National Convention Speech. Furthermore, Kindler was asked to critique the speech in terms of situation, content, source credibility, and delivery. The result? Kindler's "The Great Communicator," which not only fulfills the original assignment, but also persuasively explains why Reagan's speech was such a success at the time.

The Great Communicator

Ronald Reagan is known as the "Great Communicator" by many. In 1992, as he delivered a speech at the Republican Convention, one would not doubt his excellence in public speaking. He demonstrated superiority of speech and was easy to critique because of the situation, the content of his speech, his credibility, and his delivery.

The Republican Convention was held in support to reelect Republican Candidates President Bush and Vice President Quayle. There was an extremely large audience in support of the Republican campaign. Reagan was overwhelmed by the amount of applause and cheering from the audience. In fact, balloons, posters, and flags were everywhere displaying the pride of the nation and the Republican Party. The audience was composed of individuals from a variety of socioeconomic backgrounds. A majority of the crowd consisted of male and female working class people. Representatives from each age group were present. Throughout the speech, all members of the audience showed support and approval through chanting, "We love Ron" and "God bless Ron."

The audience members of the upper and middle age brackets were conservative and more understanding toward the speech. Each member's perception of Reagan's speech was affected by his or her individual experiences and social framework. These educational and occupational experiences molded each listener's view. These members of the audience had quite a different opinion towards what Reagan was saying compared to the opinions of the younger members.
Reagan began his speech slightly agitated due to the overwhelming response of the audience. He used hand gestures and repeatedly thanked the audience for their continued support. After regaining the audience’s attention, Reagan spoke of the many issues facing Americans. He used humor to deliver his factual message of the matters that have not only formed our country but are also still developing the citizens today.

Reagan stated that not only is America advancing rapidly, but also the best is yet to come. He noted a wide variety of accomplishments that America has experienced throughout the past several years. Reagan stressed that the rest of the world looks to America as the one nation for leadership. America was not the first force that defeated communism, and it has not always been a road of success. At one time, America was a country with mortgage rates that had doubled, but now we are sending individuals to the moon. He also noted that the ultimate direction is in the eyes of God. He used the phrases “America’s best days are yet to come” and “the country of tomorrow” to not only grab the attention of the audience but also to gain support for Bush as “he lives for the future.” Reagan satirized Democratic candidates Bill Clinton and Al Gore. The audience’s reaction was overwhelming in response to those satirical remarks. Reagan strongly encouraged the audience to choose the Republican candidates, for they do not “inhale,” and America would only fall under a president that speaks no truth.

Reagan emphasized education as an important mental tool for the future. He believed that the most profound education begins in the home. He encouraged the need of parents to spend a significant amount of quality time to build a firm educational foundation. Furthermore, education is not the only issue of concern; there is also the need to get control of the federal deficit.

At the end of the convention, Reagan recognized his wife, who has not only supported him, but also showed him strength throughout his presidency. He did this to show America that not only is society important but the individual family member is also. He obviously believed that society is constructed of smaller integral parts called the family.

After giving so many speeches to earn his way to the Oval Office, Reagan gave this speech with pride in this country. He had no note cards and did not employ the use of visuals. He used voice inflection, made incredible eye contact, and remained very poised in his figure.
format of the speech was clear and coherent, while he also used his experience as imagery to help make his purpose more vivid.

Many people see Reagan as a very credible and influential speaker. To know if a speaker is credible, four aspects such as competence, trustworthiness, dynamics, and co-orientation are analyzed. Reagan is a very competent speaker. He started out his political journey as a private citizen to a governor, then to the presidency and now back to a private citizen. The challenges he experienced as a president were probably the most overwhelming. However, all of these experiences have shaped Reagan's organized formality of speaking. Reagan also exemplifies trustworthiness. As an audience member, I trusted Reagan throughout this political speech because not only does Reagan have competence, but he is also one of the most knowledgeable politicians regarding the affairs of our nation. Reagan definitely shared common ground with the audience, which is also referred to as co-orientation. American citizens share many of the same interests as the president; therefore, the co-orientation of the speaker is superior.

All of these elements previously stated contribute greatly to the speaker's intent and purpose. Reagan was a fantastic speaker. As an audience member, I would have never guessed this man was ever nervous. However, little did the nation know that this would be the last of the many great deliveries of Reagan.

In addition, Reagan's speech is an example of an Aristotelian way of teaching. The audience has an exigency to hear improvement for the future of America. Reagan fulfills this need by providing inspiration in his speech. This convention is a political rally, and Reagan seizes the opportunity to persuade all to vote Republican: for if a Republican candidate is in office, the country will have a better chance for an improved America.
Alexis Maple

In Dr. Jeannette E. Riley's English II course (English 10002), students are allowed to create their own paper topics. Alexis Maple, due to her interest in environmental issues, chose to discuss Richard Hague's, Barbara Kingsolver's, and Merly Schwartz's (a writer Maple found through independent research) suggestions and ideas about the preservation of the environment. Maple's paper effectively argues that "If we as a people can keep our hands out of the environment and in our pockets long enough to give serious thought to the writings of Schwartz, Kingsolver, and Hague, then planet Earth may survive for future generations to live on and learn from."

Pockets

Richard Hague and Barbara Kingsolver both write about the value of a rural upbringing in communication with the land and nature. They list the lessons of life throughout their essays and explain the teachings of each lesson. Both Hague and Kingsolver work with the destruction of nature and the death it causes in the world. Kingsolver writes in her essay "The Memory Place" that "habitat destruction can be more subtle than a clear-cut forest or a forest fire; sometimes it's nearly invisible. Nor is it necessarily ugly" (202). Kingsolver believes that when a person such as Hague enters a habitat, be it a frog pond or an Iowa cornfield, death will always occur. She asserts that "human encroachment alters the quality of a place that has supported life in its particular way for millions of years" (202). In other words, when man touches earth—earth will die.

As children, we grow up overlooking the simpler things in life. We tend to avoid confrontations with others and view the world in large images, avoiding what lies in front of us. Richard Hague, in his collection of writings entitled Milltown Natural, values the environment and urges his children, as well as his readers, to look closely at nature. Referring to his children, Hague says, "they will want to look beyond the horizon—and this is good. But it is not good if in looking beyond they fail to see what is right in front of them, close-up, on the ground at their feet" (30).
The discoveries that children make are huge and marvelous to them, but to others they may seem insignificant. For example, Hague remembers stopping to examine a beetle as a child, saying, “I had probably walked past hidden dozens of them in my life, yet it was my need to get close to the ground to see that resulted in this first discovery” (28-29). It was because of the desire to be an explorer and to see a specific beetle that “the world had suddenly snapped into focus” (29). Upon contemplating the discovery he had made, Hague realized that there is more than one living thing on the earth.

With the realization that the earth does not care for only one species - humans - Hague wonders about the connection between the human species and the beetle species. Merly Schwartz, the author of the book, The Environment and The Law, relates to how Kingsolver and Hague see the environment, and helps readers and admirers of the environment see what “human encroachment” really does to it (Kingsolver 202). Schwartz claims that “an expanding economy and population creates the need for more factories, retail stores, housing, transportation systems, and food - all which require land” (75). With new births happening day after day, one can assume that as the population grows, more land will be used up to accommodate it. Furthermore, areas that had once been forested are being used to house the growing economy. This encroachment on the wilderness, “if uncontrolled, is often accompanied by the destruction of coastal wetlands, the clearing of forests, the paving of land, more air and water pollution, and more garbage to dispose of” (Schwarz 75). As the economy grows, we need to take charge of what we are doing to the environment as well as the lives of future generations. We need to set limits and “preserve the public lands because they include the last great tracts of wilderness” (Schwartz 80).

Hague describes the same beauty of the land and nature Kingsolver and Schwartz write about, but with a twist. Unlike Kingsolver, who characterizes her work after human destruction, Hague brings to light a world that is “not only a human place, but a place of a thousand other kinds of beings, voiceless, unlettered” (41). Hague explains to the readers the fact that the beings that nature cares for and houses provide the biggest lessons in our lives. If Hague had not, upon noticing that small beetle, stepped into nature, he would have missed that opportunity to discover something nature provided. Schwartz sees these so-called discoveries as resulting from the freedom that the growing economy has made. Yet Schwartz proposes that in exercising
that freedom, we have ruined what was once marvelous, "recognizing that complete freedom of action leads to environmental damage" (14).

During the first discovery Hague made as a young boy, the world and all its crevices opened up for him to peer into. He stepped forward and looked closer at things that caught his eye. An example of the new way Hague, as a child, started to view things is the examination he made of a caterpillar on a leaf, laying stretched out to its fullest ability. With the world revealing itself to him, showing him all it had to hide, he took a closer look. Hague recalls:

Leaning down, I saw a familiar caterpillar on a leaf, stretched out to its full length, but oddly still. I looked closer. At even intervals about a sixteenth of an inch apart and down both sides of its back, there were perfectly round holes. The thing was dead, hollow as a straw. (29)

Though he was initially afraid, Hague made another discovery as a result of the dead caterpillar that lay in front of him.

The discovery of the caterpillar was not enough for the world to share with Hague - the world also had to show him that out of death comes life. In other words, there are no boundaries or limits set in the environment. The lessons the environment teaches to its admirers are everywhere, and many of those lessons come along in pairs, such as death also brings life. Hague returns to the memory of the caterpillar:

I stepped back, frightened. But I looked again, and I was sure. Later, after I had carefully removed the leaf the husk had dried to and carried them home, I read about the parasitic wasp that lays its eggs on the skin of such caterpillars. When they hatch, the larvae, maybe two dozen of them, burrow in and feast slowly on the living worm, gradually digesting its organs and tissues and displacing them with their own fattening bodies. (29)

The earth taught young Hague, and many other children and admirers of the environment, about death and life through the caterpillar example. Without such discoveries, young Hague may not have become so intrigued with the lessons and matters of the environment. As a result, the collection of essays in Milltown Natural about the environment and nature may never have been written.

As the economy grows larger and larger over time, we need to become concerned about the environment, or future generations may
not be able to learn the lessons of death and life through nature. According to Schwartz, "in the eyes of the environmentalists" (38) the time has come when "human activity must be controlled in order to preserve the balance of nature" (15). For the economy and nature to both survive the changes that occur, we are going to have to give our hands a break from creating more buildings and our minds the freedom to discover the lessons that the environment holds.

Much like Hague, Barbara Kingsolver writes about the way nature teaches lessons throughout life. However, she believes that one can learn from nature without disturbing it. The central theme of Kingsolver's writings is that of "seeing ourselves as part of something larger," and the issues she explores "are all aberrations that stem from a central disease of failing to respect the world and our place in it" (198). That is, Kingsolver believes that we originate from one thing - the world - and if we do not respect the world, then disease (such as the destruction of land) will result.

Kingsolver, again like Hague, believes that nature can teach us about the relationship between life and death. Yet she also believes that death only comes from people. Kingsolver states, "when human encroachment alters the quality of a place that has supported life in its particular way for millions of years, the result is death, sure and multifarious" (202). In other words, as said before, the outcome when man touches earth is that earth will die.

On the conflict between economic growth and the environment, Schwartz writes, "it seems obvious that people would prefer to live in a world that is clean and beautiful, that poses no threat to their health, and that provides for their most basic needs" (19). I believe that Schwartz is correct in this assumption, and I also believe that Kingsolver would side with Schwartz on how the economy acts towards the world. But is the growing economy going to get its hands dirty and help to make the world a clean and beautiful place for future generations? I believe, like Schwartz, that the dirt on the hands of the economy "is the price the nation has paid for economic development" (83). So in the end, the generations to come will live in a clean world and be able to learn lessons from the environment.

Kingsolver finds herself most influenced by "the experience of nature, with its powerful lessons in static change and predictable surprise. Much of what I know about life, and almost everything I believe about the way I want to live, was formed in those woods" (201). She sees the world as a classroom, a window to learning. But the ways we learn
from the world’s teachings are different. Unlike Hague, Kingsolver believes that mankind causes destruction. She writes that at “first glance,” the presence of the land has changed: “[t]he pollution here is noticeable. Upstream we passed wildcat strip mines, bulldozed flats, and fords where the road passes through the creek” (203). She sees the sites that once held beauty, but as man entered the beauty, he left his footsteps - destruction. Kingsolver wonders what will happen to the land when man starts to travel more, saying, “if the land eroded badly, or the turkeys were all killed in one season, they and their children would not survive. Rarely does any creature have the luxury of fouling its own nest beyond redemption” (203).

Kingsolver thinks ahead to the future of the world, its land and its habitats. She fears that the teachings she has learned may not be there for her daughter. Kingsolver writes, “the fragile desert becomes more precious to me as it becomes a family treasure, the place she will always like to think about, after she’s grown into adult worries and the need for imaginary refuge” (205). Kingsolver believes that mankind takes advantage of what is handed to it and treats the land and its teachings as “more of a playground” (204). People do not realize what truth, richness and treasure the world holds for them, and they treat it with no respect. Kingsolver hopes that mankind can learn without disturbing nature and keep “the land of impossible childhood discovery, in hopes that it may remain a place of real refuge” (205).

Overall, the destruction that the economy has created has damaged the future of the environment. If we as a people can keep our hands out of the environment and in our pockets long enough to give serious thought to the writings of Schwartz, Kingsolver, and Hague, then planet Earth may survive for future generations to live on and learn from. I feel so strongly about the topic of the environment because we live in a world that will, if not respected and cared for, deteriorate - and then where shall we go? Schwartz supports the scientists, “who play an important role in the making of environmental law” (32), and asserts that “human activity must be controlled in order to persevere the balance of nature” (15). I cannot believe that the world has come to a point where human activity must be restricted in order to keep the “destruction of coastal wetlands, the clearing of forests, the paving over of land, more air and water pollution, and more garbage to dispose of” from happening to the environment (Schwartz 75).

I believe both Kingsolver and Hague carry their stories and lessons of the teachings they learned from the world equally. They have seen
the light and discovered the hidden message in each teaching. The only difference between the stories and views of Kingsolver and Hague is in the way they approach nature's lessons. Kingsolver believes the "hands off" approach is better and will help preserve the earth longer for other generations in the future to learn from its teachings. Hague, on the other hand, realizes that the "hands on" approach is more educational and helps one to better understand the world's teachings. As for myself, after considering the information from Schwartz, I believe that Kingsolver is heading in the right direction, but could use a little guidance from Hague. Kingsolver encourages admirers of the environment to watch for and listen to the teachings the environment offers but also emphasizes the importance of preserving the environment for future generations to come.

Works Cited

James T. Lazio

Professor Greg Little’s Computer Imaging I class (Art 44095) was asked to combine images collected from video frame grabs, scanned photos, or photos taken with a digital camera and then to create a new reality. Here, James Lazio has created a scene with varying facial images drawn from these various mediums.

Dark Collective
Kristine Morgan

In an Honors section of Introduction to Philosophy (Phil 11001), taught by Dr. Thomas Norton-Smith, Kristine Morgan was asked to provide a metaphysical explanation for the number three. This particular assignment has the purpose of reflecting the branch of philosophy called “metaphysics,” which examines and describes something in its essence and existence as one of the important “Ways of Knowing.”

What is the Number Three?

When examining what sort of existence the number three has, it is important first to understand exactly how it exists relevantly in the physical world. First of all, the primary existence of number three is not a tangible existence; one cannot walk through the forest and find threes growing wild with beautiful, silky, burnt orange and maroon spotted petals and green leaves. Second of all, the number three cannot do anything by itself to declare its own existence in the physical. Unlike air, gravity, or time, which are also intangible but still capable of certain physical actions such as wind, combustion (air), gravitational pull (gravity), or orbits (time), the number three does not have the physical properties necessary to be detected by the senses of any terrestrial being by itself.

So, exactly how does the number three exist? Well, it has a co-dependent existence; in order for three to exist, it requires something called “units.” Three exists as an application of units, and units can be any existing thing with physical properties. The units are what determine the type of existence three has. If the unit is another application such as five, six, or seven, or a variable (a variable occurs when the units’ arrangement or amount varies) such as X or Y, then the existence is not yet detectable; this only creates another type of application or formula that requires units with physical proprieties to be “plugged into it” in order to be detected through the senses in the real world. There are two ways that three can be used as an application to units; it can be used in terms of quantitative measurement or it can be used in terms of sequences.
Earlier I mentioned that you cannot walk through the forest and find threes growing wild. However, you can find three tiger lilies growing wild. The tiger lilies are the units and three is the application. This is an example of three applied as a quantitative measurement. In other words, three is the amount of tiger lilies growing. You can tell there are three tiger lilies if you count the first seen as one, the second as two, and then the third as three, and you see no other tiger lilies besides the ones counted. If all these conditions are satisfied, then you have a three of tiger lilies. Remember that units can be any existing thing and not exclusively tiger lilies.

Now, suppose we are standing in line at Ticketmaster. The first person in line is number one, the second person in line is number two, and the third person in line is number three. What makes this application significant is that the units are in a certain order with respect to three. This is a sequential arrangement using the number three. Number one will be the first person to buy concert tickets, number two will be the second, and number three will be the third. Also, it is important to know that any unit(s) that may be doing any action may be used in a sequence of three, just as long as the units do the actions in sequence with respect to three.

This leaves one more question: can three exist without being invented or perceived by man? Well, actually, there is not a definite “yes” or “no” answer to this question; the idea that three’s existence is relevant without a human perception of it can be debated. For example, a dog is not aware of the label “three,” but imagine a mother dog that has three puppies. Some may argue that she will be able to recognize the physical properties of each puppy and that she will examine each puppy in sequence in order to know if all three puppies are there. Therefore, three has relevantly existed without a human’s perception of it. However, another person may argue that when dog breeders sell a puppy from a litter of three, there is no significant change in the mother dog’s behavior after the puppy is gone; so, the mother dog fails to perceive any relevant existence of the number three. Both arguments are reasonable and opposing; this is why it is unknown whether or not three can exist as an application of units without our perception of it.

In conclusion, the number three definitely has a relevant existence to human beings in the real world if three is used as an application that takes form as either a sequential arrangement or quantitative measurement of independently existing units. If all of these conditions are satisfied, then three can be perceived by man through the senses, whether or not three can be perceived by any non-human beings.
Eric J. Pierzchala

In Intermediate French I (Fr 23201), Dr. Ruth Capasso assigned journal entries, to be written in French, in which one could explore a range of topics. What Eric Pierzchala found in his journal writing was a common thread of self-discovery through reflection back to the days of first rememberings. "Le Petit Miracle," or "Little Miracle," is one of Pierzchala's favorite entries from his collection. Upon the request of the editorial staff, Pierzchala provided an English translation for our readers.

Le Petit Miracle

Quand j'étais petit, je voulais avoir une patinoire derrière ma maison. Mes amis avaient une patinoire de temps de temps et je avais besoin d'une patinoire aussi.

J'ai demandé à ma mère chaque année mais la réponse était la même toujours. Ma mère me disait annuellement...

"Non... non... non." "Il est trop... Il est dangereux..." Mais quand j'avais dix ans, un miracle est arrivé.

Le temps avait été très particulier le nuit avant. Cette bonne heure du matin le téléphone a ressoné. Ma mère a hurlé, "On a ferme les écoles." J'étais frappé, mais je suis allé redormir. L'étoile du matin a disparu dans la lumière du jour; un jour merveilleux.

Après j'ai pellete le trottoir, j'avais le temps à jouer. Quand je jouais à l'après-midi, j'ai trouvé une surprise incroyable. À cause du temps bizarre, il y avait de la neige mais au dessous de la neige il y avait une patinoire naturelle! Incroyable! Une patinoire naturelle à cause de la pluie! Je ne le croyait pas! Rapidment, je suis allé vite pour obtenir mes patins, mon bâton, et le disque de caoutchouc. La glace était forte.

Pour deux jours j'ai eu mon patinoire. Ma mère était dans une incroyance quand elle a découvert ce que j'étais fait. Ma mère a ri quand elle a vu son garçon patiner. Quand je pense aujourd'hui de cet evenement, d'une vie simple, je le considère un miracle de la jeunesse. En effet, il y avait un autre qui l'a suivi. Ma mère m'a préparé un chocolat chaud. Je pense que le miracle était un aussi un chocolat chaud.
Little Miracle

When I was young, I wanted to have an ice rink in my backyard. My friends had one from time to time, and I needed an ice rink too. I asked my mother each year but the answer was always the same. My mother told me every year...

“No... No... No...” “It is too... It is too dangerous...”

But when I was ten years old, a miracle arrived.

The night before the temperature had been very strange. The magic hour came when the telephone rang. When my mother yelled, “They have closed the schools,” I was struck with excitement, but I went back to bed. The morning star disappeared into the light of the day, a day that would be filled with wonder.

After I had shoveled the walk, I had time to play. While I was playing in the afternoon I found an incredible surprise. Because of the bizarre temperature, there was snow, but on top of the snow there had formed a natural skating rink. Incredible! The rain had caused a natural ice rink. I could not believe it! Quickly, I went and got my skates, my hockey stick, and a hockey puck. The ice was strong.

For two days I had my ice rink. My mother was in disbelief when she saw what I was doing. My mother smiled when she saw her boy skating. When I think back to this event, a time when life was simple, I consider it a miracle of youth, but there was another miracle that followed. My mother, after I had been skating all day, had made me hot chocolate. As I think back to this event now, although the ice from the heavens was a miracle itself, I now believe that the true miracle was not just the ice rink but also that hot chocolate.
Shawn Selby

Dr. Heaphy's U.S. Recent Period History—1929 - Present (History 41069) class was asked to interview someone involved in, or present at, a major social, political, or cultural event from the period covered in class, then write a paper exploring a question of the topic chosen, using the interview as the primary source. Shawn Selby chose to examine the "understated contributions made to the space program by the workhorses of the crewless spacecraft."

"Pioneer"-ing Space: The Forgotten Space Program

"That's one small step for man, one giant leap for mankind." Those words, spoken by Neil Armstrong, the first man to set foot on the moon, have passed into history. Their emotional delivery, their meaning, and the historically monumental event they commemorate make them some of the most famous words ever spoken. Anyone who was old enough to remember the time can probably remember exactly where he or she was and what he or she was doing when man first walked on the moon. Along with the inscription on the plaque placed at the point of the landing ("we came in peace for all mankind"), Armstrong's words are often enough to bring tears to the eyes of nearly every American and indeed much of the world. As great an accomplishment as man's landing on the moon is, however, there are other momentous events that often seem forgotten in the glare of celebrity afforded to the space program's manned missions.

How many people can remember where they were when the first man-made object left the bounds of our solar system? How many people can even remember what that object was? It was the Pioneer X spacecraft, and it left the solar system in mid-1987 without much fanfare. Think of it, the first object from earth that has broken through the realm of our solar system went relatively unnoticed. In terms of our position in the vastness of space, the walk on the moon was a trip to the house next door; Pioneer left our neighborhood completely to search for the answers to some of our most basic questions about the origins
and nature of the universe. It carried with it a plaque to announce our existence and position in the galaxy to any alien civilization who found it. In the grand scheme of things the Pioneer X and XI deserve just as much praise as the moon landings. Because of their less visible mission goals and the fact that they are seen as simple, unmanned machines; however, they are seen by many as step-children of the space program. These events and machines often go without the recognition they deserve. Many of mankind's most significant achievements in space go unnoticed by much of the public, yet they are, and have been, integral to the creation of the manned space program which garners much of the spotlight.

In order to sufficiently examine the impact of the unmanned space program, there are several areas we must consider. First, we must look at the significant firsts accomplished by the unmanned program. The vast majority of the public sees and remembers little of the major milestones that have occurred within the "robotic" research undertaken by NASA. Second, what foundation work did this program give to the manned missions that used its technology? Lastly, why has the series of unmanned missions and their accomplishments gone so long without significant recognition? By looking at these several important points, we can begin to understand the significant yet understated contributions made to the space program by the workhorses of the crewless spacecraft.

In 1961, President John F. Kennedy announced to the world that the United States would make it a national priority that by the end of the decade we would land a man on the moon and return him safely to the earth. This assertion was made only twenty days after the first American had entered space. America did not even have an astronaut who had orbited the earth yet. Mr. Kennedy spurred NASA on, however, and slightly more than eight years later the United States could boast the accomplishment of placing the first men on an extraterrestrial body.

Much has been written about the Apollo program, as well as the Mercury and Gemini programs before it, and with good reason. Little has been written, though, dealing with the huge advances made in the field of unmanned flights that helped to set up the necessary technology and skill to accomplish President Kennedy's dream. In fact, the unmanned missions were often indispensable to the successful completion of the ultimate goal. Without the lessons learned by their groundbreaking successes, many of the accomplishments made by the
more famous manned space program would have been much harder to come by.

Although the public is familiar with the Kennedy Space Center in Cape Canaveral, Florida, there are many other research and development centers around the country. Each of these centers handles specific jobs and missions. For instance, the Jet Propulsion Laboratory (JPL) in Pasadena, California handles the creation of unmanned spacecraft and their programming. Goddard Research Center near Washington controls the creation of weather and atmospheric satellites. Within NASA’s system of research centers and launch control centers are many integral crews who develop the systems needed to make each launch a success. The crews at NASA’s Lewis Research Center near Cleveland, Ohio are responsible for coordinating much of the technology that allowed and presaged the moon landings, as well as other significant firsts in space exploration.

It was here that one unsung hero of NASA worked from 1964 until 1996. He was an integral part of nearly every significant unmanned launch during those thirty-plus years; his work helped get the men to the moon, and it helped guarantee that Pioneer X and XI and Voyagers I and II made it to their objectives. His story is intimately connected with some of the most significant achievements in NASA’s, and indeed the world’s, history. His name is Ed Muckley; he was a mission manager at Lewis¹, and projects that he worked on became the stepping-stones to moon landings, planetary probes, and satellite launches that serve much of the planet’s communication requirements. Unfortunately, however, his role, like that of so many others, is largely overlooked in the telling of the history of manned space flight. NASA Lewis’s job was to integrate the spacecraft developed at other research centers, such as Ames center near San Francisco, to the launch vehicles located primarily at Cape Canaveral.

This integration involved programming the satellite, probe or lander in the proper way to ensure correct deployment, as well as determining the software, electronic connection and mechanical mating of the payload to the rocket that would launch it. The workhorse of the NASA unmanned program was the Atlas-Centaur. It used an Atlas lower stage rocket and a Centaur upper stage to place satellites and other interplanetary spacecraft into space.

One such mission was the Surveyor mission to the moon. First launched in May of 1966, it signaled the first American soft landing on
the lunar surface. As such, it served as a valuable test for the subsequent Apollo landers by providing much needed technological information and practice at building a craft that could successfully place its payload safely on the moon's surface. The Surveyor landers were also used to help determine potential landing sites for the upcoming Apollo missions. Without Surveyor's pioneering landings, the Apollo program would have been severely curtailed.

Another significant contribution provided by the men and women at Lewis was the development of the high energy hydrogen/oxygen fuel needed to launch large payloads at speeds high enough to escape the earth's orbit. This fuel, originally intended for use in the Atlas-Centaur rocket system, provided the missing link in the upper stage fuel used in the Saturn V rocket which carried the men to the moon. The second stage of the Saturn rocket proved to be the most difficult. It "presented enormous challenges to NASA engineers and very nearly caused the lunar landing goal to be missed...It was consistently behind schedule, and it required constant attention and additional funding to ensure completion by the deadline for a lunar landing." Thus, the work done at Lewis Research Center was again invaluable to the Apollo program.

After the Apollo program came to a halt in 1972, NASA took a breather. They began working on more unmanned flights and continued their interest in studying the other planets. Among the earliest attempts at surveying other planets came the Mariner series that studied both Mars and Venus in the early 1960's through the early 1970's. These orbital probes (in particular the ones sent to Mars in the late 1960's) served as building blocks for the development of the probes that would later gather information about the outer planets. Mariner IX, launched aboard an Atlas-Centaur rocket, was the first spacecraft to orbit another planet (in this case Mars) in 1971. As such, it gave the scientists and the general public on Earth their first look at Mars as it really was, without the distortion of ground telescopes and atmospheric haze.

In August and September of 1975, the Titan-Centaur rocket system was used to send the two Viking missions to Mars. These missions contained both an orbiter and a lander. They reached the planet after about six months of travel time, and immediately began returning our first images of the surface of another world. They showed the red, rusty soil, made scientific and infrared tests, and gave mankind its first glimpse of the planet most likely to have sustained life at some point.
These landings and tests have helped to pave the way for any potential manned mission to land on Mars.

Our exploration of the solar system was not limited to our immediate neighbors, however. In the early 1970's, NASA sent the Pioneer X and XI spacecraft towards the outer planets. This marked the first time in history that any probe had left the confines of the rocky inner planets and attempted fly-bys of the huge gas planets. Pioneers X and XI were identical and were sent on nearly identical missions. Pioneer X was sent just to pass near Jupiter. After its mission there was complete, it was intended to leave the solar system without passing close enough to any of the other outer planets to gather significant data. Pioneer XI, on the other hand, was programmed to fly by Jupiter and then proceed on to Saturn for close inspection. These two probes made history by providing the first close and detailed look at the features of these two titans of the solar system.

Although they were to be upstaged by the two Voyager Spacecraft already on their way, Pioneers X and XI were the true pioneers of the outer solar system, providing data about the outer planets that was many times greater and more detailed than had been collected in all the years before them.²

Each of the Pioneer spacecraft intended to leave the solar system carried with it a plaque describing the probe's origins and included drawings of human beings should any intelligent life ever discover it.³ The Pioneer probes are still sending data back to the earth, giving scientists their first significant, first-hand look at the composition of the universe outside our solar system.⁴

The later missions in the Pioneer series (both launched in 1978) were sent to Venus. Again they were launched on the workhorse of the unmanned program, the Atlas-Centaur. These also marked significant firsts in space exploration in that they were the first successful American orbits of Venus. Pioneer II Venus also included a lander which survived several seconds on the surface of Venus and sent back data to scientists on earth dealing with the atmospheric and surface composition of Venus. Again, these significant events in the history of American space exploration have gone largely unrecognized by both the general public and by those who debate the value of the space program.

Perhaps the most famous, and in some ways most successful, series of probes launched by NASA has been the Voyager series. Launched in 1977, the two Voyager spacecraft passed by Jupiter in
1979 and provided some of the most breathtaking and detailed photographs ever taken of the giant planet. They far outstripped the images returned from Pioneer. "The photos obtained by the two Voyagers of Jupiter, Saturn and their respective moons were astounding." From Jupiter the two Voyager probes moved on to photograph and analyze Saturn, Uranus and Neptune before leaving the solar system in 1990. The Voyagers not only captured the public's imagination as few other unmanned probes before them, but they also provided the first glimpses of the farthest planets of our solar system, as well as their moons. Uranus and Neptune had never even been photographed from earth until the Voyager spacecraft arrived.

No probes in history have repeated Voyager's monumental accomplishments, and no other man made object has passed so close to Uranus or Neptune. It is estimated that both probes should be detectable until approximately 2016, by which time they will have left the heliopause, which is the area of the universe that is still affected by the sun's influence. This will give scientist's their first look at what the galaxy is like without the sun's interference.

The other satellite and probe systems developed at Lewis for the unmanned program are somewhat less recognizable, but are no less significant. For instance, the HELIOS probes were launched towards the sun to take measurements around the sun's poles. This marked the first time in history that any spacecraft was launched out of the plane of the ecliptic (the dish-like plane in which all the planets revolve around the sun). Although the U.S. eventually launched only one of the two probes we had earlier agreed to sponsor, it still served as a major milestone in the advancement of space technology.

Perhaps the most directly important spacecraft launched using technology from Lewis Research Center are the many communications, weather, and military satellites put into orbit over the past thirty-five years. "The weather satellites were launched for Goddard [space center] and NOAA [National Oceanographic and Atmospheric Administration]." These satellites help forecasters around the world determine potentially severe weather, as well as help the rest of us plan our days without the threat of unanticipated weather changes. Along with many of the communications satellites, such as the INTELSAT and COMSTAR series which provided the opening days of international television broadcasts, the Atlas-Centaur and Titan-Centaur have launched dozens of military satellites, which help with the modern global positioning system as well as aid in detection of enemy military
movements. It was this type of satellite that allowed the Allies to engage in such precision attacks during the Gulf War, thus saving the lives of hundreds of Allied service men and women.

So it is evident that many significant achievements were made by the unmanned space program throughout its history. Had it not been for the Surveyor moon landers and the high energy hydrogen/oxygen fuel developed for the Atlas-Centaur rocket series, the Apollo program would have had a much more difficult and dangerous time reaching its goals. Many of our most important scientific research into the nature and origin of the universe also comes primarily from unmanned spacecraft. The information recovered by the Viking series to Mars, and the Pioneer and Voyager missions to the outer planets, will serve as invaluable additions to any planned human exploration of those planets.

Even the OAO, the Orbiting Astronomical Observatory which predated the Hubble as a telescope in space, has given NASA a glimpse of the cosmos that would never have been possible from earth based observatories. Its technology, while not as sophisticated as that of the Hubble, was instrumental as a test bed for the newer, more powerful telescope. Yet the OAO got little or no recognition compared to the overwhelming publicity afforded the Hubble.

Few people, when asked about the most significant achievements of the space program would mention the COMSTAR communication satellites or the Pioneer’s exploration of the outer planets. Even fewer still would think of the Surveyor as being the first attempt at a soft landing on the moon. It is a safe bet that the overwhelming answer would be the moon landings, as well as the other famous manned missions, either successful or otherwise. Why is this the case? Why does the public seem so quick to dismiss the unmanned side of space exploration as mere fluff and as secondary to NASA’s “other” missions?

Even today, as the American, and indeed the world public, has become blasé about the shuttle and other launches into space, most of the world’s attention to the space program only came when former astronaut John Glenn went back into orbit. Until this recent mission, NASA seemed to have lost much of the glamour and prestige it had in the days of Apollo and even Mercury and Gemini. Much of this has to do with the lack of national pride in the space program as a whole. In the 1960’s, with the cold war a constant concern, the American public reveled in the space race as a way to combat the Soviets in a less dangerous arena than nuclear war. “A perceived threat to national prestige from the Soviet Union was met by a dynamic leader, John
Kennedy, and economic prosperity allowed him to launch a massive effort to demonstrate America’s capabilities.” The U.S. consciousness was tied directly to our astronauts who risked their lives in a pursuit that was only several years old. In the future it is not likely that such a convergence of historical factors would ever occur to create the same sense of national pride and exhilaration that the Apollo program provided.

Today, the novelty of space flight has worn off. Unfortunately, most people don’t even take a second look when a spacecraft is launched today. It has become so “routine” that few of us can remember the last time the shuttle went up, or even if it is in orbit right now. It simply does not interest us, or capture our imagination like it once did. Many people have compared the increasingly lackadaisical attitude toward space flight to the way in which air travel gradually became old news. In the early days of flight, people would run out of their houses whenever an aircraft would pass overhead. Today it is second nature to see dozens of airplanes cross the skies every day. While spaceflight is by no means so routine, it has lost much of the thrill and adventure, as well as the feeling of a national identity that once fueled NASA’s launches. There is no longer the feeling of connection with “our boys” who travel in space anymore. Even the manned missions have become “old-hat;” as a result, the unmanned missions get no coverage whatsoever.

Obviously, the manned missions would have much more romanticism about them than the launch of a simple machine in the first place. So it should not be surprising if many of the advancements made by the unmanned program go largely unnoticed. It is still disturbing, however, that there is very little publicity when significant events in the space program go unreported and unrecognized by the press and the public in general simply because there are no human crew members on board. The amazing achievements of the Pioneers and Voyagers and Vikings are just as deserving of recognition as the shuttle missions.

One example of the “short shrift” that the unmanned space program gets occurred in the coverage of the Challenger launch failure in January of 1986. The most horrific and deadly failure in NASA’s history, Challenger led the nation to reevaluate its commitment to the exploration of space. In the extensive coverage given to the results of the explosion little was said of the missions that were disbanded because of the failure and the subsequent grounding of the shuttle program. At the time of the explosion, NASA was in the process of
modifying a Centaur upper stage rocket for launch from the shuttle’s cargo bay.¹⁸ This would have allowed a much greater freedom in sending probes, landers and other orbital and interplanetary satellites into space. It would also have been cheaper than using the Centaur mated with lower stage rockets from earth. Needless to say, the Challenger failure effectively killed the idea of using highly volatile hydrogen/oxygen fuel for any launch system within the shuttle itself. Hundreds of people involved in the program were suddenly stripped of years of hard work. “It hit us pretty hard in that the many years that went into development of the Shuttle Centaur was now basically wasted because the project was canceled as a result of Challenger.”⁹ Granted the loss of life and the national tragedy were much more significant, but some mention should have been given in the subsequent weeks of the other people that were affected. No action occurs in a vacuum, but for NASA it often appears that way.

Perhaps the most obvious “problem” with the unmanned space program is the simple fact that it is unmanned. Many casual space enthusiasts might consider the mechanical and robotic probes and landers to be less worthy of note than a mission that involves putting men and women into space. This is somewhat true. Obviously the stakes are much greater for everyone involved when humans are sent into space and put through the risks that such a mission entails. This difference in risk factors should not preclude the necessity of giving the unmanned missions their due. The impact of the contributions made by these missions cannot be overstated. Throughout this paper we have seen one example after another describing the significant firsts that were pioneered by the missions of the unmanned space program. We have seen that these launches were intimately tied to the success of the more visible manned program. Unfortunately, however, the press and the general public probably will not give sufficient recognition to the robotic and mechanical side of space exploration for a long time, if at all.

We now return to Mr. Ed Muckley, who retired in 1996. As much as anyone in the entire NASA organization, Mr. Muckley was responsible for the successes of the unmanned missions. His name will never make it into the “Who’s Who” of American space exploration, yet without his work, and without that of countless others who toil behind the scenes, NASA would not be what it is today. Like many who worked on the unmanned missions, Mr. Muckley feels that the mechanical probes, landers and orbiters have gotten passed over in favor of the more visible
and more publicity oriented manned missions, such as the space station.

One of the things NASA can do more of is the unmanned program, at a fraction of the cost of manned missions. Plus you don't expose a human to the risks. A lot of science can be done through robotic spacecrafts. And they're getting short-shrift, because as it was during the shuttle days, the shuttle captured the biggest funding, now the international space station is the other big program that's draining the bucks. So the planetary missions have gotten pretty much token treatment. ²⁰

In fact NASA does not have specific plans for their most anticipated new mission, which is to land humans on Mars. ²¹ The administration dangles the landing before the public like a carrot on a stick, yet it never admits to working without any set goal. Because of budget constraints and the desire to make the agency's goals appear more concrete than they are, this lack of a definite time-frame is never admitted to the public.

As NASA's budgets shrink with the global economic crisis and Congress desires to funnel money into other "more productive" agencies, the unmanned program might gain a rebirth. It may well be that NASA will begin to take the robotic exploration of space more seriously as a budgetary and scientific necessity. Since the bottom line is becoming more and more a money issue, the attractiveness (and cost-effectiveness) of sending machines in place of humans may become more evident. This may simply be a pie in the sky, however, as the romance of manned space flight is what keeps the program in the public eye in the first place. Thus, while the administration may focus a somewhat larger portion of their funding toward unmanned exploration, the real reason for NASA as a public entity is so Americans and the world can watch with some measure of their old fascination the spectacle of human beings stepping beyond their earthly cribs into the cosmic playground.

Footnotes

1 Ed Muckley, personal interview, Oct. 31, 1998, Canton, OH.
7 Yenne, *Encyclopedia*, 123.
8 see Appendix
9 Interview.
13 Interview.
14 Interview.
15 Interview.
17 Interview.
18 Interview.
19 Interview.
20 Interview.
21 Interview.

**Works Cited**


Pamela Wilfong

For Dr. Penny Bernstein’s Human Biology course (BSCI 10001), Pamela Wilfong researched a scientific topic of choice, with respect to the local community, and concluded with a personal opinion on the subject. Wilfong’s paper focuses on Botox, “a new medication for eliminating wrinkles.” Wilfong’s research concludes that not enough is known about “the long term use and the long term side effects of the toxin, despite the fact that Botox has been approved by The Food and Drug Administration and is being used for a variety of medical conditions.”

Botox: The Pretty Poison

Everyday, as I go through the morning ritual of applying my make-up, the visible signs of aging are becoming more apparent. I see skin that is starting to sag and everyday, I swear, a new wrinkle appears. Of the many things I can find fault with on my aging face, the most bothersome are the deep creases between my eyebrows. For this reason, five months ago, I decided to check out my options for obliterating these deep valleys on my forehead. After calling several cosmetic surgeons in the Akron/Canton area, I learned I had only three options: brow lift (a major surgical procedure), laser skin resurfacing, or collagen replacement therapy. I wanted a less invasive treatment that had little or no recovery time, so I opted for the collagen.

Meanwhile, as I was watching television one evening, I learned of a new medical treatment for eliminating wrinkles called Botox; so, when I went for my collagen injections I asked my doctor about this new treatment. At that particular time, Dr. Pennington did not do the procedure, which involves injecting Botox into forehead wrinkles; however, he said he was going to learn to do the procedure, and would be offering it in about three months (which was just about the length of time my collagen would last). He suggested that I call him in October if I was interested. Fortunately the timing, and my desire for more information about Botox, coincided with this assignment. Ultimately, my research would determine whether or not I would actually have the Botox injections; therefore, I began my investigation with a list of important questions such as, what is Botox, what effect does it have on frown
lines, how long does it last, and is it safe. In addition, considering it is a relatively new procedure, I wanted to know if there were other doctors in the local area who were performing this procedure and, most importantly, the price I would have to pay to undo my furrowed brow.

Through my research I found that Botox, the trade name for Botulinum Toxin type A, is a “neuromuscular junction blocking agent produced by the bacterium Clostridium Botulinum” (“Botulinum Toxin”). In other words, Botox is derived from the same poisonous bacterium which causes botulism - a deadly food poisoning. The Botox works “by blocking the release of the neurotransmitter acetylcholine, which results in muscle weakness. It does not alter the muscle or the nerve, but prevents the relay of information between the two” (“Botulinum Toxin”). Therefore, Botox is beneficial in the treatment of wrinkles and frown lines because it causes specific muscles to relax, which in turn lessens the lines of facial expressions. Because Botox relaxes specific muscles, it is also used to treat a variety of medical conditions dealing with muscle spasms.

Botox was first used in the 1980s to treat muscular problems with the eyes, such as uncontrolled blinking and squinting, lazy eyes and crossed eyes (Health Beat). Botox has also been used to stop excess sweating by injecting the toxin into the sweat ducts in the skin (Channel 2000). However, in 1989, Dr. Carruthers of Vancouver pioneered the use of Botox for forehead wrinkles (Sparks). Thus began the craze of aging females, like myself, eager to eradicate prominent creases by using Botox. Today, doctors are using Botox not only as a treatment to eliminate forehead frown lines, but also to erase crow’s feet (the tiny lines that appear around the eyes). Specifically, Botox is injected into the corrugator muscle between the eyebrows. The Botox relaxes the muscle and inhibits the ability to draw the eyebrows together when frowning. Once the muscle has been injected the frown line gradually fades away - generally within two to five days (Sparks). To eliminate squint lines, Botox is injected into the muscles beside the eyes. This procedure is very simple, takes only a few minutes, is painless, and appears to be a great alternative to surgery, but it is not a cure.

The effects of Botox injections are not permanent, therefore the injections must become an on-going treatment process. In general, the effects last three months and injections can be repeated every three to six months; however, some patients require less frequent treatments because they break the habit of contracting the frown muscle (The Skin Site). So far this procedure sounds great. It’s quick and easy, and the results are immediate, but how safe is it and are there side effects?
Botox is approved by the Food and Drug Administration and the American Academy of Neurology and the National Institutes of Health report Botox to be safe ("Botulinum Toxin"). Although botulism poisoning can be deadly, the dosage of botulinum toxin used for medical treatment is much smaller than the amount that causes botulism. A lethal amount of botulinum toxin is approximately 2,700 unite, however only about 20 to 25 units of toxin (in a purified form) are used for most treatments (Health Beat). Even though this is a very minute amount of toxin, there can be occasional side effects. One side effect is that one out of every ten patients develops a small bruise or hematoma at the injection site, which takes several weeks to resolve. Another effect is a rare drooping of the eyebrow or eyelid, which can last three to six months, but is always reversible. Extremely rare is double vision, which can last three to six months and is also always reversible (The Skin Site). However, because this is a relatively new treatment, any long term effects have not yet been discovered. With all these facts in mind, I now needed to know where I could receive this treatment locally, and how much I was going to have to spend to look revitalized.

The first call I made was to the doctor who had given me the collagen injections. After several phone calls to Dr. Pennington’s office and several unanswered voice mail messages, my persistence paid off only to find that he was not yet performing the procedure. So through the yellow pages of the phone book I went (Appendix A). At first, I called only cosmetic surgeons in the Akron/Canton area. When I could not find a cosmetic surgeon who did the Botox injections, I began calling local dermatologists. Once again, I found no one who did the procedure. At this point, I began calling the Cleveland area, and at long last I found a doctor skilled in the procedure. Dr. Sheldon Artz of Mayfield Heights was the only doctor I found who does the Botox injections.

I spoke with Dr. Artz’s nurse, Kate Micco, who was extremely helpful answering all my questions. Kate apprised me that Dr. Artz has been giving Botox injections for about two years. She was very surprised I had not been able to find anyone locally who performed the procedure considering the fact that it has become very popular. In fact, Dr. Artz actually has a “Botox day” once a month! Patients wanting the Botox injections are scheduled on the same day. Kate said the reason for this is because once the botulinum toxin is diluted into its purified form it is not as effective after four hours. Rather than mixing the toxin each time a patient needs an injection, it is processed and used within the four hour period. On average, Dr. Artz treats six patients a month; however, according to Kate, there has been an increasing number
of inquiries about the injections. She told me that with the Christmas holiday coming up, people want to look their best, so Dr. Artz may need two days to take care of the Botox requests.

As the interview continued, I asked Kate where Dr. Artz learned to do the procedure. She informed me that he learned through reading articles and trials by other doctors, as well as through seminars and meetings in which techniques are discussed on how to achieve the best results. Wanting to know about side effects I said to Kate, “I assume that since he has been doing the procedure for two years, and has had enough patients requesting it, that he is well informed and can perform the procedure without incident.” According to Kate, thus far there have been no complaints of side effects. I then asked the big question, “How much money am I going to spend?”

Kate told me the cost for Botox injections varies. In general, the procedure runs five to six hundred dollars; however, costs vary depending on whether or not it is in conjunction with other procedures. Many patients choose to have surgical procedures, and then have the Botox treatment to help maintain their new youthful appearance. Also, Botox is often used along with chemical peels. She told me that because a Botox treatment is considered a cosmetic procedure, it is not covered by insurance. Regardless of this fact, many people are willing to spend the money, perhaps because it is the least invasive, and the results are almost immediate. Kate believes the popularity of this procedure is due to the fact that there is no recovery period. She informed me, “This is a procedure that can be done during a person’s lunch hour, unlike surgery or laser resurfacing, which require at least a two week recovery.”

With all the facts in mind, I have decided against having the Botox injections - at least for the time being. I have concerns about the long term use and the long term side effects of the toxin, despite the fact that Botox has been approved by The Food and Drug Administration and is being used for a variety of medical conditions. I have major concerns with the fact that botulism, which affects the central nervous system and interrupts nerve impulses, ultimately can cause difficulty in swallowing, walking, impair vision and speech, convulsions, paralysis of the respiratory muscles, suffocation, and death (“Botulism”). Knowing all of this, I have to ask myself if I really want the same toxin which causes botulism poisoning injected into my body, no matter how minute the amount is. Furthermore, because Botox is made up of a deadly bacteria, it seems to me that the body’s response would be to fight it. For this reason, I wonder what the long term effect might be on the immune system after long term injections, as well as other previously
mentioned physiological effects. These are questions that cannot be answered yet, for there have been no long term studies done on Botox. Also, I am concerned with the fact that there are very few doctors in the local area who perform this procedure. Why not? Is it because they are also concerned with the long term effects? I do know that if I were going to have the injections, I would have it done by a doctor who is experienced in the procedure and not by someone who was just learning. As far as the cost, five hundred dollars does not seem to be excessive in comparison to other cosmetic procedures; however, this is a recurring cost every three to six months. So what price does my vanity have on it? I've been known to be extravagant now and again, but if the price I will eventually have to pay is with my health - then this "pretty poison" is too expensive.

Appendix A: Local Doctors Researched
Lewis M.D., James M., Akron
Pennington M.D., Gary A., Akron
Plastic and Reconstructive Surgeons Inc., Akron
Plastic Surgery Associates Inc., Solon
Sandel M.D., Allan J., Akron
Shin M.D., Shin, Akron
Staus M.D., Mary E., North Canton
Thottan M.D., John J., Canton
Wikas M.D., Schield M., North Canton

Works Cited

Micco, Kate. Telephone Interview. 15 November 1998. Sparks M.D., Maggie.
Barbara J. Lincoln

Professor Greg Little's Computer Imaging I class (Art 44095) was asked to combine images collected from video frame grabs, scanned photos, or photos taken with a digital camera and then to create a new reality. Here, Barbara J. Lincoln has created her vision of how we see the world.

From a Distance
Contributors

Carolyn Adelman, a sophomore majoring in accounting, has "a love of writing that led her to take several English and related classes."

Robert Berens is a junior majoring in English at Kent Stark. He currently works in the Writing Center as a tutor, and he hopes to teach English in the future. Also, due to his love of reading and writing plays, another of Berens' goals is to write screenplays or write situational comedies for television.

Erika Bodollo, a freshman interested in therapeutic rehabilitation, plans to work with the geriatric population in the future.

Stephen Branham is now attending the main campus in Kent, and he lives in Akron where he is pursuing his artwork.

Wendi Canon, a senior English major with a minor in Secondary Education, plans for a future as a high school teacher and college professor. Canon's activities include Sigma Tau Delta, the Golden Key Society, the Ohio Education Association, and the English Association.

Beth Crookston, a senior English major, plans on attending graduate school to pursue her masters in English. Her future goal is to obtain a doctorate in English and teach at the University level. She is a member of Sigma Tau Delta and staff member of the Writing Center.

Mark Draggi, a sophomore, is awaiting transfer to a California university where he will pursue acting and directing in film. Draggi hopes to become a filmmaker and works hard to live life to the fullest. At Kent Stark, Draggi recently founded the Campus Film Club, and he is currently the president of the Campus Model United Nations Club. According to Draggi, "stress is not knowing what to do with your free time." Draggi is also more than happy to entertain any feedback about his exam response: Mark C. Draggi, 5137 Woodfern Ave. NE, Canton, OH 44705-3155, mdraggi@neo.rr.com

Beth Ann Fisher is a junior majoring in Middle Childhood Education. Her concentrations are in language arts and science.
Vanessa N. Gliatta wants to pursue her studies and eventually earn a
doctorate in the combined fields of theater and opera. She also plans
to be financially free in the future and run her own business.

Stephanie Johnson is a Kent Stark student.

Carley M. Kindler is a Kent Stark sophomore and a dietetic nutrition
major. In the future, she would like to work in a hospital or counseling
business with adolescents.

James T. Lazio, a computer science major, may decide to pursue a
double major by adding Computer Imaging to his coursework at the main
campus next fall. According to Lazio, computer imaging is a new art
form that sparks his interest and opens up a whole new world of
possibilities.

Barbara J. Lincoln is a non-traditional student in her sophomore year.
She feels her picture represents how as we “look at the world from a
distance, the world is getting smaller and our view is getting larger.”

Alexis Maple, a freshman English major, plans to transfer to Mount
Union and join their swim team. Maple hopes to combine her degree in
English with her interest in science to find her perfect job.

Kristine Morgan, freshman, majoring in pre-med and chemistry, is
preparing for medical school. She is a member of the freshman honors
society—Alpha Lambda Delta—as well as the honors college. Morgan
aspire s to be an OB-GYN.

Eric Pierzhala is a senior majoring in History with a minor in Criminal
Justice. He is a member of the Student Activities Budget Committee,
the Honors College, and Golden Key National Honor Society.
Furthermore, Pierzhala received the departmental award in History for
1998. His future goals include law school after he chases his dream of
becoming a professional baseball player.

Mollie Roth, who has yet to declare a major, thinks she may pursue a
teaching degree and also a major in theater.
Shawn Selby, a junior double majoring in History and English, plans to be a Rock n' Roll historian and/or a history professor. His interests include, as is obvious, Rock 'n' Roll. He is a Beatles nut.

Pamela Wilfong is a sophomore majoring in English. Currently a tutor in the Writing Center and staff member of the Writing Center Review, Wilfong hopes to become an English professor and director of a writing center. For now, Wilfong states, “my goal is to graduate before retirement age.”
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