



Welcome to the seventh edition of *Una Voce*! Inside are essays which represent some of the best writing by Tacoma Community College students during the 2006/2007 academic year. Over forty well-written essays were submitted to the editors of this publication. We, the editorial staff of *Una Voce*, had the difficult task of narrowing the selection to the final essays published here. The talented students of Tacoma Community College should be extremely proud of their writing ability, as this publication is only a narrow sample of their talent. We would like to thank the students who submitted their work for publication, and also the gifted instructors who mentored and encouraged them.

This year's publication is the most political issue of *Una Voce* ever compiled. TCC's students are very aware of the controversies swirling around them, and they have smart things to say about it all. From local debates, such as "The Necessity of Wal-Mart" and "Relocating the RAP and Lincoln Work Release Houses," to global issues, such as the 9/11 terrorist attacks (Belting), homelessness (Entus), the USA Patriot Act (Miller), oil drilling in the Arctic (Govan), and high-stakes testing in education (Tetrault), this year's writers are particularly good at analyzing and writing about hot issues. We believe this high level of critical thinking says a great deal about TCC students' intellect and their concern for serious issues. However, humorous essays are included, as well; a good laugh is always welcome, and you will find a few inside.

Una Voce has always been a showcase for across-the-academic-curriculum essays, and this year's edition continues that tradition. Inside are essays from philosophy, history, nursing, English, math, biology, political science, and radiology. We greatly enjoyed the variety in this collection of essays. We hope readers will also enjoy this broad spectrum of essays.

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Snapshots of Legends

Photographs that Changed Our History

Kevin Belting

This essay for Roger's History 264 class was a unanimous favorite of the editorial staff. Kevin Belting's fantastic descriptions of the images and his explanation of how the pictures captured American history at the same time as influencing it are beautifully written. Some of the images could not be printed due to copyright and other difficulties but Belting's descriptions more than do the pictures justice. His foreword alone is enough to choke the reader up.

FOREWORD

Before I begin (and indeed, write) this report, I would just like to put this in as a personal note. This is the single hardest piece of writing I have ever had to commit to paper. I include a memorial that I wrote when one of my best friends...died, let's leave it at that. Since this is an essay on the effects of photography on American History, it's natural that I had to peruse a good amount of photographs (many of which won Pulitzers) during the research for this assignment. However, the sheer horror that I saw in some of the photos literally caused me to break into tears. Now would be a good point to point out that I never cry. I saw pictures of starving children grasping the clothes of dead relatives killed in a genocide that left a town a pile of smoking rubble. A man accused of being a spy who was beaten within an inch of his life by an angry mob, then finally had a Bowie knife plunged into his chest. I saw as that same man rose and tried to flee, but was set on fire by that same mob, before he was finally put out of his misery by a machete to the head. I saw people falling for ages as the hotel they were staying the night in was engulfed in an inferno. Finally, I saw tearful, sobbing people, crying over lost loved ones. Family, peers, friends. And then it hit me, they were my same age.

I know this has nothing to do with the actual research, but I want to commit this page to the pictures that didn't make it into the paper (since it didn't affect the American public). I want to make it known that I seriously considered scrapping this paper and returning the books. But I didn't, because I remembered the hardships I had in my own life, and realized how they absolutely paled in comparison with troubles the rest of the world faced. Thank you.

Since the dawn of civilization, man has deemed it necessary to keep his legends alive. In earlier times, it was the telling of a tale around a crackling bonfire, crafting a story of gods and heroes, of deadly battles of good versus evil. With the advent of writing, new fables were created, the medium allowed the stories to transcend time itself. Accounts were no longer limited in fact due to the inherent exaggeration of story-telling; events could now be (relatively) truthfully recalled. In the early 1800's however, the art of storytelling received a new twist: the photograph. They say a picture is worth a thousand words, that no writing could match the clear-cut accuracy of a photo. Indeed, the invention of the photograph allowed the public at large to be stirred as a whole far more effectively than mere words could ever produce. The *image* of a war being won, an injustice being committed, or simply a moment of pure happiness, is far more moving than a piece of writing ever could be. As such, photographs themselves became legend, even if people forgot why the picture was taken, what moment sparked that flash of emotion or action, the icon remains, a monument to a one-thousandth of a second in time.

The Flag Raising at Iwo Jima (Fig. 1.1)



http://en.wikipedia.org/wiki/Image:WW2_Iwo_Jima_flag_raising.jpg

The year is 1945. The U.S. is at the height of its Pacific Campaign, and the fighting is intense as American forces slowly creep through the Pacific, always fighting towards its final goal of stopping Japan. In desperate need of another mid-ocean airfield, command turns its eyes towards the small island known as Iwo Jima. The Japanese were using this tiny island as an airfield, launching kamikaze attacks and refueling bombers. Seeing an opportunity to both stop lethal bombardments and gain a new fueling station for bombing runs on Japan, a fleet of Marines are ordered to take the island on the 19th of February. Among the Marines that landed, a young photographer by the name of Joe Rosenthal is there to take pictures and send them to the newspapers back home.

On February 23, 1945, after a pounding four days of constant Japanese fire, Marines finally capture Mt. Suribachi, a small volcano on the south end of the island. Happy for any victory at this point, the Marines raise a small American flag at the summit. By the time Rosenthal reaches the top to snap a photo

of the soldiers, they've already been ordered to remove the original flag and replace it with a larger one that can be seen all over the island. Originally, Rosenthal said that "I thought of trying to get a shot of the two flags, one coming down and the other coming up, but I couldn't line it up. I decided to get just the one flag going up." (Rubin, 17) The remainder of the battle is hard-fought, leaving 6,821 U.S. troops dead (including three of the soldiers in the photo), but the picture itself gives hope to the American people.

The photograph is published in newspapers all across the country, plastered on posters, stamps, and eventually turned into a sculpture for the Marine Corps War Memorial near Arlington National Cemetery. In fact, the picture was used in poster driving the 7th War Bond Drive, and may have saved the Pacific Campaign. The U.S. was low on funds to fuel the soldiers pushing westward, and used this photo to inspire Americans to buy war bonds, thus saving the war effort and, in effect, winning in the Pacific Theater (up until the dropping of the atomic bomb).

A Family Flees Their Burning Home (Fig. 2.1)



<http://vietnamnews.vnagency.com.vn/showarticle.php?num=04SUN270305>

By the end of 1965, over 200,000 U.S. troops are trying desperately to defeat the Viet Cong, losing more and more troops with each passing day. Photographer Kyoichi Sawada has been in Vietnam for six months, helping nurse injured soldiers as well as photographing their deaths. On September 6, Sawada is stationed with an American combat unit in Qui Nhon, South Vietnam, watching as U.S. planes drop bombs and napalm on a nearby village. Spotting two families desperately swimming for their lives, Sawada frames the photo and snaps the shot. Encapsulated in the photo are two mothers, struggling against the current, trying to keep their heads above the water while simultaneously trying to save their babies, followed by a frightened and bewildered child,

barely old enough to swim on his own. After Sawada returns home to win the Pulitzer Prize, the photo becomes a symbol of the personal turmoil that Vietnam has wrought. All of a sudden, the war isn't about soldiers fighting soldiers, the civilians that are harmed are brought into a new light.

After receiving the prize money for his photo, Sawada returns to Vietnam, and “finds them and gives each family half of the prize money – and a copy of the photograph.” (Rubin, 56) Sawada, however, vows that “I’m not ready to die yet. The best is yet to come.” (Rubin, 56). After a long four years, Kyoichi takes his bureau chief to survey the war in Cambodia. They were both found the next day, murdered.

Viet Cong Lieutenant Executed (Fig. 3.1)



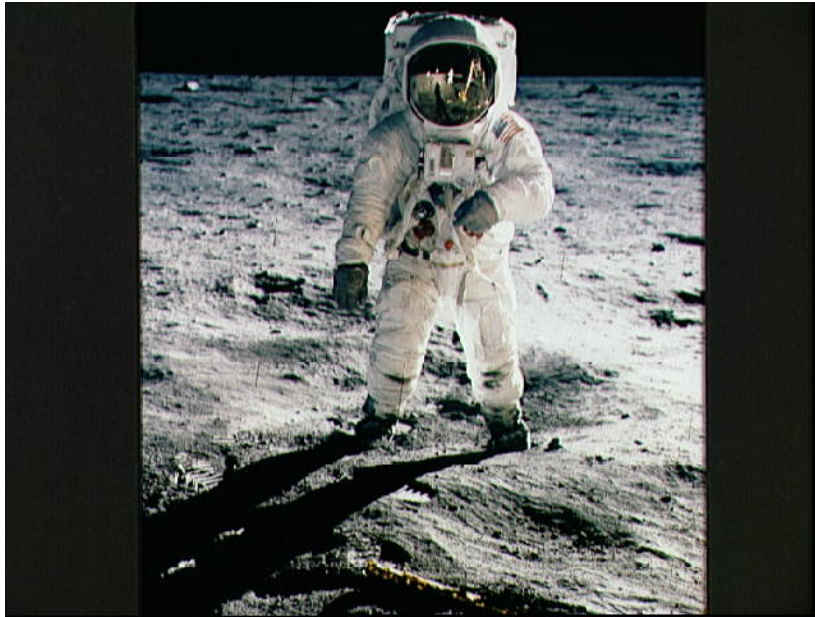
<http://www.freerepublic.com/focus/f-news/823560/posts>

On January 30th, 1968, North Vietnamese Communists begin their immense Tet offensive to bring the fight right to the U.S. Embassy in Saigon. “The Viet Cong action came at a time when U.S. intelligence and the American public believed that the enemy had been drained of its strength and that the end of the Vietnam War was in sight.” (Monk, 42) On February 1, 1968, photographer Eddie Adams was there, alongside an NBC news crew to snap photos of the action. After a couple rounds of pictures of rubble and corpses, Adams’ camera turned to a prisoner being escorted by two South Vietnamese guards. The prisoner, as it turned out, happened to be a North Vietnamese lieutenant. As the man is led around a corner, Adams and his team are standing a mere 5 feet from where a South Vietnamese officer has produced a pistol and aimed it at the man’s head. Gen. Nguyen Ngoc Loan (chief of South Vietnam’s national police) pulled the trigger

just as Adams snapped the shutter. The picture instantly went down in history, and become iconic of the anti-war movement in America. The U.S. was horrified at the apparent “barbarity” of the South Vietnamese, our allies. The picture was used to depict the excess of the horrid conflict in Vietnam.

That was not the intent of the picture, however, Adams said. The picture was misunderstood in its intent. “If you’re...this general, and you just caught this guy after he killed some of your people... how do you know you wouldn’t have pulled that trigger yourself?” (Rubin, 65) General Loan killed the man as an act of justice; the lieutenant had murdered a South Vietnamese colonel, and his family (wife, six children). Despite the photo’s original intent, it became ever more widespread as the anti-war movement continued to use it until the day the conflict ended.

“I Walked on the Moon” (Fig. 4.1)



<http://nssdc.gsfc.nasa.gov/planetary/lunar/images/a11reflect.jpg>

239,000 miles from home, astronauts Neil Armstrong and Buzz Aldrin were the first men to walk on the moon. After “four days, six hours, and 45 minutes” (Monk, 47), Man’s dream of walking the surface of the moon was realized. Amidst the wars, the fighting, the political and civil unrest, the country came together as one entity to watch this utterly historic event. With bated breath, the nation watched as Neil said those famous (though incorrectly stated) words: “That’s one small step for [a] man. . .one giant leap for mankind.” Among all the events that were happening on the surface of Earth, it all seemed insignificant to these two guys dancing around among the stars.

On July 20th, 1969, the course of human events changed forever, as it was now entirely possible for man to cavort with the stars. Science surged forward as rocks were brought back to be studied, more efficient methods of space travel were crafted, and unmanned rovers were sent deeper and deeper into space. Despite insinuations from the Flat Earth Society that the whole thing was a hoax, America was transfixed and fascinated by this massive sphere of grey rock.

After 21 and a half hours of exploring and photography, Aldrin and Armstrong returned to the Apollo 11 capsule and prepared for the journey home. Before they left, however, they left behind a plaque (along with an American flag) that stated simply “We came in peace for all mankind.”

Students Killed at Kent State (Fig. 5.1)



<http://www.digitaljournalist.org/issue0005/filo.htm>

In the spring of 1970, student activists everywhere were protesting the Vietnam Conflict and the invasion of Cambodia by tearing up school campuses. "...even normally tranquil campuses like Kent State reacted." (*OCiP*, 321) Over 800 students showed up to protest in the university commons. Eventually the protest escalates and a lighted railroad flare is thrown into the building. As firefighters arrive to quench the flames, hoses are cut and rocks are thrown, the firefighters are denied entry. As a result, the building burns to the ground. After the weekend protest, photojournalist John Filo shows up for classes, disappointed in missing the action. 500 National Guardsmen had been dispatched to the campus to quell any further violence, as a rally had been scheduled at the ruined commons. As the bell rings and the protest begins, the guardsmen order the students to disperse, and are met with a volley of thrown stones and chants of "Pigs off campus!" (Rubin, 72)

As the students continue to throw rocks the guardsmen retreat up a hill to coordinate. Once they reach the summit, some of the troopers kneel and fire into the crowd. Assuming they were firing blanks, Filo continued to snap pictures. He realized, however, that the bullets were smashing into concrete, steel statuary, and indeed, students. Amid the din of the gunfire, Filo heard a student "let out a God-awful scream. That made me click the camera." (Rubin, 72)

After the incident, seventeen students had been shot. Four are dead. Ready to launch an all-out attack on the National Guard soldiers, the students are quieted by professors who had arrived on the scene and pleaded with the students to disperse. The soldiers left as well. The shooting led a surge in animosity towards the Cambodia invasion and the Vietnam Conflict in general; and eventually led to the only nation-wide student strike in history. No troopers are ever convicted during the following trials.

Friendly Fire Napalm Burnings (Fig. 6.1)



<http://en.wikipedia.org/wiki/Image:TrangBang.jpg>

Napalm, alongside biological weapons such as anthrax, is one of the most controversial weapons of all time. It's a thick, gel-like adhesive that instantly ignites whatever it sticks to and almost immediately burns it to the ground. Due to the nature of the chemical, it will stick to any surface: walls, roofs, crops, or skin. The trouble was, it was all too easy to drop it on friendly troops in the middle of the confusion of battle. What's worse is the fact that it wasn't always soldiers that were hit by napalm.

Huynh Cong Ut had been covering the Vietnam Conflict for quite some time, and his brother had been killed in the fighting. Ut himself had been wounded 3 separate times since the war began. On June 8th, 1972, he set out to take photos of a battle near Trang Bang, about 25 miles west of Saigon. Ut spent all morning filming the mortars and rockets being fired into the entrenched Viet Cong unit. Determined to flush out the covered soldiers, South Vietnamese planes began flying in low and dropping napalm to burn them. One

plane, however, missed entirely and hits nearby friendly soldiers and civilians. Many are burned to death right on the spot as the survivors flee for their very lives. Ut quickly frames the photo and takes the shot. The focal point of the photo is a little girl, screaming in pain and fleeing as other children spring along ahead of her. The girl's name is Phan Thi Kim Phuc, and the napalm has literally incinerated her clothes right off of her skin.

As she cries out "Too hot, please help me!" (Rubin, 80) Ut rushes to her aid and takes her to the nearby hospital to be treated for burn wounds. Unlike many refugees from Vietnam, Phan survives her injuries. She grew up, got married, and had a family. She even spoke at the Washington D.C. Vietnam Veterans Memorial. The photo lives on to portray to the American Public the horror and travesties that happened everyday on the battlefields of Vietnam. They saw the napalm, and saw that little girl, and suddenly, the war was a lot more real.

One Man Stands Alone (Fig. 7.1)



<http://en.wikipedia.org/wiki/Image:Tianasquare.jpg>

On June 4th, 1989, China's army moved into Tiananmen Square to quiet large-scale protests being made by intellectuals and labor activists that year. The protests were against the repressive and corrupt Communist-led government, with some protestors arguing that the economic reform had gone too far, resulting in inflation and rampant unemployment. China "wanted [the] 100-acre Tiananmen Square cleared of a pro-democracy sit-in that began in mid-April." (*OCiP*, Franklin, 374) As a platoon of T-59 tanks rolled into the square, no one was quite sure what to do to stop them.

Enter the unknown rebel. A man so sure in his convictions that he strode out into the middle of the street and stood in front of the armor column advancing towards him, shopping bag in hand, no less. This man, having been scientifically proven as one of the biggest *badasses* of all time, stared down the

tanks until they ground to a halt in front of him. He then proceeded to climb up one of the treads and have a civil chat with the drivers inside.

Unfortunately, his pleas apparently went unheeded, as the column eventually motored on, proceeding to slaughter protestors inside Tiananmen. The photo, however, was used to draw attention to the growing problems in Communist China, shaping much of America's views of China. Combined with the simultaneous crumbling of Communism in Russia and much of Eastern Europe, American animosity to the People's Republic of China grew, and the protestors were given sympathy by much of the American public. After this photo emerged, both the U.S. and the European Union announced an arms embargo with China, and the masses began to see China as an oppressive authoritarian regime.

Columbine High School (Fig. 8.1)



<http://columbine.free2host.net/victim/surviving.html>

April 20th, 1999. America is shocked to learn that a small high school in Colorado has been the site of the deadliest school shooting in U.S. history. 12 students were killed along with one teacher when two students (Eric Harris and Dylan Klebold) went on a shooting/bombing spree inside the school. In total, the episode left 15 people dead (12 students, one teacher, and two gunmen) and 21 wounded. When the news reached the Rocky Mountain News room, photographers sprang into action. As they arrived on the scene, the team started snapping pictures of embracing students, policemen sweeping the area and wounded students strewn about the campus. “[The scene] was surreal...kids bleeding...TV reporters crying...scary. It will never go away.” (Rubin, 194) After the dust settled and the photos were developed, the entire Rocky Mountain News photography team was awarded the Pulitzer Prize. The most recognizable photo of the bunch, however, is student Jessica Holiday holding her head and screaming upwards (Fig. 6.1).

The photo caused controversy throughout the country. People cried out for

A Dictator is Toppled (Fig. 9.1)

changes, looking to everything from Goth culture to violent video games for the answer as to why these two kids did this. The video game industry especially went through turbulent times after this incident, since many blamed the video game *Doom* for the kid’s behavior, citing that the game taught them to kill. Reforms were called for to American gun control laws, since the kids had relatively easy access to firearms and explosives. Religious aspects were also explored, since the two gunmen were said to have asked certain students during the ordeal if they believed in God. If they answered yes, they would be shot. A book was written about one of the students, hailing her as a Christian martyr, and some even blamed the incident on insufficient government support of religion.

The important thing to remember was this, however: the tragedy wasn’t about heavy metal, or violent video games, or Goths, or religion, or anything like that. It was about two seriously disturbed young men tragically ending the lives of 12 promising students. The fact that some twisted the tragedy to their own agenda is sickening and is dishonoring those who lost their lives.



http://www.cbc.ca/news/story/2003/04/09/iraq_statue030409.html

“The 40-foot bronze statue of Saddam in Paradise Square, Baghdad is toppled with the help of a U.S. tank.” (Knightley, 282) On the 8th of April, 2003, the statue of Saddam Hussein stood as a symbol for the tyrannical rule of a cruel and oppressive dictator. On April 9th, the statue was pulled down, an indication that perhaps the tide was turning in the seemingly futile battles that the U.S. was fighting in the Middle East.

Originally thought to have weapons of mass destruction, the United States army was sent into Baghdad to take down Saddam Hussein and stop him before he could cause further damage, as well as “free the Iraqi people.” After weeks and months without result, the public was becoming war-weary and tired of seeing soldiers shipped home in

body bags for no apparent reason. When that bronze statue came toppling down, however, America was given a tangible result of its intervention, that maybe they were indeed doing some good in the world. Seeing Iraqi civilians pulling down a statue of their despotic leader was an emblem of hope and freedom for the public at large.

Hussein himself was captured December 13, 2003 (Humorously described at the time as a “Christmas present” to the American people) and it was hoped that it would begin a new age of democracy in Iraq. Currently, there is a civil war erupting in Iraq, often undermining the democratically elected leaders. Hussein was sentenced to death by hanging.

The Day New York Burned (Photos not available)

Every generation has their defining moment in time, many of which have been mentioned previously in this essay. This particular photo is left for last (despite not being the last chronologically) simply because it *is* the defining moment for the current generation. On September 11th, 2001, two passenger jets were hijacked and suicidally flown into both towers of the World Trade Center. The first crashed into the north tower at 8:45 AM, spraying fiery jet fuel and flaming shrapnel in all directions, instantly killing many inside the tower. 21 minutes later, a second plane is flown into the south tower, killing more and crippling the structure. At almost exactly 10:00 AM, the south tower collapses from the heat and stress. Half an hour later, the north tower collapses like the south. All emergency calls stop.

After the plane strikes and subsequent tower collapses, widespread panic and chaos ran through New York. Photojournalist Gary Fabiano recounts his experience at the tower: “As soon as we reached that open area the debris started to fly and crash down. The light went from sunlight to white light, then to the black of all blacks. When I say you couldn’t see in front of you, I mean not even an inch.” (NYS112001, 60) The scene was indescribable; rubble was strewn everywhere, police, and firemen rushed into the burning corpse of the buildings, often never to return.

Dust and ash spread everywhere, traveling like a disease over blocks and blocks of New York streets. One could only watch in horror as victims sprinted from a billowing cloud of smoke, rushing towards the ever-filling hospitals, desperate for medical treatment. Bodies literally rained from the sky as people tried to jump from the broken buildings, having no way down from inside the building, they simply decided to leap from shattered windows, hoping to land on their feet and survive the impact, often from over 100 floors up.

After the Hell on Earth that was that September day, the cleanup took months. A memorial to the lives lost now stands at ground zero, 5 years later. Articles were written, cartoons were drawn to commemorate the tragedy (Fig. 10.2), some even harkening back to one of those first photos that truly changed the world (Fig. 10.3). The public found a new sense of patriotism, calling for the destruction of terrorists (specifically the group Al-Qaeda, who took responsibility for the attacks). The 9/11 attacks eventually led to “Operation Iraqi Freedom” that still continues to this very day. The invasion led to the downfall of Saddam Hussein (as described above), though terrorism still rages in the Middle East.

America was never quite the same. The flags finally began to disappear from windows, the “I *heart* NY” T-shirts were put back in the closet, and the public at large just generally tried to move on. The mantra that was adopted after 9/11 still rings true: “We Will Never Forget.” And I guess we haven’t. Of course, I hope we never will either.

Please forgive me for not remaining as detached as I have tried to be from the other photos, but you have to understand, the following years and decades will be traced back to this singular event. The wars in Iraq and Afghanistan, the fall of Saddam Hussein, the (hopefully) eventual capture of Osama Bin Laden, and the over-arching War on Terror. This is my generation’s Vietnam, my World War II.

This is my photograph, my legend.

New photos will come, new events will unfold, and we will be standing on the cusp, ready to snap the shutter at just the right moment, and capture that moment to freeze in time forever.

Works Cited

- Filo, John "The Killing Field (Ohio)." Franklin, Stuart "Man of Steely Nerves." Our Century in Pictures. Ed. Richard B. Stolley. Boston: Bulfinch Press, 1999.
- Monk, Lorraine. *Photographs that Changed the World*. 1st ed. New York: Doubleday Publishing, 1989.
- Rosenthal, Joe. "Old Glory Goes up on Mount Suirbachi." Sawada Kyoichi "Vietnam – Fleeing to Safety." Filo, John Paul "Kent State Massacre." Ut, Huynh Cong "Vietnam – Terror of War." Rocky Mountain News Staff "Columbine." Capture the Moment: Pulitzer Prize Winning Photographs. Ed. Cyma Rubin. Arlington, VA: Newseum, 2001.
- Tomasevic, Joe. "Falling Saddam Statue." The Eye of War: Words and Photographs from the Front Line. Ed. Phillip Knightley. Washington, D.C: Smithsonian Books, 2003.
- Fabiano, Gary. "Account of September 11th." NEWYORKSEPTEMBERELEVENTWOTHOUSANDONE. Eds. Giorgio Baravalle and Cari Modine. East Greenwich, RI: Meridian Printing. 2001.

Moron's Guide to Morality

Crystal Hoffer

This paper was written for Comeau's Philosophy 100 class, and it was chosen for Una Voce because it crafts a superb narrative tale starring some of the most influential philosophers. It shows how morality applies to the real world. Plus the ending is a real blast.

The headlamp attached to a white miner's hat bobs up and down in jerky movements as a small blonde cowers against the dark stone of the cave's wall and sobs. The sound hovers about and weaves through soft whispers of vocalized fear as water trickling about the floor of the cave slowly increases in depth. A faint, crisp bell of panic begins to be heard in an alarming undercurrent of tone, bouncing off the cold solidity of the surrounding and encroaching stone.

Bubba's rotund backside, swathed in dark overalls, can be seen in fitful flashes as heads and headlamps turn in speculation toward his still struggling, bloated limbs. Many hands have already pulled and tugged in an effort to dislodge the meaty midsection that has efficiently plugged, like a snug cork, the only remaining outlet to the cavernous room.

At the other end of the rocky enclosure, where the water creeps in at an ever-increasing rate, four of us stand huddled in the dark. No headlamps spotlight the stick of dynamite that has recently taken precedence in our midst. Since its momentous discovery, the whispers in the cave have increasingly taken on a glittering tint of dawning horror spiked through with an escalating pitch of panic, and, oddly, a faint timbre of relief. The blonde continues to cry.

The silence in our group of four grows to a brittle depth. The rest of the party strains

to overhear the verdict even as they continue to whisper amongst themselves. Everyone resists the urge to turn their heads, and thus headlamps, to spotlight the speaker as the silence is finally broken.

"The solution is unsavory, but necessary, for the greater good of the majority," John Stuart Mill solemnly points out. "If I were in Bubba's position, I would surely give myself to the cause of all the others trapped here. If the situation were reversed, I—Bubba -- would surely desire that the person blocking the passage to the majority's survival would sacrifice themselves to achieve that end which benefits the most people."

I cough lightly, as if naturally, and interrupt, "We can't ask Bubba what he would prefer given the reversal of the situation. His mouth is not available for comment at the moment. Maybe we can Morse code his arse and see if he can respond with some toe tapping. However, I am sure that, given the reversal of the situation, Bubba would surely long for his own survival as he probably does even now. We can't presume that Bubba is as interested in martyrdom as you would apparently be in his situation."

Despite himself, Kant's mouth twitches slightly as he responds, "As human nature dictates, I desire to survive. My inclination, despite revulsion, is to eliminate

Bubba to ensure my own survival as well as the survival of those others here. But in making momentous decisions that hinge on moral correctness, one must ask oneself how the decision is to be made. Is it truly acceptable to ‘destroy life itself by means of the same feeling whose destination is to impel toward the furtherance of life’ (416)? Love of the self would, indeed, impel us to seek our own survival. However, there is no nobility in that course. If one begins to bend the rules here, where will the manipulation of duty end? If self-love is the reigning principle, the world will surely end with every man seeking for himself what is best for himself in any given situation. This cannot be a law of nature that furthers the survival of humanity because it ‘opposes the supreme principle of all duty’ (416).”

The silence greeting Kant’s objection is utter and carries an impetus of menace throughout the cold cavern. All the headlamps have turned in our direction, spotlighting Kant where he sits in oblivion. His face is set and unflinching under the scrutiny of his anxious audience.

John harrumphs and speaks before the silence can be broken by the inevitable wailing of the blonde, “You’re being ridiculous, Immanuel. Your view of morals verges on stupidity in the given situation. You can’t hold to your high and mighty principles when the lives of so many are at stake! Your opinion on the matter is very far removed from being at all humanistic. If I did not know better, I would presume you were not more than a robot.

“I want Bubba to live. I want all the other people in this cave live as well. Which desire outweighs the other and why? The only morally correct action is the one in which the most good is achieved for all those effected by the action. The action allowing Bubba to

survive affects only his happiness. On the other hand, the action of eliminating the obstruction -- which, in this case, happens to be Bubba -- will achieve survival for greatest number of people. This amounts to being the only morally correct solution because the most good will be achieved for the greatest amount of people.

“In this case, the eradication of the blockage, so to speak, serves as a means to an end that brings about the greatest amount of good for the greatest majority of people. The happiness of one man should not, and morally cannot, outweigh the happiness of the larger group of people. I reiterate, every ‘person’s happiness is a good to that person, and general happiness, therefore, a good to the aggregate of all persons’ (428). The aggregate being greater than the one, the greatest amount of good can be found in the most desirable outcome for the greatest number.”

A general scuffle of agreement creases the air in the sniffs and mumbled phrases that greet this statement. The blonde is merely whimpering.

“Ah, but man is what man does,” Sartre finally says. He continues, “An act determines how one feels about an action. It would seem to some that the survival of the greater number is more righteous than the survival of one because that majority is capable of a greater happiness than one can achieve on one’s own. In other words, it benefits more people for the one to die, thus contributing to the greater happiness as a whole; so the action of killing the one is right. On the other hand, some might say it is wrong to kill for whatever reason, even for the saving of the majority over the one. The action of sparing Bubba and ensuring his survival would be the means to an end for every other person concerned. But if feelings about killing determine that it is wrong, the fat man

must survive, and the one who feels that killing is wrong will die a noble death. In either case, the ends justify the means. The fat man's demise becomes the means to the survival of the majority in one case. The demise of the majority will be the means to the survival of Bubba in the other case. Whose lives are more valuable? Which outcome is more expedient? Who are you to say? Nor is there any great gray man in the sky able to distinguish which action would be the correct course. If anyone can contact such a one, please let us all know immediately.

"Either we will say we love our lives enough to preserve them, or we will say we love Bubba enough to sacrifice our lives to preserve his life. Truly, one can come to whatever solution one wants to in regard to this situation. Whatever is decided will be determined to be the greater value by the mere act of doing it. In either case, the action proves the value of the deed. Every action of man is the value that man has created, and 'things will be such as men have decided they shall be' (458). Man is 'nothing else but the sum of his actions, nothing else but what his life is' (459). Every man and his every action invent what man shall be and what man values as morally correct.

"So there is no overriding moral code to determine the rightness or wrongness of the action in this situation. The action done here today will be part of who we are as individuals in the future – if we live to see it. *We are responsible for our actions* from moment to moment, and our actions will be the determining factor for what is wrong or right and will serve as a model of such for the rest of humanity. So it comes down to what we wish to be responsible for: the death of one man by our hand or the death of many by the very circumstances we are yet responsible for as a result of our free decision to spelunk with

Bubba. Since 'we ourselves decide our being', we alone are responsible for our decisions and actions."

The room explodes into a rain of voices as the lights from the headlamps sweep about in dizzying confusion. The darting light reflects on the rippling current of water that now swirls about and seeps into the shoes of everyone present. The blonde still sits on the floor of the cave despite the water that saturates her pants. An acrid smell of fear taints the now stifling air in the seemingly decreasing space of the cavern. The people are confused and no solution has yet arisen.

In frustration, I bellow a response, "As to responsibility, each man here must admit to the deficiency of reason that led him to be escorted through small spaces by an overly large and overtly slow man. I don't hold a grudge for Bubba's girth, but, god, are we ever stupid to traipse merrily along with a huge man as our guide through narrow areas like it is an every day event to thread camels through the eyes of needles! We are ridiculous, and perhaps deserving of the fate that awaits us as a result of our plainly obtuse actions. Idiocy knows no bounds, apparently, regardless of all our learned pontifications.

"Think about it this way: if not for the discovery of the dynamite, we would be left with no option but to tear Bubba's flesh with our bare hands to achieve our survival. Gruesome, is it not? It is easier to conceive of a device that will accomplish the deed by the mere strike of a match. Done by our own hand, the matter has more gravity. But, in reality, done either way, it is we who are doing it.

"You might justify it by saying that the majority is greater than the individual, but whose survival are we determining but our own? We all leave here as individuals, just as we came. What would we do if it were one

against one? Surely, most would act for their own survival and find some means of justifying it. Besides, it's not like the survival of the human race depends on *our* survival. If it did, the majority card might come into play. As it is, the human species has propagated well enough, as evidenced by the current state of overpopulation, and will surely continue to do so in the future.

"We arrived here as a result of our own choices. Bubba did not force us to follow him through the caves. Will we kill a man whom we willingly followed?"

There is a brittle texture slicing the air at the end of my words. The blonde is now bleating, and dangerous apprehension is coating the surface of every whispered conjecture as Kant, daringly, decides to speak, "This conundrum is exactly why there should be a categorical imperative in regards to actions. This imperative would rise above the consequences of actions and demand that an act be done for the sake of duty alone.

"No life should be willfully taken for the preservation of other life. The very idea defeats itself. Your maxim would become this: in order to prolong my life and the life of those others here because of love of life, I will kill someone to see this end met. Can this apply as a law of morality? Can one decree that this is how things should proceed in the future? Can the very love for life kill life to ensure survival? It does not make sense.

"Bubba is not a thing to be used, but a man that, as a sentient being, has the same value as any other man. If we destroy Bubba, we 'make use of a person merely as a means' (419). 'A human being, however, is not a thing and hence not something that can be used merely as a means, but must in all his actions always be regarded as an end in itself' (419). You cannot use another being to

further your life or even the life of the majority.

"Morality is not determined by the outcome of one given situation, but by the rules that apply to every situation. These rules cannot contradict one another if they are meant to stand by their own strength. To determine what should occur based on the outcome of any given situation is to sabotage future decisions and deprive said decisions of any greater good."

"So because an idea contradicts itself and can, therefore, not be used as a law of nature, you would condemn innocent people to die?" John asks in credulity.

"No one is innocent. Innocence would imply a lack of action. Every person here has acted and is here as a result," Sartre says in a clipped tone.

The sound of water swirling in eddies and rippling around calves now ominously overrides even the sound of the hysterical blonde. Others are starting to lash out angry words that hang in the now thick and viscous air like ugly portraits. I could swear that, as a headlamp briefly lights Sartre's face, he is grinning a bit maniacally. John simply looks like he might vomit at any moment, and the horrified glint in his eyes blazes momentarily as a light catches his lurid features. Kant, of course, has a mouth rigid with determination, although his eyes betray his fear as they dart from the stirring throng of lunatics obtuse enough to be led through caves by a grossly overweight man to the huge expanse of Bubba's rear-end -- both lighting up sporadically as heads really begin to dart about in frantic panic. The blonde has since found the common sense to stand up before she drowns in the ever-rising water. As for me, I am really starting to sweat.

John shouts, "The greater good is for the happiness of the majority!!"

“What will you be after you kill a man, whatever the reason?” Sartre dryly observes.

“Humans are not to be used as means. No man should die at the hands of another,” Kant chimes in.

“Everybody settle down,” I shout over the rising tumult even as my own heart drums a staccato rhythm against my breastbone. “As an individual, I take full responsibility for my actions. I followed a fat man into some dark, small spaces; I deserve this fate. I brought myself here, just as each of you did. I have no right to take into my hands the life of another whom I willingly followed. I freely came here, as did you. I freely decide to own my fate as the responsibility of myself alone.

“However, as Sartre here would say, ‘I cannot make liberty my aim unless I make that of others equally my aim’ (460). None of you can say that you did not freely decide to let Bubba lead you here. As your own choices led you here, now your own choices must determine what is to be done now. I respect the liberty of every man and call for a vote to determine the outcome of this situation. “

“You, thereby, effectively resolve yourself of all responsibility – or so you think,” Sartre quietly whispers in my ear. “You already know what the vote will be. You have committed yourself to an outcome that you know will occur. You are still responsible.”

I shudder as the truth jars through me. Of course, he is right.

Meanwhile, everyone has begun to talk loudly, justifying to themselves and each other the imminent death of Bubba. The light from the headlamps now darts from Bubba’s backside to where the dynamite rests on a stalagmite that oddly resembles the fat man. Slowly, the darting lessens, and the lights come to rest ominously on the stick of dynamite. The ensuing silence becomes a

deafening roar as the full scope of the situation reaches everyone present.

The blonde suddenly lunges forward, flashing in the light of the headlamps as she snatches the dynamite and the precious matches. A quake of angry voices rumbles the air, and water sloshes around thighs that move to forestall whatever action the crazy blonde has in mind. The lights whiz and zip around the cave, lighting on water, dark rock, panicked faces, and surging limbs.

The blonde runs to Bubba and tries anchoring the dynamite in a ragged pocket of rock near his right thigh. Most everyone follows close on her heels, panic overriding reason. The blonde reaches up and lights the tail of the dynamite that is now precariously wedged in a crevice. She turns to flee, meeting the oncoming tide of bodies.

“It’s lit!” she shouts over the tumult.

Confusion and the waist-high lap of cold water slow the now retreating movement of milling bodies. There is a sound of slugging flesh. There are shouted curses and screeches. The roil of water around the tumult adds its splashy voice to the cacophony. A few headlamps are swallowed by the dark maw of cold water as a handful of people fall in the wake of the struggle.

A short fuse leads to the premature ignition of the dynamite.

A brilliant light flashes and a sound like a thunderclap rips the air to shreds. A low rumble vibrates through the cave as the whole cavernous room collapses into itself, burying all the people within and crushing Bubba in a rocky embrace. As the air stills after the violence of the explosion, there is no one left alive to bear witness to these events but the earth that moves in its resilient, nature-driven patterns with no concern for right or wrong.

Identification of an Unknown Microorganism

Joe Hubbard

Joe Hubbard helps to bring essays and writings from all areas of academia by gracing us with an essay written for a Biology 201 Lab. When given a mysterious substance, Hubbard was assigned to perform various tests explaining the significance of the test and the results. He was able to bring his literary talents into the essay as he intrigues the reader to read on and learn how these very tests he performs are the same as doctors, medical practitioners, and criminologists use to identify the unknown.

ABSTRACT

What if a ubiquitous pathogen, often responsible for abscesses, boils, carbuncles, acne, impetigo, pneumonia, osteomyelitis, endocarditis, cystitis, pyelonephritis, septicemia and toxic shock could be identified by a novice microbiologist with relatively simple techniques, a spartan lab, a few chemicals and a good microscope? That is exactly what we have accomplished this quarter in the lab section of Microbiology 201. We describe in the following paragraphs the tests, results and the final identity of a common bacterium collected from a sink in the biology lab.

INTRODUCTION

The identification and classification of an unknown microorganism may be one of the most foundational skills needed in microbiology. Even with the advent of high tech testing machines, computers with identification algorithms and easy to use gadgets, understanding how to identify an unknown with relatively simple tools is analogous to understanding elementary math facts even if you have access to state of the art calculators. Given that presupposition, our assignment was to aseptically transfer a microorganism from one medium of our choosing and subculture it on an agar medium using the three phase streak plate method. This allowed us to isolate discrete colonies which were further isolated to a pure culture on slant tube agar. The pure culture was used throughout the quarter as a learning tool to discover basic lab techniques, proper lab procedure and appropriate tests, including accurate interpretation of results with the goal of identifying the unknown microorganism. Our investigation began with a wide view of the appearance of the isolated colonies, narrowed to bacterial cell morphology and then progressed to differential tests using selective media and biochemical capabilities.

MATERIALS AND METHODS

There are several basic skills and techniques that are part of each step listed in this section.

Unless otherwise noted, one should assume general aseptic techniques were used including transfer, handling, inoculating and culturing. Petri dishes and tubes were properly handled and labeled. When Petri dishes were incubated, they were inverted. The microscope was used and cared for in the standard manner. Slides were prepared using described procedures. Results and conclusions were shared and in most cases confirmed by each lab partner.

Transfer, Subculture and Isolation of the Unknown

Our first attempt to transfer and subculture an unknown microorganism from the faucet handles (both hot and cold) of the lab sink in the northwest corner of room 17, building 14 failed to develop any significant colonies.

The second attempt was taken from under the sink rim of the same sink (N.W. corner sink, room 17, building 14) using a wet sterile swab. The sample was placed on a Petri dish coated with TSA (trypticase soy agar) and diluted using the three streak plate method. The inoculated TSA Petri dish was incubated at 37°C for at least 48 hours. A pure culture of the unknown was transferred to a TSA slat tube and incubated at 37°C for an additional 48 hours. This pure unknown culture was used throughout the rest of the quarter.

Preparation of Bacterial Smear, Various Stains & Slides

After some practice with known microorganisms we prepared five slides using different staining techniques over several lab periods. All slides except the wet mount and capsule stain were prepared using similar basic techniques. Because all unknown inoculum came from the slant agar tube, a small drop of tap water was placed on the slide first. A small sample of inoculum was aseptically transferred to the slide and the position marked on the underside with a grease pencil. The slide was allowed to air dry completely then was heat fixed over a flame. After staining, the slide was blotted dry with bibulous paper and examined under oil immersion.

The first, and possibly most important staining procedure, was the Gram stain. We used four different reagents to help classify the unknown as either Gram positive or Gram negative. Because we did not perform a simple stain on our unknown, we also used the Gram stain to identify the morphology of our organism. The primary stain was Crystal Violet, which was flooded over the slide prepared as described above. The Crystal Violet remained on the slide for one minute then gently washed with tap water. Gram's iodine was then flooded onto the surface of the slide, allowed to stand for one minute, and washed with tap water. The decolorizing agent, 95% ethyl alcohol was then gently added by dropper to the slide. This was perhaps the most important step because the alcohol increases the porosity of the gram negative cell walls allowing the crystal violet/iodine color to be washed more easily away from the cell making them appear colorless whereas the gram positive cells retain their purple color. After just a few drops of alcohol (added until it runs clear – no more than 5 – 10 drops) the slide was again rinsed with clear tap water. The final reagent was safranin which was used to stain red those cells that were decolorized by the alcohol. Therefore, a gram positive bacterium would appear purple and a gram negative would appear red.

The second staining procedure was the Acid-fast stain which is used to distinguish various

species of *Mycobacterium*. The slide was prepared as described above then clouded with carbol fuchsin and placed over a beaker of boiling water. The slide was allowed to steam for five minutes and carbol fuchsin was added as needed to keep the slide wet. After allowing the slide to cool, it was rinsed with tap water and then flooded with acid alcohol drop wise until the alcohol ran almost clear. The slide was again rinsed with tap water and methylene blue was added as a counterstain and allowed to stay on the slide for 2 minutes. The slide was then given a final rinse under tap water. “Acid-fast positive species appear red while an organism that is acid-fast negative will be blue.”¹

The third staining procedure was the Spore Stain. The slide was prepared as described above and then placed on a beaker of boiling water in the same way as the Acid-fast stain except that malachite green is flooded on the surface for five minutes. After allowing the slide to cool, it was rinsed with tap water and then flooded with safranin. The safranin was left on the slide for two minutes and the slide again rinsed with tap water.

The fourth staining procedure was the Capsule stain. This procedure required the slide to be prepared differently than the “normal” method described above. At one end of the slide a small drop of methylene blue stain was applied and a small sample of culture aseptically added without mixing. The slide was allowed to stand for thirty seconds and a tiny drop of nigrosin was added. Using the edge of another new slide the stains/culture “broth” was slid across the surface resulting in a thin film. The slide was air-dried but not heat fixed and observed under oil immersion.

The fifth slide procedure called a “wet mount” did not require a stain. The purpose was to determine if the unknown microorganism was motile or not. A new slide was prepared by adding a small drop of water and aseptically transferring a loop of unknown culture. A coverslip was carefully applied and the sample observed under oil immersion.

Differential, Selective and Enriched Media

Five different media were used during this section of trials but the procedure was the same for all tests. Using aseptic technique, inoculum was streaked on each Petri dish with a single line. The inoculated Petri dishes were appropriately labeled and incubated at 37°C for 48 hours. Differential Media included: Mannitol Salt Agar, MacConkey Agar and Eosinmethylene blue agar. Selective Media was Phenylethyl alcohol agar. Enriched medium was blood agar (sheep).

Temperature Requirements

In order to determine the temperature requirements of our unknown microorganism we aseptically inoculated four Sabouraud broth tubes with our unknown and incubated a tube at each of the following temperatures: 4°C, 20°C (room temperature), 37°C and 60°C (warm water bath method). Each was incubated for 48 hours and then observed for the presence of pigment and growth (turbidity).

Enzymatic Tests

¹ Microbiology Laboratory Guide, prepared by Ruth Ann Mikels, Ph.D. Biology 201 2005-2006 pg. 31

Four tests were conducted to determine the ability of our unknown microorganism to excrete hydrolytic extracellular enzymes capable of breaking down starch (amylase), casein (proteases), gelatin (gelatinase) and urea (urease).

The starch agar plate (testing for amylase), milk agar plate (testing for proteases) and urea agar plate (containing a phenol red indicator testing for the presence of ammonia which is an end product of urease breaking down urea) were prepared using the same technique. Each agar plate was divided by line into two sections and appropriately labeled. Using aseptic technique a single line streak inoculation of each test organism was performed and the plates incubated at 37°C for 48 hours.

The gelatin hydrolysis test required a stab inoculation using proper aseptic technique. After appropriate labeling the gelatin deep tubes were also incubated at 37°C for 48 hours. During incubation the gelatin became liquid and needed to be refrigerated after 48 hours to determine if the organism produced gelatinase.

Carbohydrate Fermentation

Four fermentation tubes, each containing a carbohydrate, a Durham tube to collect gas and phenol red as an acid indicator were aseptically inoculated with our unknown microorganism and incubated at 37°C for 48 hours. The four carbohydrates used were, glucose, maltose, lactose and sucrose. After incubation the tubes were examined for color change (the phenol red turned deep red

² <http://www.vetmed.wisc.edu/pbs/courses/bact/labmanual/c1cells.html>

³ Journal of Clinical Pathology. Pub. May 1974 v.27(5) pg. 408-412 “Gram-positive, motile, cluster forming cocci as a cause of urinary infection.” National Public Health Laboratory, Turku, Finland.
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=478137>

⁴ Cappuccino, James G., & Sherman, Natalie (2005). Microbiology: A Laboratory Manual. Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA pg. 101

⁵ Ibid pg 101

⁶ Ibid pg 101

⁷ Ibid pg 102

⁸ Ibid pg 102

⁹ http://www.biology-online.org/dictionary/Fastidious_organism

¹⁰ Cappuccino, James G., & Sherman, Natalie (2005). Microbiology: A Laboratory Manual. Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA pg. 102

¹¹ Ibid pg. 161

¹² Todar, Kenneth, Todar's Online Textbook of Bacteriology, University of Wisconsin-Madison Department of Bacteriology, ©2005 downloaded 3/1/2007

¹³ Buchanan, R.E. & Gibbons, N.E., co editors. Bergey's Manual of Determinative Bacteriology, eighty edition. The Williams & Wilkins Co. Baltimore, 1974

Todar, Kenneth, Todar's Online Textbook of Bacteriology, University of Wisconsin-Madison Department of Bacteriology, ©2005 downloaded 3/1/2007

Cappuccino, James G., & Sherman, Natalie (2005). Microbiology: A Laboratory Manual. Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA Chart pg. 204, Chart pg. 416

¹⁴ Buchanan, R.E. & Gibbons, N.E., co editors. Bergey's Manual of Determinative Bacteriology, eighty edition. The Williams & Wilkins Co. Baltimore, 1974 pg. 483

¹⁵ Ibid pg. 483

¹⁶ http://education.med.nyu.edu/courses/old/microbiology/courseware/infect-disease/Facultative_Cocci4.html

¹⁷ Cappuccino, James G., & Sherman, Natalie (2005). Microbiology: A Laboratory Manual. Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA pg. 416

in the presence of acid) and the presence of gas in the Durham tube.

Biochemical Tests

Eight biochemical tests were performed using different media.

For the SIM (Sulfide, Indole, Motility) test the deep tube was aseptically inoculated with the unknown microorganism and incubated at 37°C for 48 hours. After incubation we looked for the presence of H₂S indicated by black medium. Motility was determined by movement away from the stab line. We then added Kovac's reagent to test for the presence of indole.

MR/VP (methyl red/Voges-Proskauer) tests were prepared by aseptically inoculating by the stab method the MR/VP broth agar and incubating at 37°C for 48 hours. After incubation the MR/VP agar was divided into two equal portions. To one tube methyl red was added dropwise and the results noted. The second tube, containing the other half of inoculated and incubated agar, was tested by adding Barrit's reagent dropwise.

In the Simmon's Citrate test, agar containing citrate and a green dye was aseptically streaked for growth and incubated at 37°C for 48 hours. After incubation we looked for a color change from green to blue indicating citrate was utilized.

The nitrate reduction test required aseptic inoculation of trypticase nitrate broth with our unknown microorganism and incubation for 48 hours at 37°C. After inoculation and incubation the broth was tested for the presence of nitrite by adding 5 drops of agent A (sulfanilic acid) and 5 drops of agent B (α -naphthylamine) and observed for color change. A small amount of zinc was then added to test for the presence of nitrate or if nitrate was reduced to ammonia and nitrogen gas.

The final biochemical test was to determine if our unknown makes catalase. We took a Petri dish containing left over but pure isolate of our unknown and added hydrogen peroxide and observed for bubbles which indicated a positive reaction.

Antimicrobial Sensitivity using the Kirby-Bauer Test

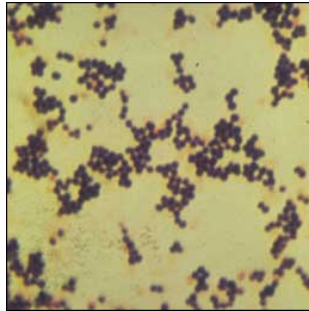
We began this final test by preparing a broth by aseptically inoculating broth and incubating at 37°C for 48 hours. Using a sterile cotton swab dipped in the inoculated and incubated broth we streaked an entire Mueller-Hinton agar surface (lawn streak) and allowed it to air dry. Using a Sensi-disc dispenser we applied antimicrobial discs onto the agar surface. We then incubated the plate culture for 48 hours at 37°C and measured the zone of inhibition around each disc.

RESULTS

Our unknown microorganism isolated well and developed multiple colonies that had a yellow pigment. The margins of the small (1 – 3 mm) round colonies were smooth and the elevation was raised or slightly convex.

The gram stain revealed beautiful and classic purple grape cluster configuration allowing us to initially classify the organism as a gram positive *Staphylococcus*. The following photograph was taken from the University of Wisconsin's veterinary science web site but accurately replicates what

we observed.



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All of the next four slides were “negative.” The Acid-fast stain was negative (blue - grape clustered *Staphylococcus*) which confirmed our gram stain result and ruled out the genus *Mycobacterium*. Differential staining again confirmed our initial classification because gram positive *Staphylococcus* organisms are non-spore forming and generally do not have heavy capsule layers. Although there are motile gram positive *Staphylococcus* organisms³ our unknown was non motile. This was difficult to determine because Brownian movement and natural capillary action on the slide made viewing difficult.

Specialized media is often used to isolate bacterial types, differentiate closely related groups, and aid in characterization and identification of bacteria by their abilities to produce chemical changes.⁴ Our results confirm the original classification of the unknown as *Staphylococcus*.

Type of Medium	Medium	Amount of Growth	Appearance of Growth	Appearance of Medium
Selective	Phenylethyl Alcohol Agar	2+	Yellow	White
Differential	Mannitol Salt Agar	2+	Yellow	Unchanged
Differential	MacConkey Agar	0	-	-
Differential	Eosin-Methylene blue Agar	0	-	-
Enriched	Blood Agar	2+	Yellow	Gamma

PEA is used for the isolation of most gram-positive cocci by partially inhibiting gram-negative organisms.⁵ Our result indicated strong growth on this medium.

MSA contains a high salt concentration, which is inhibitory to the growth of most bacteria other than the staphylococci.⁶ Again, we had a strong growth on this medium but since the medium remained

unchanged, our unknown did not ferment mannitol.

MacConkey agar inhibits the growth of gram-positive organisms and allows the isolation of gram negative bacteria.⁷ There was no growth indicating a gram-positive organism.

EMB like MacConkey agar is partially inhibitory to the growth of gram-positive organisms⁸ and therefore the lack of growth on our Petri dish was an expected result.

Blood agar is designed to cultivate fastidious organisms (fastidious organisms are bacterial organisms having complex nutritional requirements.⁹) and permits demonstration of the hemolytic properties of some microorganisms.¹⁰ Our unknown staphylococcus grew well but demonstrated gamma hemolysis or no lysis of red blood cells.

The temperature requirement tests were somewhat surprising. We found growth in both the 4°C and 20°C broths but no growth in the broth incubated at 37°C. (Our 60°C broth was mistakenly lost).

Enzymatic hydrolysis tests were designed to investigate the exoenzymatic activities of various microorganisms. Rather than reproduce all of our results I have included the results for our unknown compared to the results another group of students recorded for *S. aureus*. The results obviously do not match which caused some anxiety for our lab table since we believed our unknown to be *S. aureus*.

	Gelatinase	Amylase	Proteases	Urease
Unknown	-	+	+	-
<i>S. aureus</i>	+	-	-	-

Since organisms use carbohydrates differently, carbohydrate fermentation is one method used to categorize organisms. Again, we have reproduced only a portion of the results due to space considerations.

	Glucose Fermentation/gas	Malatose Fermentation/gas	Lactose Fermentation/gas	Sucrose Fermentation/gas
Unknown	+/-	+(weak)/(weak)	+/-	+/-
<i>S. aureus</i>	+/-	+/-	+/-	+/-

Biochemical tests primarily differentiate the principal groups of *Enterobacteriaceae* based on their biochemical properties and enzymatic reactions in the presence of specific substrates.¹¹ Because our unknown is a *Staphylococcus* it should not be surprising that the results for seven of the eight tests were negative. The catalase test, however, is a crucial identifier of *S. aureus*. Our sample was definitely catalase positive.

One of the most interesting tests was the Kirby-Bauer antimicrobial sensitivity test. Our results are summarized in the following chart:

Chemotherapeutic	Susceptibility	Chemotherapeutic	Susceptibility
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Agent		Agent	
Penicillin	Resistant	Chloramphenicol	Susceptible
Streptomycin	Susceptible	Erythmycin	Susceptible
Tetracycline	Susceptible	Sulfanilamide	Resistant

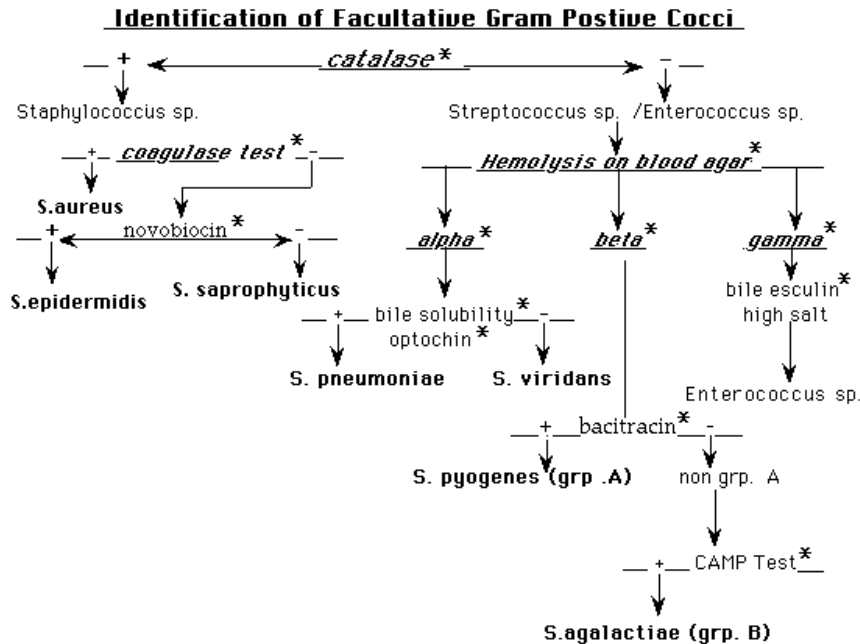
DISCUSSION

Our results demonstrate that our unknown is a gram-positive staphylococcus, producing yellow (aureus mean golden) pigmented colonies. It was easy to grow on several different mediums including mannitol. It is a mesophilic non-motile, non-spore forming, non-encapsulated facultative anaerobe. It is resistant to penicillin and sulfanilamide. It ferments a variety of carbohydrates but produces little or no gas. It is catalase positive. With little hesitation we can conclude that our unknown microorganism is *Staphylococcus aureus*. “*Staphylococci* are Gram-positive spherical bacteria that occur in microscopic clusters resembling grapes.... In 1884, Rosenbach described the two pigmented colony types of staphylococci and proposed the appropriate nomenclature: *Staphylococcus aureus* (yellow) and *Staphylococcus albus* (white). The latter species is now named *Staphylococcus epidermidis*. Although more than 20 species of *Staphylococcus* are described in Bergey’s Manual (2001), only *Staphylococcus aureus* and *Staphylococcus epidermidis* are significant in their interactions with humans.”¹²

Important phenotypic characteristics of *Staphylococcus aureus* listed in several sources:¹³

- Gram-positive, cluster-forming coccus
- Nonmotile, nonsporeforming facultative anaerobe
- Fermentation of glucose produces mainly lactic acid
- Ferments mannitol (distinguishes from *S. epidermidis*)
- Catalase positive
- Coagulase positive
- Golden yellow colony on agar

Bergey’s Manual of Determinative Bacteriology describes some of the key points in our identification. “A wide range of carbohydrates may be utilized particularly in the presence of air with the production of acid but gas not detectable by standard procedures.”¹⁴ “Usually sensitive to antibiotics such as the β -lactam and macrolide antibiotics, tetracyclines, novobiocin and chloramphenicol.”¹⁵ In addition, there are several identification schemes but perhaps the clearest is the following flow chart from the New York University Medical School’s web site.



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Even though we were thorough in keeping notes, in retrospect, we should have monitored some aspects of the various tests more carefully. For example even though we found that glucose fermentation produced acid (positive methyl red test) my notes were less than clear about that fact. We also found it difficult not to be overwhelmed by the details and new techniques being learned and miss the big picture of why we were actually performing each activity. One test which would be helpful in differentiation of *S. aureus* from other *Staphylococcus* species would be the coagulase test.

Most new skills are learned and perfected through practice and repetition. With the understanding that most modern health professionals rely on computer assisted procedures like the API STAPH-IDENT system¹⁷ and lab specialists for diagnostic assistance, it still would seem prudent to more adequately train new health professionals in basic identification techniques. It is not beyond belief that some health professionals may find themselves in places throughout the world without the aid of computers, the internet, specialty laboratories and million dollar machines. To that end and in conclusion, I suggest designing a course or a series of courses intended to give new health professionals a broader and more foundational base from which to help others.

BIBLIOGRAPHY

Buchanan, R.E. & Gibbons, N.E., co editors. Bergey's Manual of Determinative Bacteriology, eighty edition. The Williams & Wilkins Co. Baltimore, 1974

Cappuccino, James G., & Sherman, Natalie. Microbiology: A Laboratory Manual. Pearson Education, Inc., publishing as Benjamin Cummings, San Francisco, CA 2005

Madigan, Michael T., & Martinko, John M., Brock Biology of Microorganisms, Eleventh Edition. Pearson, Prentice Hall, Upper Saddle River, NJ 2006

Mikels, Ruth Ann, Ph.D. Microbiology Laboratory Guide, Biology 201 2005-2006

Todar, Kenneth, Todar's Online Textbook of Bacteriology, University of Wisconsin-Madison
Department of Bacteriology, ©2005 downloaded 3/1/2007

Journal of Clinical Pathology. Pub. May 1974 v.27(5) pg. 408-412 "Gram-positive, motile, cluster forming cocci as a cause of urinary infection." National Public Health Laboratory, Turku, Finland. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=478137>

http://www.biology-online.org/dictionary/Fastidious_organism

<http://www.vetmed.wisc.edu/pbs/courses/bact/labmanual/c1cells.html>

http://education.med.nyu.edu/courses/old/microbiology/courseware/infect-disease/Facultative_Cocci4.html

The Necessity of Wal-Mart

Jay Jenkins

This essay written by Jay Jenkins for Dr. Endicott's English 102 class argues a familiar topic with a twist. As the Wal-Mart Corporation continues to grow and expand everyone seems to be against it for various reasons. Jenkins takes these opinions head on, counters them, and goes on to tactfully highlight the surmountable benefits. This different approach does a fantastic job of arguing his point.

To the Honorable Senators and Representatives of the State of Washington, I respectfully appeal to you to allow Wal-Mart their unhindered right to a free market share in the state of Washington. The economic benefits to the state alone warrant such approval. But to deny Wal-Mart that right would establish a very dangerous precedence of discrimination.

The many factors of this issue should be carefully considered. As Wal-Mart has grown, it has drawn the attention of organized labor, small business owners, citizens with environmental concerns and individuals within local communities concerned with growth. Each of these groups has found fault in some aspect of Wal-Mart's business practices. But those complaints need to be balanced by facts and by the benefits enjoyed by the majority. The labor movement believes that Wal-Mart has unfair labor practices and that their workers should be represented. Small business owners believe that Wal-Mart will put them out of business. Citizens with environmental

concerns believe that Wal-Mart has a significant negative impact to the environment and residents near where Wal-Mart conducts business complain of increased traffic. These are certainly valid complaints and should be considered, but in a broad context. Wal-Mart alone is not the only corporation or entity that could be considered guilty of such offenses. Variations of these arguments could be used against other successful companies such as McDonalds, Microsoft, Safeway or Home Depot. All of these companies have enjoyed tremendous growth, but have been perceived to encroach on local businesses or have a negative impact on the environment. But the growth in our nation's population has forced communities to expand. As communities grow, that has an impact on the environment and the quality of life within those communities. How that expansion occurs and is managed is a very difficult and controversial issue.

With 1.3 million employees in the United States, Wal-Mart plays a significant

role in our local and national economy. Likewise, organized labor has played an important role in the economic advancement that we have seen in the past century. Many of the benefits we enjoy today are a direct result of organized labor. The 40-hour workweek, two-day weekends, wage increases, and benefit for labor jobs can be attributed to unions. America is a much better society because of those contributions. But just as changes in labor practice were necessary a hundred years ago, so is it necessary to change now. The job market today bears no resemblance at all to the job market of a century ago. Organized labor no longer has the same impact as it had in the past. Union membership has declined to an all time low and continues to decline each year. This is due in part to non-union establishments adopting the benefits that have been established by the unions. The Wal-Mart Corporation employs over 1.8 million employees worldwide (2006 Annual Report). Of those workers, a very small, unfairly disproportionate percentage receives media attention, complaining of their working conditions, wages, and benefits. The vast silent majority is grateful for the employment opportunity that Wal-Mart provides. The level of employment opportunity that Wal-Mart provides would not be possible with union intervention.

Most importantly, two facts stand out. There is fierce competition for the jobs at Wal-Mart when a store opens. People want the jobs that Wal-Mart has to offer. A Wal-Mart store recently opened in Illinois and offered 325 positions, yet received over 25,000 applications (2006 Annual Report). And if Wal-Mart employees did unionize, those that were not laid-off as a result of unionization would enjoy some benefits. But, by far the greatest benefactor of

unionizing Wal-Mart's 1.8 million employees would be the unions that would be collecting the dues of those 1.8 million employees.

The Environmental claims cannot be isolated exclusively against Wal-Mart either. The growth rate for housing developments and the associated land consumption exponentially exceeds the land consumed by Wal-Mart. When business parks, strip malls, and roads are factored in, Wal-Mart's land consumption is almost negligible. It is safe to say that Wal-Mart may contribute to increased traffic, but it is far less responsible than housing developments, business development, malls, strip malls, or growth in general.

Consider the Kent Valley, an area that stretches from Puyallup to Renton and is approximately 30,000 acres in size. In the past 35 years, the predominant use of that land has changed from agriculture to become the largest distribution center in the region. The proximity of the Kent Valley to the Ports of Seattle and Tacoma make that land prime for trucking and rail traffic. There are literally hundreds of warehouses between the shores of Lake Washington and the town of Puyallup. Consumer goods both imported and exported are stockpiled in these warehouses and must be trucked or railed to their end destination. To accommodate the number of warehouses, many new roads have been built. The expansion of infrastructure has also attracted other businesses, housing developments, and apartment complexes. Consequently, the traffic in that part of the region and the adjacent areas has been adversely affected in a very dramatic way. And the land surface that was once permeable is now non-permeable as a result of the buildings and asphalt. This in turn has impacted the water table within the valley and the environment as a whole. Wal-Mart

has two stores located within that area and is just one business out of thousands in the Kent Valley. Out of an area that is nearly 30,000 acres in size, Wal-Mart owns 20 acres (King County DDES). This clearly shows factors far greater than Wal-Mart impacting the economy, the environment, and communities in a much larger way. Though Wal-Mart certainly contributes to the concerns raised, those contributions are not enough to disqualify its participation in the states economy.

The probability that the local business community will be impacted by a new Wal-Mart store is high. Small businesses could be lost the same way that the local hamburger stand was replaced by McDonalds or Burger King, by the way the blacksmith was replaced by the mechanic or by the way that the large grocery chains replaced the corner market. Examples like these show the evolution of our economy. Today, it would be unthinkable to argue the benefits of the horse-drawn carriage over the automobile, yet there was a time when that was a controversial issue. But this assumes that a small business will fail when the opposite could just as equally be true. The small business that provides a niche service that Wal-Mart is not capable of greatly benefits from the large volume of shoppers. And while the thought of any businesses failing is difficult, blame cannot be placed exclusively on large corporations like Wal-Mart. There are more reasons and causes for businesses to fail, both small and large, than can be named here. To focus the blame on Wal-Mart is not fair to that corporation or to the businesses affected.

The balance to the issues raised by the opponents of Wal-Mart is not just to counter the complaints, but also to speak of the benefits that Wal-Mart brings to a

community. In the aftermath of Katrina, the company contributed over 44.5 million dollars worth of cash and merchandise to the victims of that storm (2006 Annual Report). That does not take into consideration of the charitable contributions Wal-Mart makes annually worldwide. The local economies also benefit as demonstrated by the competition for jobs at the opening of the Illinois store. Companies like Wal-Mart typically produce increased tax revenues to local municipalities and can indirectly contribute to the local job market in the way of construction, building and grounds sustainment and deliveries.

It is important to consider the concerns levied against Wal-Mart and to act on those concerns with due process. No corporation is or should be exempt of or from the law. It is equally important to allow Wal-Mart continued growth as the fundamental freedom on which our country was established. The citizens of this country hold the freedom to choose as a fundamental right. It is a fundamental right to choose to shop at Wal-Mart or not. It is a fundamental right to choose to work at Wal-Mart or not. It is a fundamental right to choose to start a business like Wal-Mart or not. These are essential to not only Wal-Mart's success, but our economy as a whole. The consumers ultimately speak with their patronage, because of the wealth of choices and goods, at low prices, that Wal-Mart brings to a community. Wal-Mart provides a means of acquiring many of the wants and needs of its shoppers. It succeeds because it can purchase in such large volume and keep its prices low. It succeeds because it has so many of the items that its shoppers desire, all in one place. Wal-Mart represents an important element in the evolution of capitalism, just as the large grocery chains

did in the early fifties and warehouse shopping in the eighties. To stand in the way of this important step would be the same as telling Henry Ford that he could not build cars the way he did. Wal-Mart may collectively represent many of the growth

issues that our country is struggling with, but it is certainly not wholly responsible and should not be penalized as if it were.

Works Cited

2006 Annual Report, Wal-Mart, Fiscal year end, January 31, 2007

<http://walmartstores.com/GlobalWMStoresWeb/navigate.do?catg=453&contId=5700>

King County Department of Development and Environmental Services,

Parcel Viewer, City of Renton, Parcel # 1923059048, Lot Area = 431,667 SqFt

(9.91 acres) http://www5.metrokc.gov/reports/property_report.asp?PIN=1923059048

King County Department of Development and Environmental Services,

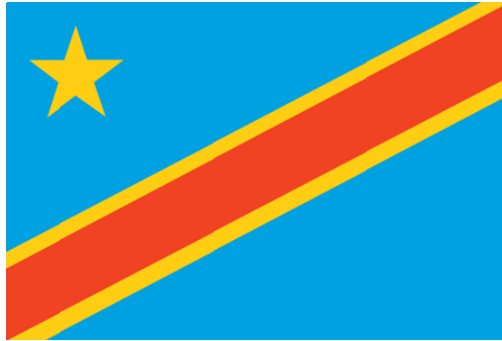
Parcel Viewer, City of Auburn, Parcel # 2321049031, Lot Area = 404,765 SqFt

(9.29 acres) http://www5.metrokc.gov/reports/property_report.asp?PIN=2321049031

Case Study
The Democratic Republic of the Congo

Jessica Tetrault

This analysis of an African nation was written for Political Science 101. In it, Tetrault highlights the difficulties of the post-colonial era in Africa. This essay is well-written, informative, and useful. At a time when Americans are criticized for not understanding worldwide issues, Tetrault shows real perception about global issues.



As a developing nation, the Democratic Republic of the Congo—Congo, as it is known—may define itself as a democracy, but its name has more to do with clarification rather than being an accurate representation of the country’s political system. The country formerly known as Zaire distinguishes itself from its neighbor Republic of Congo by adding the word “democratic.” The Congo, despite having held a recent national election, is anything but democratic. By applying the correlates of democracy to the situation, it is obvious that the new government has many challenges ahead if they wish to shake off the lasting effects of colonialism to form a truly democratic nation.

The Congo was formed in 1908 as a Belgian colony. Even after the country gained independence in 1960, colonialism still marked the Congo. The country’s

official language is still French, even though over 200 African ethnic groups populate the area. There are 700 local languages and dialects spoken, with Lingala and Swahili being the other two most widely used. The transitional government formed after independence was modeled on the French parliamentary system. Belgium continues to be the Congo’s largest trade “partner,” although Belgium takes far more in natural resources out of the Congo than it supplies in aid. This, along with other economic problems, is one of the biggest reasons why the Congo democracy has failed to be successful.

If the correlates of democracy are applied to the case of the Congo, it is easy to see that the economic impact of colonialism is severely inhibiting the spread of democracy in the country. National wealth is one of the most important factors in the

spread of democracy. The Congo is actually blessed with vast natural wealth. Within its borders are numerous mines, containing diamonds, cobalt, rubber, copper, gold, silver, zinc, and a host of other minerals. The Congo also has some petroleum resources, and huge areas of rainforest for timber. However, the government does not receive the lion's share of the profit of these products. The Congo is one of the three countries (along with Sierra Leone and Angola) where the "blood diamonds" conflict is currently raging. The Revolutionary United Front, or RUF, is based in Sierra Leone but spreading its power into the Congo. Since 1999, over 80,000 people have been killed due to the violence (Durham). The RUF has been known to cut off the hands, feet, lips, ears, and noses of those people who refuse to join them or voice dissent about the mining practices. These victims then cannot vote or gather food for their families, perpetuating the cycles of the RUF's power and extreme poverty. The Congo also has one of the lowest gross domestic product figures in the world, at only \$700 per capita (CIA factbook). The national debt of \$10.6 billion continues to grow as the Congo has to rely on foreign aid and cannot control the flow of cash regarding its resources.

A strong market economy is another correlate of democracy that must be met for success. The Congo has not been able to overcome government corruption in order to establish a fair trade system. The country has also been involved in a lengthy and bloody civil war since 1998. The war has been one of the bloodiest conflicts in the 20th century, and it severely damaged the

Congo's ability to produce products and revenue and increased the national debt as the death toll reached nearly 4 million people (CIA factbook). Foreign business has practically vanished as the infrastructure of the country broke down during the war.

Political correlates of democracy have faced serious trouble in the Congo. Freedom of communication is highly important to the success of democracy, and in the Congo this does not exist. Not only has the government been extremely unstable and corrupt, there is little framework or structure for communication to even occur. There are not even 11,000 telephones in use in the country, and the telephone line system is described as "barely adequate" (CIA Factbook). Only 10% of the population owns a television, and there are only four broadcast stations. There is one Internet service provider, and less than 150,000 people are Internet users. With this limited capacity for sharing information, it is easy to see how government officials can hide corrupt activity and not be held responsible for their actions.

A stable party system is required for democracy to succeed. The Congo's fledgling democracy is flooded with minor parties due to the huge diversity of population. The recent elections saw candidates from the Democratic Social Christian Party, Forces for Renovation for Union and Solidarity, National Congolese Lumumbist Movement, Popular Movement of the Revolution, and several others (CIA Factbook). Incumbent President Joseph Kabila recently was re-elected to office after assuming the presidency following his father's assassination in 2003. However,

there has been serious opposition to the validity of the election led by Jean-Pierre Bemba, Kabila's main opponent in the presidential race. Bemba filed a challenge to the Congo Supreme Court, claiming that there was "systematic cheating in the vote counting" (AlJazeera 1). The Supreme Court has ruled that Kabila retains the presidency, but there has been rioting in Kinshasa, the capital city, since the verdict was announced.

Another political correlate of democracy says that civilian control of the military is one of the keys to a successful system. The military system in the Congo is very fractured, and "it poses a real and present danger to civilian rule" (Magstadt 258). There are three branches of nationally recognized military: Army, Navy, and Air Force. The Congo spends \$104 million annually on military expenditures, but this is not even 2% of the GDP. Also, only 10% of the population is even fit for military service due to the high rate of disease (CIA Factbook). However, there are many other armed forces within the Congo. Joseph Kabila and Jean-Pierre Bemba each have their own armies, and these forces are currently in a standoff in the capital. Bemba's troops actually stormed the Supreme Court, setting furniture and documents on fire. Kabila issued an ultimatum to UN peacekeeping troops, saying "they have 48 hours to remove Bemba's soldiers from Kinshasa or let the (national) army do it" (AlJazeera 2). The Congo also has a history of military coups, as Colonel Joseph Mobutu "seized power and declared himself president in November 1965" (CIA Factbook).

Perhaps the most important correlate is historical: previous democratic experience. Unfortunately for the Congo, their initial foray into democracy ended with the assassination of the first elected leader of the nation, Patrice Lumumba. Joseph Mobutu then seized power, and the Congo has been in its current state of unrest ever since. In spite of the United States' seeming desire to spread democracy, the Eisenhower administration in the mid 1970s can actually be held culpable for the failed democracy in the Congo.

"...classified U.S. government documents, include(e) a chronology of covert actions approved by a National Security Council subgroup, that reveal U.S. involvement in—and significant responsibility for—the death of Lumumba, who was mistakenly seen by the Eisenhower administration as an African Fidel Castro. Hundreds of thousands of dollars and military equipment were channeled to these (CIA) officials, who informed their CIA paymasters three days in advance of their plan to send Lumumba into the clutches of his worst enemies. Other details: The U.S. authorized payments to then-President Joseph Kasavubu four days before he ousted Lumumba, furnished Army strongman Mobutu with money and arms to fight pro-Lumumba forces, helped select and finance an anti-Lumumba government, and barely three weeks after his death authorized new funds for the people who arranged Lumumba's murder." (Weissman)

As the Congolese people struggle through rioting and other unrest after their most recent election, it is easy to assume that many of the citizens are uneasy about the validity or longevity of this new attempt at democratic rule. Lumumba had been a

“passionate nationalist and became prime minister with a plurality of seats in the parliament”, and the current situation surrounding Kabila’s 58% of the vote is strikingly similar.

Lastly, the Congo faces a lack of democratic neighbors. Heinous humanitarian crimes occur daily in Sudan; and due to vicious civil wars in Uganda and Rwanda, the Congo has seen an influx of refugees from these countries. Sadly, the conditions in the Congo are not drastically different. If “the form of government in neighboring states can exert a positive influence” (Magstadt 259), then it follows logically that the government failures in

neighboring states exerts a negative influence.

Despite the Congo’s second attempt at democracy in electing President Kabila, it is difficult to look at the future of this country as a democracy. Its bloody, war-torn history and the trappings of colonialism have a firm grip on the Congolese people. Until elections can be held without riots and harsh accusations of dishonesty, the Congolese will not truly have a voice. Democracy and prosperity seem to go hand in hand, and the Congo remains desperately poor despite its wealth of natural resources. In order for the Congo to become a true democracy, there must be an agreement between international organizations: to pledge financial aid, honesty in trade dealings, and a true desire to see real democracy spread throughout the former European colonies in Africa.

Bibliography

CIA—The World Factbook. Democratic Republic of the Congo. Washington: 2006

“Congo Court Confirms Kabila Victory.” AlJazeera.net. 27 Nov. 2006
<http://english.aljazeera.net/News>

Democratic Republic of the Congo. Wikipedia.
http://en.wikipedia.org/Democratic_Republic_of_the_Congo

“DR Congo Opposition Given Ultimatum.” AlJazeera.net. 23 Nov. 2006
<http://english.aljazeera.net/News>

Durham, Dick. Diamond Trade Fuels Bloody Wars. CNN.com. 18 Jan 2001
<http://cnnstudentnews.cnn.com>

Magstadt, Thomas M. Understanding Politics: Ideas, Institutions, & Issues. 7th ed. Belmont, CA: Thomson Wadsworth, 2006.

Weissman, Stephen R. “Opening the Secret Files on Lumumba’s Murder.” The Washington Post 21 Jul 2002 http://www.africawithin.com/lumumba/murder_of_lumumba

Relocating the RAP and Lincoln Work Release Houses

Alexandra Newman

In this essay from Professor Faherty's English 101 class, Alexandra Newman points out some errors in logic on the part of the Washington Department of Corrections that create safety issues for a Tacoma neighborhood. Her conclusions may inspire you to take action, too.

There are two houses, side by side, on 37th Street and Yakima Avenue; they are both large and dignified, built in the early 1900's, with wide porches supported by Grecian pillars. These two houses reside in the middle of a residential area in Tacoma, Pierce County, Washington. Six-foot cedar fences hem in several houses; some have kids' bikes and scooters sprawled on the lawns. One of them, the faded yellow house with white trim, has a view of Lincoln Park. It sits just across the street.

Today, Lincoln Park is cleaner, prettier, and significantly more popular. In the summertime, Metro Parks opens the pool, offering free lunch and activities to the local kids. Half a block down the street from the park is Lincoln High School, from which dozens of teen students traverse daily, back and forth, from school. Two blocks south and four blocks west is the Whitman Elementary school, where hundreds of children attend kindergarten through fifth grade classes. At recess, the playground is teeming with activity.

For the most part, life in urban Tacoma has improved. Nevertheless, for whatever reason, when a neighbor passes by the two aforementioned houses, walking toward Lincoln High School or Vietnamese shops up

the road, he/she grows silent, averts the eyes, and quickens the step. No neighbor likes to linger around these houses alone.

These houses are two of three "half-way houses" (also called the "RAP/Lincoln Park Work Release Homes") in Pierce County, designed to re-introduce previously convicted felons and sexual offenders back into society. The Washington State Department of Corrections states that, "The State of Washington operates the program in partnership with Allvest Inc., a private rehabilitative corporation," (Rap/Lincoln Park Work Release).

These work release houses in the Tacoma, Pierce County area appear to be worthwhile, but they are ill placed in regards to the safety of the surrounding area. Let us examine a few of the current inmates of these "halfway houses", keeping in mind the residential nature of the proximate neighborhood. Currently, there are three Level II sex offenders and one Level III offender presiding in these houses. "Level II offenders" pose a moderate threat. "Level III" offenders are,

"...a potential high risk to the community and are a threat to re-offend if provided the opportunity.

Their lifestyles and choices place them in this classification. Some have predatory characteristics and may seek out victims. They may have refused or failed to complete approved treatment programs.” (The Washington State Sex Offender Information Center)

Some may argue that there are no documented cases of ex-cons committing violence while serving in these work release programs. They may even downplay, as paranoiac concerns, that these felons pose a threat. Why demonize the people who are simply trying to carve out a life of normalcy after paying their debt to society?

The point is not to demonize those on the Lincoln and RAP programs – the point is to illustrate the inappropriateness of the location of these programs. Work release program occupants have violated their release terms in past years, ultimately costing the lives of innocent victims. Consider the story of 17-year-old Meeka Willingham, a cheerleader at Stadium High School in Tacoma.

“On Aug. 19, 1994...Meeka Willingham...was stabbed 56 times. Her killer, Johnny Robert Eggers, had been in *Lincoln Park, the Tacoma work release facility to which the prison systems sends all of its mentally ill offenders to make the transition back into the community...* Three years after Willingham’s murder, a Pierce County jury found the Department of Corrections negligent and awarded her family \$6.3 million. Eggers is serving a life sentence at the state penitentiary at Walla Walla.” (Pierce County: Dumping Ground [emphasis added]).

In addition to the murder of Meeka Willingham, there is also the much-publicized Snohomish case of Charles Rodman Campbell. Campbell is the reason there have been no work-release centers in all of Snohomish County for more than 22 years.

“...he didn’t go to his job. Instead, he tracked down the woman he had raped eight years earlier – a woman whose testimony sent him to prison – and killed her, a neighbor, and the neighbor’s 8-year-old daughter. Prison officials shut down the work-release center in 1984, two years after the brutal murders. County residents and their elected officials have fended off all efforts by the state to open another facility in the county” (Pierce County: Dumping Ground).

These are only two of many documented cases where felons on work release violated the terms of the program and caused harm to unsuspecting citizens. Why is government “reintroducing” ex-convicts and high-risk sex offenders back into society through “halfway houses” in a residential area, just across the street from Lincoln High School, Lincoln Park, and a few blocks from Whitman Elementary? Certainly, we cannot allow high-risk felons to remain in housing so close to vulnerable children. Regardless of prison crowding, parole, etc., why would this be permissible – specifically when the state has openly identified one of these sex offenders residing there as “likely to re-offend if provided the opportunity”?

According to the Federal Bureau of Justice Statistics web site, “Of the 272,111 persons released from prisons in 15 States in 1994, an estimated 67.5% were rearrested for a felony or serious misdemeanor within 3 years,

46.9% were reconvicted, and 25.4% resentenced to prison for a new crime,” (Criminal Offender Statistics). Granted, this is a national statistic, but it gives a clear picture of the tendencies of high-risk felons, albeit on a larger scale.

Based on the long-term crimes rates in the United States, nationally and at the local level, it does not make sense for the state to place work-release houses in such close vicinity to children and teens. However, the dangers presented by these houses’ positions do not end here.

The Washington State Department of Corrections website discloses that the felons in both of these homes are either mentally ill and/or developmentally challenged. The RAP House assists developmentally disabled offenders, while the Lincoln Park Work Release assists mentally ill offenders. Hence, not only are the occupants of these homes moderate-to-high-risk ex-convicts and sex offenders, but they are also mentally disturbed. The Department of Corrections goes on to say, “Staff monitor medication, however, the resident is responsible for learning and demonstrating competency regarding medication times and dosage,” (Rap/Lincoln Park Work Release). The RAP home houses up to twenty individuals. The Lincoln Park Work Release houses up to thirty inmates. How can we be certain that this will always be the case?

One of the arguments for the positioning of these houses and their occupants has been that of transportation to and from the workplace. In their current position, these felons have ready access to the public transportation system. “They are confined,” writes Joseph Turner, journalist from The News Tribune, “unless they work...or are

making a supervised outing to visit family members,” (Pierce County: Dumping Ground). The availability of the city bus in the current situation is ideal; some argue that, if moved, the inmates would be unable to go to the workplace.

It appears that the state considers being located near a bus line a viable rationale for placement of these houses near vulnerable citizens who are, most of them, unaware of the implied risk. Perhaps we need to prioritize. Which should be the priority – convenient bus line transportation or the safety of our children?

Tacoma should address this risk, but they have chosen to ignore it. Even if the chance of an offender harming a local were as little as one in one thousand, would we not, as a community, fight to eliminate that gap? The work release houses in the Lincoln Park, Tacoma, and Pierce County vicinity appear to succeed in their mission of reintegrating inmates into society. There is a valid need for these services in our state. However, the City of Tacoma does not appear to have continued awareness of the financial-legal risk they would face should the public deem them negligent in performance of their duty to protect its citizens. This was the case with the Meeka Willingham murder in 1994, in which they relinquished \$6.3 million. Regardless of the value of these work release programs, the current location of the related housing should be re-evaluated.

It is time for a change. We should and we can respond to the loss potential that the RAP and Lincoln homes present. One option would be for the city to complete a risk-assessment of these programs and establish a monetary fund to compensate any losses should an inmate re-offend. However, based

upon state recidivism statistics, the government could not prepare sufficient funding for such a fund. This would acknowledge the risk and potentially position government officials to take effective action. Even so – tighter regulations cannot eliminate all possibility of the work release attendees repeating offenses.

The simplest and most effective option would be to relocate the said “half-way houses,” away from residential neighborhoods. Relocating these facilities to Western State Hospital or any other such location is a viable prospect. Western State has trained staffing and controlled access especially designed to care for mentally disturbed people. Turner of The Tribune goes on to state that, “Lakewood is fighting the state prison system over a proposal to move the Progress House work-release program and its 75 inmates from Tacoma’s West End to the grounds of Western State Hospital...” (Pierce County: Dumping Ground). “The department wants to keep the option of using its former pre-release center on the grounds of Western State Hospital.” Certainly, this proposal does present difficulties of its own (doubtless, these difficulties are off-putting to Lakewood officials), but they could be resolved. Not only

should the officials relocate the Progress House program, but they should also consider similar action in regards to the RAP and Lincoln work release houses.

To reap action, we must invoke the voice of community. Up to this point, the citizens of Tacoma have not continually communicated their concern, unlike the populace of Snohomish in the case of felon, Charles Campbell. This is not to suggest that Tacoma should take the exact measures of Snohomish and eliminate the local work release programs altogether, especially considering that, as a result, Snohomish’s prisons are grossly overcrowded. However, Tacoma could use Snohomish as an example of what citizens can do when vocalizing the facts and urging the government to take immediate action. We should encourage further petition and formal initiatives to change the regulations surrounding the locations of these facilities. Whether we urge them to take none or all of the aforementioned policy routes is not as important as that we urge them in the first place. We must be firm; in fact, we must be inappeasable. The RAP and Lincoln houses place our children in harm’s way; we must remove the potential for that harm.

Works Cited

“Criminal Offender Statistics.” Federal Bureau of Justice Statistics.
<http://www.ojp.usdoj.gov/bjs/crimoff.htm#findings>

Turner, Joseph. “Dumping Ground.” The Tacoma News Tribune, October 20, 2006

“Rap/Lincoln Park Work Release.” Washington State Department of Corrections.
<http://www.doc.wa.gov/facilities/RAPLPWRdescription.htm>

“Frequently Asked Questions.” The Washington State Sex Offender Information Center.
<http://ml.waspc.org/FAQ.aspx#Level2>

Neonatal Chest Radiography

David N. Haupt

David Haupt thoroughly describes the uses, procedures, and tasks that accompany the use of neonatal chest radiography. This in depth study, written for Mike Mixdorf's RS-142 class, takes a look into the usefulness of the x-ray as well as the techniques and importance. This well written essay is sure to give the reader a much deeper understanding of an x-ray that saves lives as it detects problems within the human body.

The neonatal intensive care unit (NICU) at the Tacoma General/Mary Bridge (TG/MB) hospital complex is a sixty-two bed facility that maintains an average daily census of forty neonates. Considering an average length of stay of seven days this equates to roughly four thousand patients treated each year by this Level 1 neonatal trauma unit. It is estimated that 95 percent of these patients will receive at least one chest X-ray during their stay, so it is incumbent upon staff radiographers to become familiar with the hospital's protocols for this procedure.

Indications for a Neonatal Chest X-ray

Neonatologists, physicians who specialize in the treatment of critically ill newborn children, will frequently order chest X-rays for their patients. A quality radiograph can provide physicians with a diagnostic tool to confirm or exclude suspected diagnoses. X-rays are ordered, broadly stated, to investigate problems in three basic categories: disorders of aeration, disorders of circulation, or determination of the proper placement of medical devices and assorted lines.

Some of the respiratory issues that are demonstrated with chest X-rays include: atelectasis (absence of gas from some or all of the lung due to failure of expansion or re-absorption of gas from the alveoli), pneumothorax (air between the outer lining of the lung and the chest wall, causing collapse of the lung(s)), pneumonia (a buildup of fluid within the lungs following an infection) and air leaks which may occur when the neonate is receiving positive pressure ventilation.

Radiographs are also used to demonstrate a variety of vascular disorders such as: patent ductus arteriosus (a condition in which the connecting blood vessel between the pulmonary artery and the aorta in fetal circulation stays open in the newborn), and persistent fetal hypertension in which the neonate presents with low arterial pressures.

Newborns in the NICU frequently require installation of feeding tubes, arterial catheters, PICC lines, or intubation for ventilation. Correct placement of these medical inserts is critical to the well-being of the infant; an incorrect placement can damage organs. Radiographs are used to demonstrate that the line(s) have reached their intended target, or that further manipulation is required.

Contraindications for a Neonatal Chest X-ray

As stated by Arthur (2001), "It is important to keep the exposure to ionizing radiation to a minimum to reduce the small but important risk of malignancy associated with X-ray examinations. However, the risk must be kept in perspective and balanced against the risk of missing an important diagnosis or complication of treatment by failing to perform an X-ray or CT examination" (p. 311). Dr. John Mulligan, a neonatologist with TG/MB, indicated that the only contraindication he could think of for this examination was if the neonate had arrived from another facility and already had a current and valid radiograph (J. Mulligan, personal communication, May 30, 2006).

Preparation for a Neonatal Chest X-ray

TG/MB does not require that the radiographer obtain a consent form prior to making the exposure. The hospital does require strict hygiene for anyone entering the NICU. Dr. Mulligan listed this as the most important criteria he expects of radiographers entering the department.

Techniques and Procedure

A radiographer is expected to respond quickly to requisitions from the NICU. Upon entering the department the technologist first walks to the portable X-ray unit and powers it up. They then return to the scrub sink and use a germicidal soap and warm water to wash their hands and arms. Protocol requires a minimum washing time of twenty seconds. Gowns and gloves are donned before returning to the portable X-ray. An 8X10 inch cassette is retrieved from the unit's holding bin (no grid is used), a lead marker is attached to the IR and the two are placed in a zip-lock plastic bag. The mobile unit is then moved to the patient's bedside. Care must be taken to ensure that the bulky mobile unit does not injure staff or jar the patient's bed or other nearby medical equipment. After verifying patient identity and examination orders the radiographer enlists the help of the assigned nurse to prepare for the exposure. The nurse relocates any obstacles (heating units, monitors, etc.) so that the x-ray tube can be properly positioned.

Virtually every chest requisition calls for a one-view chest, which translates to an AP projection with the neonate in the supine position. Because of the height of the bed or isolette and limitations of the portable X-ray equipment 40 inches is our standard SID. The nurse removes as much of the neonates upper body clothing as possible to reduce the appearance of artifacts. She then lifts the neonate while the radiographer slides the cassette underneath. It is recommended that when the infant is placed on the cassette the back of its head should rest on the upper edge of the IR to prevent extension of the head. The nurse will attempt to arrange any lines or leads away from regions of interest.

Collimation should be fairly close side-to-side, but frequently is opened up lengthwise to include the nose, particularly when a nasogastric tube placement is being examined. The neonatologists strongly urge radiographers to ensure that the infant's midsagittal plane is centered to the IR and that they not be rotated. Lead markers should be demonstrated on the radiograph but should not obscure any anatomy. To this end, particularly with active patients, the nurses will

frequently “lead-up” and secure the arms and legs of the patient despite recommendations against this practice by the radiographer. A small lead shield is placed over the patient’s gonads for radiation protection. The RT then steps back behind the mobile unit and rechecks the exposure settings. The average newborn-to-one month old neonate requires a technique of 76 kVp and 0.8 mAs. The tube is rotated-up and exposure is made at the estimated time of full inspiration.

Post Examination Tasks

After the exposure is made the nurse again lifts the patient while the radiographer removes the cassette. The mobile unit is carefully wheeled back to its storage area and the cassette is taken to the reader for processing. At TG/MB processing is digital and an image is routed to several different locations, one location is the neonatologist’s high-resolution monitor. The radiographer informs the physician that the image is ready and waits for physician approval that the image is acceptable. Afterwards the cassette is returned to the mobile unit’s holding bin and the X-ray equipment is disinfected. The radiographer then removes their gown and gloves and disposes of them in the appropriate bins before returning to the imaging department.

In summary, a chest X-ray involving a NICU patient is a common examination performed at the request of the neonatologist to confirm or exclude a diagnosis. Strict adherence to hygiene is critical to minimize nosocomial infections to the neonate. Quality radiographs depends upon the close cooperation of the radiographer and the nursing staff and requires a technique significantly lower than that which is used in the imaging department.

References

Arthur, R. (2001). The neonatal chest X-Ray. *Paediatric Respiratory Reviews*, 2, 311-323.

Not Homeless but Social-less

Chris Entus

Chris Entus's essay for Mary Fox's English 101 class brilliantly brings out the strong and supportive writing of the Tacoma Community College students. Entus defines the word homeless in a stimulating and open minded manner that causes the reader to completely rethink their perceived classification. A common term takes on new meaning as Entus brings new light on the label "homeless."

The word "homeless" is what is used to identify people living in a certain human condition. In her essay "Homeless," Anna Quindlen takes a subtle and out of the ordinary approach to define homeless people. She defines homelessness as a state of the human condition in which the "crux" is not being homeless, but the lack of "...certainty, stability, predictability, [and] privacy..." (201) that allow us to be human and live human lives. But is it an accurate definition of these people, or their condition? To define those people who sleep in the doorways of shops, who stand on the corner with signs for assistance, and who eat food provided by others requires something more. This human condition, in such an abundantly wealthy country, cannot be defined so simply.

Every society has outsiders. Among people whose economic systems are based on reciprocity, outsiders are often those who do not or are unable to reciprocate. In most societies, there are outsiders who do not buy into the general religious or moral framework. In other words, outsiders are individuals brought together in group by a religious, moral, or some other influence of belief that is outside of the social norm. In industrial and/or

capitalist societies, class becomes like caste, resulting in class wars and various kinds of discrimination intertwined with racism and other isms. Often the poor are pushed to the outside of the centers of urbanization much like the untouchables of other cultures around the world. This may seem like a useless generalization, but is it a fairly accurate way to look at what it is like to be homeless in America? In Quindlen's essay, she attempts to define homeless from the perspective of individuality. Although her definition is moving, the definition has not yet evolved with societal times and she seems to contrast herself by discussing urbanization.

Quindlen discusses how people today move from place to place every couple of years; one could say that urbanization has rid the popular culture of the ideology of home. If stability and predictability are true defining features of home, then the mass of people moving into and out of industrial and/or government centers at an unprecedented rate would dictate that many people are homeless because they do not have the stability and predictability Quindlen so eloquently notes. Her definition of a home has yet to evolve with current societal trends. Definitions are

continually evolving with society and how people live and move within it. What is important about Quindlen's essay is her statement that a homeless person be described as "a person without a home" (200). This brings the definition back to the individual perspective. The current political defining feature of homelessness is a societal category of people without fixed housing. This more simplistic definition works for current trends in statistics gathering and social/welfare reformations, but leaves out the human element: the element of a person in need. Current definitions of homelessness seem to produce a sub-community of disappearance, a mode of governance in which the homeless are grouped and marginalized or erased by statistics and programs such as welfare reform. As David K. Shipler notes in his book, *The Working Poor: Invisible in America*, the problems of poverty are "interlocking." Shipler discusses how the first step is to see the problems, and the first problem is the failure to see the people. Quindlen's definition solves this problem by breaking down the definition of homeless at the personal level; not a societal category but an individual in crisis.

Current definitions rid the homeless person of his/her individuality. A "societal category" is used to describe the homeless. This aspect of the definition allows administrative/government involvement to dictate social and personal practices that are normally exempt from policing. No trespass laws dictate there is no subsisting on private lands. Examples of this are seen in the current struggle of homeless individuals living in tent

cities where offerings from private landowners and churches have come under local government fire to not allow this type of community to dwell on private property. If the government's aim is to support sustainable communities by tackling homelessness more effectively, then they should meet the people's social needs. Instead, actions of government administrations seem to attack the social needs of the people in order to make the community move forward in an upward trend of wealth and production ignoring the basic needs of the individual. Basic needs are few and should easily be met for everyone within the confines of a wealthy America. Subsequently, if a home is a basic need, then availability should exist for all. To say the word homeless means without a home, and to define home as it is currently defined by the political identities is not adequate.

So what is a home and what does it mean to be homeless? As already stated, the definition provided by Quindlen's essay does not provide a meaning of home within the modern urbanistic society. Home is also not the fixed housing arrangement so defined by governmental policies. Home is, as Quindlen notes, a place of certainty. Additionally, home is the need of people to be social; a need of involvement, not necessarily predictable or stable as Quindlen defines, but rewarding with reciprocity not as a monetary value, but a social one. Those individuals attempting to set up a community as a tent city understand this. It does not matter if the door one walks out of is wood, steel or plastic, it is the acceptance of who they are and the ability to talk to the neighbor, share stories, eat a warm meal in the

company of everyone else and feel a sense of belonging or certainty—a social community with basic needs met. To be homeless is the absence of this socialness. Being stepped over, looked down upon, and broadly defined as a societal category that marginalizes an individual into the fringes of an abundant and wealthy nation is homelessness. It would seem that the current definition of homelessness is a major contributing factor in the problem of homelessness itself.

All in all, Quindlen seeks to provide an understanding that homelessness should not be

described by “broad strokes” (202), but be defined in a detailed and compassionate way; not homeless, but a “person without a home.” Furthermore due to the current evolution and trend of urbanization, home should be the presence of social acceptance; it should be defined as a system where the basic needs of socialness and the individual are met and constructed in a way to support the individual as an individual and not a societal category that needs tackling.

Works Cited

Shieler, David K. The Working Poor: Invisible in America. New York: Random House Publishing, 2004.

Quindlen, Anna. “Homeless.” *The Bedford Reader*. 9th Ed. Kennedy, X. J., Kennedy.

Dorothy M, Aaron Jane E. St. Martins, Boston, MA 02116: 2006 p. 200-202.

ANWR Drilling and Exploration

Jessica Govan

Jessica Govan's paper for Cain's English 103 class covers a topic that has been done many times before. However, Govan approaches the topic of Arctic drilling from a neglected angle. This fantastic paper veers away from the emotional side and presents the issue from a cost to gain perspective. She approaches the question not as an emotional college student, but emulates the people she would need to convince, namely businessmen and politicians. This is a great example of argumentative writing in practice.

In 2005 the Senate voted to open Alaska's wildlife refuge for oil drilling, and since then the Bush Administration has attempted to increase the amount of drilling and exploration permitted in the area, despite being met with the avid protest of environmentalist groups. It is estimated by oil companies that nearly 1.5 billion barrels of oil rests beneath the coastal plane of Alaska's northern slope. Originally established as a way to preserve wildlife, the area is home to polar bears, caribou, migratory birds, and many other animals. It is also home to the Gwich'in, a tribe that relies heavily on the porcupine caribou for the food, hides, and tools required for their day to day life. The Inupiaq of the Kaktovic village, are also inhabitants of the area, residing on the northern edge of the coastal plane. The Bush Administration should not permit the increase of oil drilling in the Alaskan wilderness because it would damage the environment and upset the living conditions of native tribes. Currently, Alaska's

North Slope accounts for approximately 15% the U.S.'s oil.

Most of the tribes living in the North Slope of Alaska, most notably the Gwich'in and the Inupiaq tribes, are against increased drilling and "exploration" in the area. Inupiaq woman Darlene Q. Kaleak stated, "Not only are they killing our animals, they are killing nature..." (Beach). This view is one held by many, yet over ninety percent of the North Slope is already open for development. Environmentalists groups, most notably the Wilderness Society, the Sierra Club, and the National Wildlife Federation, have been especially vocal about their position against increased drilling, and for good reason. The increase of fossil fuel consumption would be disastrous for the environment. It contributes to problems such as oil spills, acid rain, global warming, and greatly reduces the quality of air, resulting in asthma and other breathing problems. Among native Alaskan tribes, there have already been signs of this. The main culprit is tropospheric ozone, which causes

shortness of breath, and over time, permanent lung damage in humans. Fossil fuel also produces dust, soot, and smoke, which are other respiratory irritants. Among native tribes, heart disease, diabetes, and hypertension have all risen during times of oil development, particularly gas flares.

Water and land pollution are also major concerns. Oil spills, which are not uncommon occurrences in the production and transportation of oil, result in losses of plant and animal life. Long after an oil spill, waterways and surrounding shores remain uninhabitable. Pollution has been causing the fish to become infected and die, usually from parasites. This is a major concern for native tribes because fish is one of their main food sources aside from porcupine caribou. Then of course there is the issue of global warming. In the past century and a half, the amount of carbon dioxide in our atmosphere has increased twenty five percent because of the burning of fossil fuel. Pollution, at least to some extent, is expected to occur when drilling for oil, but the amount of pollution occurring in the North Slope oil fields is truly alarming, partly because much of it is invisible. The dangers of air pollution are usually not in the forefront of the debate of to drill or not to drill, taking a backseat to oil spills and the effects on caribou, migratory birds, and other animals. Nevertheless, it is a major concern for Alaskans, especially native tribes.

If it is allowed, drilling in Alaska's wildlife refuge will run directly through calving grounds of the Porcupine caribou,

which the Gwich'in people depend on as a main food source. It would disrupt their migration, causing them to move to less desirable areas, including those with bears and other potential predators, which would greatly decrease their numbers over time if drilling in the areas persists. And because the estimated amounts of oil are widely scattered along the coastal plane, miles and miles of roads and pipelines will need to be constructed, which would wreak havoc on the wildlife habitat. But the Gwich'in are opposed to drilling for reasons that stretch beyond the obvious disruption it would cause to the animals on which they rely on for food, hides, and tools. Their spiritual identity is intertwined with the land and the animals, and is as at as much risk of being damaged as they are. Some elders worry that their way of life will be forever changed.

Proponents of increased drilling argue that it would create jobs for hundreds of people and improve the economy. Among the Gwich'in, poverty is extremely common. For that reason, a portion of the community supports drilling because of the jobs that it would create. But even this somewhat positive result is eclipsed by the fact that any jobs created would be short term and unstable at best. A lot of people in support of increased exploration and oil drilling feel that it would be a worthwhile venture because it would greatly reduce U.S. dependency on foreign oil. Currently, the U.S. relies on foreign sources for over 56% of its oil. Although many people look to ANWR as a solution to oil

dependency, what they fail to realize is that there is no guarantee that it can be successfully extracted at a reasonable cost, especially without causing severe environmental damage.

There has obviously been an increased need for oil, but instead of plundering ANWR in order to meet the demand, the Bush Administration should channel the same time and money into finding renewable sources of energy for cars to run on; instead of destroying ANWR, they should be searching for ways for cars to run farther on a gallon because sooner or later, there will be nowhere left to drill. The U.S. cannot hope to solve our oil crisis with its current tactics. Drilling in ANWR is a short term solution that will cause long term pain for many, including the Gwich'in and the Inupiat. Any decrease in oil dependency would be short term, time consuming, and when looking at all the facts, not worth the risk.

Although an increase in drilling and exploration could possibly allow the U.S. to be somewhat less dependent on foreign oil, the

long term effects could prove disastrous for the environment. Native tribes would be the most affected because drilling is in direct line of caribou calving grounds, which they rely on heavily. Their main food sources could be lost because of the disruption to their habitat, and pollution could contaminate drinking water and air. Drilling would also contribute to the amount of air pollution and would enable global warming. The long term effects of drilling and exploration in Alaska's wildlife refuge are ones that should not be taken lightly. The price of oil is very high, and the wildlife and the tribes in the northern slope are the ones who will have to pay the price. The fact that proponents of drilling ignore the obvious damage it would do to wildlife and native tribes is disturbing. Neither one should be seen as expendable. The Arctic National Wildlife Refuge is a protected land for a reason. If the line is not drawn at some point, then oiling drilling will continue unchecked.

Works Cited

- Beach, Luci. "Arctic Refuge Drilling Will Harm Wildlife—Tribes Opposed." *Native American Times*. 24 Nov. 2004. Proquest. Lakewood, Washington. 22 Feb. 2007. <<http://proquest.umi.com/pqdweb?did=784685291&sid=1&Fmt=3&clientId=3236&RQT=309&VName=PQD>>
- Benerjee, Neela. "Oil Industry Hesitates Over Moving into Arctic Refuge." *The New York Times*. 10 March 2002. Proquest. TCC Library. 22 Feb. 2007. <<http://proquest.umi.com/pqdweb?did=110331336&sid=3&Fmt=3&clientId=3236&RQT=309&VName=PQD>> TCC Library>
- Gildart, Bert. "The power of one in a remote land; Native activist Sarah James leads Alaska's 'Caribou People' in defense of their way of life north of the Arctic Circle; [ALL Edition]" *The Christian Science Monitor*. 13 March 2002. Proquest.

TCC Library. 22 Feb. 2007.

<<http://proquest.umi.com/pqdweb?did=110404266&sid=3&Fmt=3&clientId=3236&RQT=309&VName=PQD>>

Harjo, Susan Shown. "The First 100 Bush Days for Indian Country." *Indian Country Today*. 9 May 2001. Proquest. TCC Library. 22 Feb. 2007.

<<http://proquest.umi.com/pqdweb?did=582205881&sid=1&Fmt=3&clientId=3236&RQT=309&VName=PQD>>

Horsechief, Geneva. "Controversial Energy Legislation Divides Tribes." *Native American Times*. 1 Dec. 2003. Proquest. Lakewood, Washington. 21 Feb 2007.

<<http://proquest.umi.com/pqdweb?did=611701981&sid=1&Fmt=3&clientId=3236&RQT=309&VName=PQD>>

May, James. "Knowles Vies For Alaska Native Vote." *Indian Country Today*. 4 Aug 2004. Proquest. TCC Library. 22 Feb. 2007

<<http://proquest.umi.com/pqdweb?did=704510431&sid=1&Fmt=3&clientId=3236&RQT=309&VName=PQD>>

Reynolds, Jerry. "Wilderness Status for ANWR Would End Alaska Oil Dispute." *Indian Country Today*. 17 Jan. 2007. Proquest. TCC Library. 26 Feb. 2007.

<<http://proquest.umi.com/pqdweb?did=1218185731&sid=2&Fmt=3&clientId=3236&RQT=309&VName=PQD>>

What's So Rational About These Exponents?"

Amy Crubaugh, Zach Jornlin, Valerie Morgan-Krick (Group Project)

This group presented a paper that fits well with Una Voce's "writing across the curriculum" theme. It was written for Valerie Morgan-Kick's Math 99 class, and it looks at functions that may appear to be similar in form; but through arithmetic and formal explanations, there are definite differences from mathematical standpoints.

First looking at the functions $f(x) = x^{3/5}$, $g(x) = (x^{1/10})^6$, $h(x) = (x^6)^{1/10}$, it seemed that they should all graph the same. If the functions $g(x)$ and $h(x)$ were simplified they would be equal to the function $f(x) = x^{3/5}$. However, the functions were to be graphed, not simplified. After choosing 11 values for x (-5 to 5) to find corresponding y -values ($f(x)$, $g(x)$, or $h(x)$ -values) and creating graphs of each function, it was easier to see the similarities and differences of the three.

The graphs of the functions all had similar shapes. Each of the graphs of the functions were the same in quadrant 1. This was true because when a value of x was a number ≥ 0 , the resulting y -value was also positive value or 0. This can be explained by the fact that, when a positive number has a rational exponent with a denominator that is an even number, the result is another positive number. The graphs of $g(x)$ and $h(x)$ had the same range $y \in [0, \infty)$, and the graphs of $f(x)$ and $h(x)$ had the same domain $x \in (-\infty, \infty)$. Also, because when simplified the functions would all be equal to $x^{3/5}$, the y -values were all similar when calculable.

The differences in the graphs depended on one main idea: x being a negative value. If a value for x was a negative number and the denominator of its rational

exponent was an odd value, then the resulting number would also be negative, and therefore able to be graphed. This was true for the function $f(x) = x^{3/5}$. However, if a value for x were a negative number with a rational exponent whose denominator was an even value, the resulting number would not be a real number and would be impossible to graph. This was the case for the function $g(x) = (x^{1/10})^6$. And as in $h(x) = (x^6)^{1/10}$, if an x -value were negative and raised to an even power to make the value a positive number and able to be graphed.

In view of graphing the above functions and comparing the results to the equations themselves, it was easy to decide that the graph of the function $k(x) = x^{6/10}$ would be identical to that of $g(x) = (x^{1/10})^6$.

Since the denominator of the rational exponent in $k(x)$ is an even number, it can be determined that, if a value for x is negative, the result would not be a real number. And for the x -values that are computable, the corresponding y -values will be like those of the other three functions. When $x^{6/10}$ is simplified it is also equal to $x^{3/5}$. After graphing the function $k(x) = x^{6/10}$ using the same eleven x -values (-5 to 5), its graph being the same as the graph of the function $g(x) = (x^{1/10})^6$ proved true.

Personal Philosophy of Nursing

Nancy Rienzo

This paper for Julie Benson's Nursing 130/210 class focuses on the personal life experiences that led Nancy Rienzo to the field of nursing. Rienzo's in-depth look and personal insights are both inspirational and uplifting.

A feeling of helplessness consumed me as I watched my 3 pound baby boy fight for his life in a glass enclosed isolette. Not far away in another hospital was his twin sister, equally as small and doing only slightly better, both being born prematurely. Here at Children's Hospital I watched as they prepared Ben for surgery, not knowing whether his little body had enough life in it to withstand the procedure.

As the doctors came to take him and as my helplessness grew, I felt a hand gently on my shoulder. I turned to look into the compassionate eyes of the nurse that had been caring for Ben. Her name tag said "Cindy" and I had come to know her as my one reliable source of information and understanding. She handed me a picture she had taken of Ben along with a blue card with the tiniest footprints I had ever seen. She knew that I needed some part of him to hold close while we were going through this ordeal. In her way she was caring for me as well as for my son.

I don't think I knew the significance of that moment for quite some time, but her display of compassion touched a desire in me that had long been ignored or forgotten.

Like many young girls, I had wanted to be a nurse, even felt that it was my purpose, but time obscured that desire. I married, got a good job in mortgage banking and proceeded to go about the work of building a family.

But during it all I had an unsatisfied desire to do more. The help I provided to other people in the mortgage industry just wasn't enough. I had an unspoken need to touch people's lives in a deeper and more meaningful way. It all began to come to focus on that day in the hospital and my dream to be a nurse was revived.

Today I am on the journey to complete my goal. As a nurse I want to comfort the parents of a dying child and the children of dying parents. I want to provide compassionate nursing care regardless of race, culture or religion, using up-to-date information, techniques and tools. I want to give every patient the best possible opportunity to become healthy. My goal is to give the highest level of care and teaching in order to empower patients and their families to make informed decisions.

Having already earned my LPN and being fortunate enough to work in a hospital, I have already started to apply the principles I believe are important. I have cared for a dying man and have comforted his wife. I have helped many sick and elderly patients. I have cared for the terminally ill and the temporarily ill. I am continuing in my education towards an RN degree because I want to better be able to help patients and their doctors. I want to be better trained and have more knowledge to enhance the care that I can provide. I also want the additional access to healthcare opportunities that the RN degree affords.

I remember the care my son and I
received from Cindy and I want to give the

same to those that I care for as well.

The Biblical Apocrypha

Megan Hubbell

The following paper is a wonderfully detailed explanation of the “Apocrypha,” that is, Biblical books that are sometimes excluded or published separately. Written for Dr. Wakefield’s English 260, this paper explains some of the history behind the Apocrypha, and why some churches disagree about whether the books are truly Bible-worthy.

The controversial group of books in the Bible known as the Apocrypha has an appropriate name: meaning “hidden things,” most Christian and Jewish denominations today regard the books as noncanonical and disregard them in their doctrines, thus hiding these little-known books from the average churchgoer (NRSV AP 3, 6). Also known as the Deuterocanon to Roman Catholics, the Apocrypha are a set of eleven disputed books and additions to canonical books written from circa 165 BCE to about 50 CE (Dentan 3). What Biblical scholars have disagreed on since the second century CE is the didactic value of these books. As a result, the Apocrypha have undergone a turbulent history of addition and removal to Biblical canon based largely on the books’ designation by religious groups as inspired, God-given writing or uninspired writing of solely human origin.

Although they were Hebrew works, the Apocrypha were originally written in Greek, the language that had become common in the Roman Empire after the

death of Alexander the Great in 323 BCE.

The varying types of literature found in the Apocrypha—proverbs, folk stories, historical narratives, a lament, and others—as well as their occasional tendency to stray from accepted Judeo-Christian principles give them a colloquial feel that some have likened to the “dime novel” of the ancient Jewish world. This is not to say that the books were without literary impact. On the contrary, Ecclesiasticus, or Sirach, was quoted in some rabbinic literature, several apocryphal books were recorded in the Dead Sea Scrolls, and the first known records of the original celebration of Hanukkah are found in First and Second Maccabees. It has also been noted that a few writers of the New Testament may have been influenced by the Apocrypha. Parts of the books of Romans and Corinthians, written by Paul, are said to be reminiscent of the Wisdom of Solomon (AP 9).

Despite the degree of influence that the Apocrypha may have had on Jewish culture and writings, however, it is

significant that nowhere do Jesus or any of his disciples cite the Apocrypha. Although he makes an abundance of references to things “written about me in the law of Moses, the prophets, and the Psalms” (Luke 24:44), among others, direct quotation of the Apocrypha cannot be found. Gerald E. Geiger maintains, “Concerning the Apocrypha, which have been suggested for inclusion into the canon, we note that Jesus never made any reference to them. This alone is sufficient to convince me that they were not meant to be part of or equal to the Old Testament Canon” (1). Jesus’ role in defining the Biblical works to be read by his followers is considered no less pronounced in those he excludes, whether that exclusion is explicit or not.

Besides the near lack of representation in the Old Testament and absence of mention in the New Testament, though, little record has been found about Jewish attitudes toward the Apocrypha as canon. There were no formally agreed-upon lists of Biblical canon until the fourth century, although many scholars had attempted to lay out such lists starting in the second century. At that point, attitudes toward the Apocrypha were somewhat ambiguous. Melito, c. 170 CE, lists the entire Hebrew canon but doesn’t mention the Apocrypha (Marlowe 2). Cyril of Jerusalem, c. 350, counts the apocryphal book Baruch and the Epistle of Jeremiah as part of Jeremiah, additionally warning “whatever books are not read in the

churches, do not read these even by yourself” (Marlowe 5). The Cheltenham list, c. 360, includes 1 and 2 Maccabees, Tobit, Judith, and the Wisdom of Solomon (Marlowe 7). And Athanasius, c. 367, includes Baruch and the Epistle in Jeremiah, but notes at the end of his letter that “Wisdom of Solomon, Wisdom of Sirach, Esther, Judith, Tobit . . . are included in the Canon” (Marlowe 9). From these examples it is clear that there was no standard canon that was accepted everywhere.

When Jerome first translated the Latin Vulgate from the known Hebrew canon circa 390, he used the language that each manuscript was found in as a basis for deciding canonicity. Thus, the entire Hebrew canon was translated into the Vulgate, as was First Maccabees, but the rest of the Apocrypha were not deemed part of the canon because of their Greek language (Marlowe 15). He did include the Apocrypha, although he specifically denoted their noncanonical status in a preface to each book. Later transcribers of the Vulgate, unfortunately, were less diligent in making this distinction. In addition, these later copies of the Vulgate maintained Jerome’s placement of the Apocrypha in chronological order throughout the Old Testament. This further enforced the books’ status as canonical by spreading them out rather than keeping them in a separate group. As the Vulgate spread throughout Western churches as the

manuscript of choice, the Apocrypha remained unofficially canonical until the Protestant Reformation, over a thousand years later.

The Wycliffe Bible, translated in the 14th century directly from a version of the Latin Vulgate that contained all of the apocryphal books save for 2 Esdras, somewhat restored Jerome's original position in its English version of the Bible by noting the apocryphal status of these disputed books. But the Apocrypha weren't fully separated from the Old and New Testaments in an English Bible until the Coverdale Bible in 1535, translated nearly two centuries after Wycliffe's Bible. Coverdale gathered the entire Apocrypha and placed them in a group after the Old Testament, an example that was followed by the succeeding Great Bible, Bishop's Bible, and the 1611 King James Bible (Goodspeed). Even with this separation, H. W. Howorth notes that the Bishop's Bible only labels the disputed books as "Apocrypha," without any further denotation of their specific separation as canon, implying that "the so-called Apocrypha are treated as integral parts of the Bible." During the Reformation, however, the Protestant church soon decided that the Apocrypha would take no place in their doctrines, and they vigorously rejected the books. Dr. Lightfoot, speaking to the English House of Commons in 1643, neatly summed up the Protestant attitudes toward the Catholic practice of including

the Apocrypha between the Old and New Testaments: "Thus meetly and nearly should the two Testaments join together, and thus divinely would they kiss each other, but that the wretched Apocrypha did thrust in between" (Howorth).

Eventually, the centuries following the 1599 Geneva Bible saw the gradual decline of Protestant Bibles that included the Apocrypha, including even the King James Bible (AP 6). As the Protestant, Calvinist, and Anglican translators and theologians increasingly pronounced the apocryphal books noncanonical, the Roman Catholic church countered by "[declaring] these works definitively a part of the Bible" (NRSV ES 458). In 1546, the Roman Catholic Council of Trent convened to decree all apocryphal books canonical except for the Prayer of Manasseh, Psalm 151, 3 and 4 Maccabees, and 1 and 2 Esdras (AP 1). The Council even went so far as to condemn those who "[do] not accept as sacred and canonical the [Roman Catholic Deuterocanon] in their entirety and with all their parts" (AP 5).

These conflicting viewpoints have persisted to modern times, though the prevailing opinions about the Apocrypha or Deuterocanon have stabilized. The Roman Catholic Church today still uses the canon laid down by the Council of Trent and the Eastern Orthodox Churches include the entire collection of apocryphal books, while Protestant Bibles omit the Apocrypha entirely or place them after the New

Testament on the rare occasion they are included. Jewish Biblical tradition also fails to perceive the Apocrypha canonical, but has never included them in the printing of the Hebrew Bible, even under the pretense of extra-Biblical reading value.

Although modern scholars have begun to take interest in the historical potential that the Apocrypha offer, Protestant Christians will continue to disregard them. In the end, the overriding

view is that the Apocrypha do not belong with the rest of the Hebrew and Christian Biblical canon. The long and irregular history that the Apocrypha have undergone partly reflects the strife between Catholicism and the emerging Protestants during the Reformation, but also the constant struggle of Christianity to differentiate the Word of God from flawed, uninspired writings that should be kept separate from it.

Works Cited

Coogan, Michael D., ed. The New Oxford Annotated Bible, New Revised Standard Version with the Apocrypha. 3rd ed. New York: Oxford UP, 2001.

Brettler, Mark Z. with Pheme Perkins. "The Canons of the Bible." Coogan 453-460 Essays.

Newsom, Carol A. "Introduction to the Apocryphal/Deuterocanonical Books." Coogan 3-10 Apocrypha.

Dentan, Robert C. The Apocrypha, Bridge of the Testaments. 1954. 3 Mar. 2007.

<<http://www.orthodoxanglican.net/downloads/apocrypha.PDF>>

Geiger, Gerald A. The Establishment of the Canon of Scripture. 3 Mar. 2007.

<<http://www.wlssays.net/authors/G/GeigerCanon/GeigerCanon.PDF>>

Goodspeed, Edgar J. Preface and Introduction to Goodspeed's Apocrypha. 3 Mar. 2007.

<<http://www.gnte.org/ecopub/goodspeed.htm>>

Howorth, Henry H. The Origin And Authority Of The Biblical Canon In The Anglican

Church. 1906. 3 Mar. 2007. <<http://www.islamic-awareness.org/Bible/Text/Canon/anglicanhis.html>>

Marlowe, Michael D. Ancient Canon Lists. 2001. 4 Mar. 2007. <<http://www.bible-researcher.com/canon8.html>>

The Weapons of Capitalism

Crystal Hoffer

This paper was written for Li's History 112 class. This paper traces the traits and trends of capitalism back to its roots in Western Europe in the Middle Ages. This is the perfect example of a history paper. It is beautifully written, demonstrates critical thinking, and delves into the past to explain the present.

Today there is no corner of the world that has been left untouched by the greedy hands of capitalism. Regardless of a society's governmental structure, whether democratic, socialist, communist, or any other, it must either participate in the now global capitalistic game or be plowed under and exploited by the other players. The seeds of capitalism were sown all through Europe and Eurasia; however, the first place where germination and growth occurred was in Western Europe during the time period of 1500 – 1800. What prepared the soil for the roots of capitalism to grow in that particular time and place, and why did the rest of the globe, though in some cases much more advanced than Europe, fall behind? The growth of productive capitalism in the West is what gave the West an opportunity to leap ahead of the rest of its competitors and establish an advantage that exists to this day; moreover, "capitalism did not develop in a [. . .] vacuum," but was the result of many internal and external factors that had developed through time (653).

Western Europe was not the only place from 1500 – 1800 where the ground was prepared for the growth of capitalism. Throughout Europe, Eurasia, Asia, and

Africa, there was "a process of increasing urbanization and increasing long-distance commodity movements which characterized the late middle ages throughout the hemisphere" (Harman). This was due in a large part to the Mongol Empire and its role in trade expansion across more expansive areas than were previously the case. Once the ball had started to roll, trade and cross-cultural exchange continued to pave the way for further expansion. Western Europe, however, was the first to turn to full-blooded capitalism, especially England and Holland. There were many internal factors that led to this development.

The first of these factors was the rise of a powerful merchant class as a result of an increase in urbanization in Western Europe. As cities increasingly became centers of trade where merchants decided the rules of the game, the wealth that was being generated through new expansive trade networks increasingly ended up in the hands of individual merchants or in the palms of larger companies comprised of individuals. Bentley defines capitalism as "an economic system in which private parties make their goods and services available on a free market and seek to take

advantage of market conditions to profit from these activities” (649). Thus, with the money and means of production, including “the land, machinery, tools, equipment, buildings, work shops, and raw materials”, in the hands of individuals or partnerships formed of individuals, the focus of power in society shifted away from the nobility and the feudal systems and increasingly centralized in cities in the hands of the emerging merchant class. In addition, Bentley states that “economic decisions [in a capitalist economic system] are the prerogative of [. . .] businessmen, not governments or social superiors” (650). This can be seen in the rise of joint-stock companies, which especially contributed to the growth of capitalism. With many owners spreading the risk of investment between them, trading companies were able to organize “commercial ventures on a larger scale than ever before in world history” (651). Therefore, the power structure in Western Europe increasingly focused around individual merchants, or businesses formed by them, as they began to own not just the produce, but the means of production as well, including labor power.

While there were merchants throughout the East and in Africa who took advantage of increasingly extensive trade routes as admirably as those merchants in Europe, it was the superstructure, or, more accurately, the lack of one, that made the difference in Europe. In the article, “The Rise of Capitalism”, Chris Harman gives the following explanation:

The superstructures in medieval Europe were weak and fragmented. A plethora of local lords struggled with each other to exploit and dominate the mass of people in each locality, often barely recognizing the authority of kings and emperors who themselves were involved in continual dynastic conflicts. The main instrument of ideological control, the church, was organized along hierarchic lines of its own, with allegiance to popes in Rome (and at one point in Avignon) whose political ambitions often clashed with those of kings and lords alike. This fragmentation allowed the merchant and artisan classes to create political space of their own, running many of the towns in which they resided, sometimes by agreement with local lords, princes and kings, sometimes in continual struggle against them (Harman).

Since there had never been a strong central government in Europe and the feudal system had basically pitted the nobles against one another in petty struggles for control and local domination, it was relatively easy for the emerging merchant class to grab the reigns of production and, thus, largely the means to political power.

Although the Reformation was used by nobles and royalty alike to unite people under their particular banners of faith, it was not enough to combat the power of merchants with “independent social bases”

(Harman). Although capitalism had not as yet completely formed at the time of the Reformation, the overriding power structure that was the Roman Catholic Church, thin as it was, was torn apart. This allowed the already increasing urbanization to pick up speed as money that had been previously given to the church was diverted elsewhere. Merchants in the cities took advantage of the situation as did nobles and kings. However, since the power-base increasingly rested in the hands of the merchant class in Western Europe, the rulers saw the wisdom of working with the merchants and even protecting their interests. The rulers had to form working relationships with merchants for the benefit of both parties and for the avoidance of conflict with this powerful emerging class.

This situation was not the rule in other areas of the globe, especially in China. While trade circulating all across Eurasia from land routes and oceanic routes benefited the Chinese economy and prompted population growth as well, the superstructure in China was firmly entrenched under the Ming and Qing dynasties. This superstructure included a classification system based on Confucian tradition that put “an intellectual straitjacket” on ideas that may have emerged as a result of growing trade and communication with other societies. Bentley states that “Confucian tradition ranked three broad classes of commoners below the gentry: peasants, artisans and workers, and merchants [;] merchants, from street peddlers to individuals of enormous

wealth and influence ranked at the bottom level of Confucian social hierarchy” (737). This being the case, merchants were regarded as low-life parasites, essentially, and were not legally protected by the state.

In a strange twist, it appears that merchants were actually exploited, in a way, by the ruling classes. Some of the gentry class formed profit-sharing arrangements with the merchants while many government officials accepted, or, rather, sometimes demanded, bribes from the merchants (737). These arrangements were not enough, however, to allow Chinese merchants to form a base “of semi-autonomous political power” similar to that forming in Europe, especially when their resources could be yanked from them at the mere whim of one of those belonging to the upper echelons of society (Harman). In addition, the power of the strongly centralized state with control over things necessary to trade, like the canal systems, in combination with this low placement of merchants in society “made it difficult for them [the merchants] to intervene independently as a social force” or to develop “an independent productive base” (Harman). Without the support of the ruling class, the merchants were not able to carve out for themselves a foothold that would allow them to significantly change the structure of society enough to allow capitalism to form.

In the meantime, India and Africa were also experiencing change due to the rapidly expanding trade networks throughout the entirety of the hemisphere.

However, capitalism did not take root in either of these places for fairly obvious reasons. In Africa, the Europeans had already begun to exploit the economy to further their own ambitions, capitalizing on localized conflicts to encourage Africans to make war on one another and to capture more war captives for European use as slaves (718). The Africans were too busy being exploited and too busy with infighting to form strong economies of their own.

In India and in other parts of Eurasia that were ruled by Islamic empires, there was a resistance to outside influences, especially that of the West. Bentley states that “like the Ming, Qing, and Tokugawa rulers in east Asia, the Islamic emperors mostly sought to limit foreign and especially European influences in their realms” (774). Although the Islamic empires ruled over peoples that were ethnically diverse, “temporary impositions of powerful, centralized political superstructures [. . .] sapped productive resources and hampered further economic developments” (Harman). This refusal to integrate Western ideas or technologies, except weaponry, into their societies and the lack of actively seeking to “improve their military technologies” themselves led to stagnation and a drop in trade (772). This, in turn, led to the weakening of their empires. As can clearly be seen, in neither Africa nor India was the ground as yet prepared for capitalism to emerge.

Back in Europe, however, the economy continued to expand as largely a

result of technologies that had been incorporated from China and elsewhere. These technological advances included the use of advanced nautical equipment in exploring the world’s oceans and the use of gun powder to form more advanced weaponry than the world had yet seen. Harman states that “a few countries in western Europe had acquired by 1500 small but critical advantages in gunnery and shipping, which permitted the conquest of the Americas and growing domination over the maritime commerce of the Indian Ocean so accelerating capital accumulation and technical change in the leading maritime countries of Europe.” There were other prerequisites, however, that led to European dominance in these areas, including many external factors.

Once they had an idea of the profits to be had from maritime trade, the Europeans took full advantage of the situation and sought to further commerce by exploring new trade routes, thus ‘discovering’ many new places open to exploitation, including the Americas and the islands sprinkled throughout the Atlantic Ocean. When the Europeans so kindly introduced themselves to the peoples of the New Worlds, they also introduced diseases for which the native populations had no immunity. Bentley points out that “in the wake of severe depopulation, European peoples toppled imperial states, established mining and agricultural enterprises, imported enslaved African laborers, and founded colonies throughout

much of the western hemisphere” (691). Thus, the exploitation in the New World became much easier for the Europeans to accomplish due largely to biological factors alone. Moreover, the exploitation of the New Worlds was necessary to keep the Europeans ahead of the game, and “the opening up of agriculture in the Americas allowed parts of Europe to industrialize and increase their populations without running into acute food shortages” (Harman). Thus, the New Worlds and the use of their products and lands fed the continued build-up of capitalism in western European societies and played an integral role in feeding the new capitalist machine that required exploitation and accumulation to survive.

In addition to the technologies borrowed mostly from the Chinese to successfully navigate the globe, the use of gunpowder in creating new forms of weaponry also contributed to the build-up of the West as the most powerful economic structure. The reason for the technological advances of weaponry in Europe can be found in the very instability and lack of central control over all of Europe. War was nearly a constant element in the formation of Europe into nation-states as “no ruler wanted to see another state dominate all the others [;] thus, when any particular state began to wax strong, others formed coalitions against it” (648). Because of this constant competition between European states, they all “sought to develop the most expert military leadership and the most effective weapons for their arsenals” (648).

The development of weapons used in competition against one another also gave the Europeans an edge compared to the rest of the world that had no pressing need to develop these kinds of superior arms.

One of the best examples of the ability of the Europeans to capitalize on the conflicts between others, using advanced forms of weaponry to strengthen their own economies in the process, can be found in the conflict between the Safavid and the Ottoman Turks. The English East India Company “sent military advisors to help introduce the gunpowder weapons to the Safavid armed forces and provided a navy” to them in exchange for such things as “raw silk, carpets, ceramics, and high-quality craft items” (766). Meanwhile, from “as early as the fifteenth century, the Ottomans had relied heavily on European technology in gunnery” (772). Thus, the Europeans, unwittingly or not, had exploited the rivalry between the Ottomans and the Safavids and prompted them to destroy one another with the use of the very weaponry they provided to either side in exchange for profits. What better way to weaken resistance than to give one’s competitors the means to destroy each other while gaining a profit from their conflict.

This kind of exploitation is exactly what led the West to dominance. In the rise of capitalism that was able to grow under just the right conditions in Europe from 1500 – 1800, the answer is found to the puzzle of why the Europeans were able to establish a lead in the world’s economy -- a lead which exists to this day. As capitalism

continued to develop, Europeans learned to “take advantage of market conditions” and to profit from them (649). These market conditions even now include such things as famines, natural disasters, war, and, in

general, death, but so long as there is a profit to be gained, the capitalist is there, scythe in hand, waiting to harvest the goods that may be attained from the exploitation of others.

Works Cited

Bentley, Jerry, and Herb Ziegler. Traditions and Encounters: A Global Perspective on the Past. Third Edition. New York: McGraw-Hill Companies, 2006.

Harman, Chris. "The Rise of Capitalism." International Socialism Journal 102 (2004). Google. Tacoma Community College. 16 Mar. 2007. Keyword: The rise of the West.

Analysis of the USA Patriot Act

Cindy Miller

Here is another political paper, and it is definitely one that is worth reading. In it, Miller asks whether the USA Patriot Act has gone too far. Whether you agree or disagree with her conclusions, this is sure to be an important issue during the 2008 presidential election.

On the morning of September 11, 2001, two planes crashed into the World Trade Center in New York City. Soon after, a third plane hit the Pentagon in Washington, D.C. Nearly 3,000 people died that day, and the world has not been the same since. The American public learned that the group known as al-Qaeda was taking responsibility for these events and President George W. Bush declared them as an act of war. Within weeks, the USA Patriot Act had become public law, and an unprecedented shift occurred throughout the United States government's Departments of Justice and Defense, and the scope of authority which were held by the Attorney General, local law enforcement, and the President have all been expanded to an intangible degree. The application of this law, in its attempt to create a more *secure* nation, actually strips away the principles that birthed our great nation in the first place--our collective

desire for privacy, liberty and freedom of speech.

While most of us would consider our privacy to be an inalienable right, we are openhandedly giving it away at a disturbing rate. Perhaps a result of a nation grieving the losses of 9/11, the Patriot Act granted law enforcement undue clemency in their *investigation* of criminal activity. Zara Gelsey, former director of communications at the Center for Cognitive Liberty and Ethics, points out, "the FBI doesn't have to demonstrate 'probable cause' of criminal activity to request records...the so-called search warrant is issued by a secret court" (580). This not only replaced the previous law enforcement rules and regulations, but the entire approach of our legal system, which clearly mandated that individuals were to be considered "innocent—until proven guilty." Was it truly unavoidable to completely abolish the ethical standards of law to keep America safe?

Viet D. Dinh, chief architect of the USA Patriot Act, contends there was indeed a need to improve “cooperation between agents gathering intelligence about foreign threats and investigators prosecuting foreign terrorists” (588). Dinh goes on to say:

Section 218, essential as it is, raises important questions about law enforcement and domestic intelligence. The drafters... grappled with questions such as whether the change is consistent with the Fourth Amendment protection against unreasonable search and seizure, whether criminal prosecutors should initiate and direct intelligence operations and whether there is adequate process for defendants to seek exclusion of intelligence evidence from their trial. In the end, Congress decided that Section 218 complies with the Fourth Amendment and that defendants have sufficient recourse to exclude evidence gathered by intelligence agencies from their trials... (588).

Dinh contends that the Patriot Act’s “surveillance provisions are not the executive grab for power and extension of

government” (588). However, since its inception on October 26, 2001, there have been numerous reports of abuses in power by *our* government, and some of which do reflect a correlation with the entitlements listed in the Patriot Act.

Among such claims are the recent ones against Attorney General Alberto Gonzales. In accordance with the Patriot Act’s provisions relating to the attorney general (there are many listed throughout), and the presidential appointment to chief law enforcement officer of the United States, Gonzales holds immense accountability to our government and to the public. In recent months, he has been under heavy scrutiny due to a possible political motivation involving the Bush administration’s firing of eight U.S. attorneys last December. Ari Shapiro reports that the Senate Judiciary Committee has called him to testify in hopes to clarify “what role Gonzales played in the dismissals—and who in the White House was involved...Justice department e-mails show that Kyle Sampson, who was then Gonzales’ chief of staff, discussed using a provision in the Patriot Act reauthorization to avoid Senate confirmation for the new U.S. attorney in Arkansas” (1). Attorney General Gonzales has, thus far, denied the claims of political motivation but will not comment on the specifics of the firings.

According to Shapiro, the reauthorization of the Patriot Act (in 2006), included a “provision allowing the attorney general to appoint new U.S. attorneys indefinitely without Senate confirmation. Although Gonzales says he never intended to use that provision, Justice Department documents suggest otherwise” (2). Although some of the subpoenaed documents seemed to be edited, there was one particular piece of interest, an e-mail written by Sampson, Shapiro notes, regarding the replacement U.S. attorney in Arkansas, “Our guy is in there, so the status quo is good for us. Pledge to desire a Senate confirmed U.S. Attorney, and otherwise hunker down” (2).

That particular piece of the Patriot Act reauthorization was reversed by Congress in March 2007, and there is currently a growing consensus among key government officials who want to see Gonzales resign from office.

Like his friend Gonzales, President Bush’s decisions have been under intensifying scrutiny--the primary complaint: not listening to the voice of his constituents. His unilateral agenda, frequently, goes against the wishes of the people and has alienated some of his most trusted compatriots.

Under Title I, section 106 of the USA Patriot Act, the president, alone, is given “the authority” to determine whether

or not a person or group of individuals “has planned, authorized, (or) aided . . . attacks against the United States”, and if so, it is *solely* at the president’s discretion as to what to do with “any property so confiscated” (United States 107th Congress). This aspect of the law has been under heated debate in regards to the validity of the United States military’s present occupation of Iraq. Over four years, and billions of dollars later, no “weapons of mass destruction” have been found.

In the words of Thomas Jefferson, “Rightful liberty is unobstructed action, according to our will, within limits drawn around us by the equal rights of others. I do not add 'within the limits of the law' because law is often but the tyrant's will, and always so when it violates the rights of the individual” (Jefferson). The leaders of this country have a duty to uphold the will of the people not just the will of one person. The Patriot Act has enabled the same brand of archaic subjugation to take root, in this soil, as from whence the founding members fled.

It is of utmost importance, for the future of our nation, that these injustices not go unseen. Our rights to privacy, liberty, and freedom of speech are to be, forever, cherished and preserved. We must not forget what it truly means to be an American, for it is in the remembering that

we retain and transcend the lessons of the past, lest history repeat itself.

Works Cited

Jefferson, Thomas. Thomas Jefferson Quotes.

<<http://www.brainyquote.com/quotes/quotes/t/thomasjeff136362.html>>

Kennedy, X. J., ed. The Bedford Reader. 9th ed. Boston: Bedford, 2006.

Dinh, Viet. "How the USA Patriot Act Defends Democracy." Kennedy 585-9.

Gelsey, Zara. "The FBI Is Reading Over Your Shoulder." Kennedy 579-82.

Shapiro, Ari. "Senate to Grill Gonzales on Prosecutor Firings." NPR.org. 16 Apr. 2007

<<http://www.npr.org/templates/story/story.php?storyId=9515295>>.

United States 107th Congress. Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOTACT) Act of 2001. Oct. 2001. 15 April 2007

<<http://thomas.loc.gov/beta/billview/USApatriotactfulldocument>>

Kids: Got Sleep?

Heidi Kathleen Davis

Heidi Kathleen Davis' essay is a real eye-opener. She discusses children's and adolescents' sleeping habits and the effects of not getting enough sleep. What happens if children are not able to wake up for class, stay awake in the classroom, or retain what they are taught? Davis has recommendations for improving children's sleep (and maybe even adults'.)

Abstract:

Because many childhood sleep problems go undiagnosed and manifest themselves as poor academic performance, decreased mental alertness and poor coordination, nurses should use proper screening techniques along with parental and pediatric education to promote healthy sleep in children. Noted sleep disorders include; Narcolepsy, Insomnia, Obstructive Sleep Apnea Syndrome (OSAS), and Restless Legs Syndrome (RLS). Other sleep problems for children of various ages include; trouble settling for sleep, lack of time in bed, chronobiology, and daily schedules. Methods for sleep screening procedures include sleep diaries and the BEARS Pediatric Sleep History (Millman, 2005). Education topics for parents and adolescents include awareness of risk factors for sleep disorders and modifiable factors including; caffeine intake, over scheduling, obesity, and excessive electronics use.

Key Words: sleep, children, adolescents, nurses, pediatrics, screening

The complaints are numerous and varied; "My toddler still doesn't sleep through the night", "I can't get my teenager to wake up for school in the

morning", "My child's teacher says he falls asleep in class and his grades are dropping." Lack of high-quality sleep can cause a multitude of problems for children of any age and high levels of frustration in their parents. Problems with sleep are commonly unreported and under-treated. Because many childhood sleep problems go undiagnosed and manifest themselves as poor academic performance, decreased mental alertness and poor coordination, nurses should use proper screening techniques along with parental and pediatric education to promote healthy sleep in children.

Sleep problems vary by age and have numerous causes. Some infants and young children are unable to settle themselves without parental intervention to get them to sleep, or back to sleep after waking. In older kids, insufficient time in bed, sleep disorders such as narcolepsy, insomnia, Obstructive Sleep Apnea Syndrome (OSAS), Restless Legs Syndrome (RLS) or depression may be factors (Goll & Shapiro, 2006). Medications and stimulants such as caffeine can also cause disruptions in sleep (Goll & Shapiro, 2006). The result of

continued poor sleep is excessive daytime sleepiness. This sleepiness contributes to poor mood, behavioral problems, and/or social impairment (Touchette, Petit, Paquet, Boivin, Japel, Tremblay, et al., 2005). Cognitive deficits due to chronic sleep debt result in academic deterioration. Impaired coordination from lack of sleep can mean poor performance in athletics and dangerous drowsy driving for teens. Unfortunately, many parents think that these sleep problems are a normal part of growing up, or just a phase that the child will outgrow. As a result, they do not report such problems to their pediatric healthcare provider. Further responsibility for sleep problem identification lies within the healthcare community. Thorough screening for sleep problems must become a priority throughout pediatrics.

Identification of sleep problems begins with thorough screening procedures by nurses. Unfortunately, screenings and follow through are often neglected during pediatric well-child visits. A study of children aged two to fourteen conducted at two pediatric clinics by Dr. Ronald Chervin, MD, Director of the Michael S. Aldrich Sleep Disorders Laboratory in Ann Arbor, Michigan, concluded that despite identification of sleep-related symptoms, the majority of these patients' sleep problems "were not addressed, diagnosed or treated" (Chervin, Archbold, Panahi and Pituch, 2001). This study not only reinforces the importance of sleep screenings, but especially the need for follow-through on indicators.

All well-child pediatric visits should include a questionnaire and dialogue with parents regarding their children's sleep habits. An excellent mnemonic to facilitate this process is the BEARS Pediatric Sleep History (Millman, 2005). "BEARS" stands for Bedtime problems, Excessive daytime sleepiness, Awakening during the night, Regularity and duration of sleep, and Sleep-disordered breathing (indicated by loud snoring). These five main sleep domains give nurses and other healthcare workers trigger questions to guide their clinical interview. Once an area of concern has been established, parents or adolescents may be asked to report a formal sleep history or to keep a "sleep diary" (Taras & Potts-Datema, 2005). A sleep diary is a place to record sleep duration, awakenings, daytime sleepiness and other factors over a specific time span (e.g., one week). This information can help the provider identify patterns and determine what factors may be contributing to poor sleep.

Misdiagnosis of a sleep disorder is another difficulty. Frequently, parents will report that their child has problems with inattention, lack of concentration, and an inability to sit still for any length of time. Attention deficit hyperactivity disorder (ADHD) is a common diagnosis, but sometimes medications do not help. Upon delving more deeply into the situation, it may be discovered that the child has Restless Legs Syndrome (RLS) which is keeping him awake at night. Anti-Parkinsonian drugs are usually effective for RLS (Goll & Shapiro, 2006). Finally,

detailed follow-up visits and interviews are necessary to determine whether sleep has improved. If there has not been an improvement in sleep, patients should be referred to a sleep specialist, sleep clinic or even a sleep psychiatrist for further testing and evaluation (Goll & Shapiro, 2006).

The next step to improving children's sleep patterns is parental education. Parents of infants and toddlers need to be taught strategies for getting their children to settle and fall asleep on their own. Parents can implement the "shaping technique", which is based on behaviorist theory, into their child's bedtime routine. Shaping, described by Minde, Faucon, and Falkner (1994) and reported by Skuladottir & Thome (2003) involves a sequence of steps in which a parent gradually withdraws from the child's bedroom. The sequence begins with a) lying down with the child or sitting up in bed, b) sitting in a bedside chair, and c) progressively moving the chair further away. Another technique is called "controlled crying" which is used for problems with night-wakening. This intervention involves allowing the infant a chance to self-soothe for 1-3 minutes before parents intervene. According to Skuladottir & Thome (2003), the goal of both of these treatments is for the child to "be comfortable without active involvement of the parent who is only present in the bedroom when settling for sleep" (p. 3). Further parental education should include recommendations to avoid co-sleeping and reduce night-feedings (for children over 6 months old) in an effort to

produce better sleep habits and higher quality of sleep (Touchette et al., 2005).

Parents of school-aged children and teens need education as well. Nurses must stress the importance of screening for sleep problems. Although it seems to be common knowledge that teens have different sleep habits than other ages, they still need 9-10 hours of sleep each night (Millman, 2005). "Insufficient sleep (time in bed) occurs commonly but this is not the only process that may be present" says Millman (p. 5). Probably the biggest obstacle preventing proper sleep in teens is related to their chronobiology and daily schedules. Adolescent development is accompanied by a change in the biological system regulating circadian timing. Melatonin is released later in the day (meaning teens are not sleepy until late at night) and results in teens sleeping later in the morning (or into the afternoon) (Millman, p. 2). Add to this the external factor of early school start times and we can see why teens seem to be perpetually fatigued. A study by Hanson, Janssen, Schiff, Zee and Dubocovich (2005) found that adolescents got an average of 8.7 hours of sleep per night during the summer months and only 7.0 hours of sleep per weeknight during the school year. So, although we may educate teens about the amounts of sleep they need per night and other ways to improve quality of sleep, their internal biology and daily schedules are factors that greatly influence how much sleep they can and will get.

Despite teenagers unusual sleep patterns there are several factors which serve as red flags to alert parents to problems with sleep. A major issue for kids is caffeine intake, which can interfere with getting to sleep and staying asleep, because the body craves more caffeine as its effects are wearing off (Millman, 2005). Parents should be instructed to watch for signs of sleep debt including decreasing academic performance, daytime sleepiness, and impaired coordination. Other topics which should be covered include sleep disorders, circadian rhythms, and extramural activities and employment. Even medications such as NSAID's can interrupt sleep by disrupting the production of melatonin (DiLeo, Reiter & Taliaferro, 2002). The top 4 common "sleep stealers" identified by Judy Owens, M.D. and Jodi Mindell, PhD, authors of *Take Charge of Your Child's Sleep* (2005), include: "The Electronic Sandman" (referring to television, computer and video game play before bedtime), caffeine, too many activities leaving too little time for sleep, and obesity. The authors recommend keeping electronics such as televisions and computers out of the child's bedroom, eliminating or reducing caffeine intake, reducing extracurricular activities and after-school job hours, and helping the overweight child to drop pounds through diet and exercise. Finally, all parents should be supplied with information on age-appropriate sleep habits and needs so that they will be aware of problems when they occur.

School-aged children and teens are old enough to be educated about sleep as well. Nurses can stress the importance of a good night's sleep for health, growth and development, and mood. Adolescents should be taught about the effects of lack of sleep on cognition and coordination, along with the many factors which affect their sleep. Several factors to be discussed include caffeine, staying up late, extracurricular activities and jobs, and how exercise can affect sleep (avoid exercising too close to bedtime). Findings from the 2006 Sleep in America Poll from the National Sleep Foundation report the following; only 20 percent of teens are getting sufficient sleep, 27 percent reported an accident, or near accident, due to drowsiness while driving over the past year, and the highest grades were directly linked to the most sleep. In addition to these topics, kids should be informed of some of the risk factors of sleep disorders including loud snoring and obesity.

If kids are to successfully grow, develop, and learn, they require the proper amount of high-quality sleep for their age group. Nurses are in a position to provide specialized sleep screenings, referrals, and follow-up, along with both parental and adolescent education. Teaching parents and kids about the factors which affect sleep quality will improve the reporting of problems to healthcare providers for earlier treatment. Many aspects of children's lives will be improved through early identification of problems with sleep and diagnosis of sleep disorders.

References

- Chervin, R.D., Archbold, K.H., Panahi, P., and Pituch, K.J. (2001). Sleep problems seldom addressed at two general pediatric clinics. *Pediatrics*, 107(6), 1375. Retrieved January 12, 2007 from Thomson-Gale Power Search database.
- DiLeo, H.A., Reiter, R.J. & Taliaferro, D.H. (2002). Chronobiology, melatonin, and sleep in infants and children. *Pediatric Nursing*, 28 (1), 35-40. Retrieved October 20, 2005, from Proquest database.
- Goll, J.C. & Shapiro, C.M. (2006). Sleep disorders presenting as common pediatric problems. *Canadian Medical Association Journal*, 174 (5), 617-19. Retrieved April 9, 2006 from Proquest database.
- Hansen, M., Janssen, I., Schiff, A., Zee, P.C., & Dubocovich, M.L. (June 2005). The impact of school daily schedule on adolescent sleep. *Pediatrics*, 115(7), p1555. Retrieved October 09, 2006, from *Expanded Academic ASAP*
- Millman, R.P. (2005). Excessive sleepiness in adolescents and young adults: Causes, Consequences, and treatment strategies. *Pediatrics*, 115(6), 1774-1786. Retrieved April 9, 2006 from Proquest database.
- National Sleep Foundation. (2006). *2006 Sleep in America Poll*. Washington, DC: Author. Retrieved January 12, 2007, from http://www.sleepfoundation.org/_content/hottopics/2006_summary_of_findings.pdf
- Owens, J.A., & Mindell, J.A. (2005). *Take charge of your child's sleep*. New York: Marlowe & Company.
- Skuladottir, A. & Thome, M. (2003). Changes in infant sleep problems after a family-centered intervention. *Pediatric Nursing*, 29, 375. Retrieved October 20, 2005, from Proquest database.
- Taras, H. & Potts-Datema, W. (2005). Sleep and student performance at school. *The Journal of School Health*, 75(7), 248-255. Retrieved April 9, 2006 from Proquest database.
- Touchette, E., Petit, D., Paquet, J., Boivin, M., Japel C., Tremblay, R., et al. (2005). Factors associated with fragmented sleep at night across early childhood. *Archives of Pediatrics and Adolescent Medicine*, 159, 242-249. Retrieved April 9, 2006, from Journal of American Medical Association database.

The Conscience of Man: The Moral Philosophical Doctrine of C.S. Lewis

Alexandra Newman

Here is another well-written essay by Alexandra Newman, this time from Professor Li's Philosophy 101. In it, Newman writes in detail about C.S. Lewis – his background, beliefs, and writing. The renewed popularity of The Chronicles of Narnia makes reading about Lewis particularly interesting.

Introduction to C.S. Lewis's Philosophy

The first questions that may arise when considering C.S. Lewis's writings surround whether or not he is a philosopher, or simply an apologist or theologian. If we saw him solely as one, his expression of thought could not be taken without certain warrants. Many point out that in his career, Lewis rescinded himself from that noble faction called the "Philosophers" in his failure to seek the counsel of those considered in that order. Closer examination proves that, if taken in the literal sense, the idea sways to the contrary. The word "philosophy" is derived from the ancient Greek terms "phileo" (love) and "sophia" (wisdom). A philosopher is, essentially, merely someone who loves wisdom – no more and no less. They may not be particularly wise themselves, or perhaps they may be, but deny it in expression of Socratic humility, but, in any case, they are still philosophers because they express a clear and passionate love of wisdom. C.S. Lewis, beginning his career as a scholar and atheist, later ending

it as a renowned writer and apologist, was a lover of wisdom.

If there is any other qualification for the rank of philosopher, I do not pretend to know it. Thus, C.S. Lewis was a philosopher. His philosophical muse is a one begat through rationalist logic, influenced greatly by his search for truth and his confrontations with, and ultimate acceptance of, faith. A true rationalist, adverse to the Empiricism that was, at the time, increasing in its popularity, Lewis believed that all things could be decided through logic and reason. In this light, we will take a closer look into the moral philosophy of Lewis and those great thinkers who influenced him – Augustine, Plotinus, etc. Topics include: the existence of morality and the absolute, the solution to the problem of evil, a word refuting naturalism, the probability of Christianity, the influences of Lewis's philosophy, Lewis's philosophy in comparison with other moral thinkers, and how all of this relates to our time (meaning the social and philosophical implications of Lewis's teachings).

The Conscience:

Evidence for Morality and the Absolute

Lewis spent the greater part of his academic and literary career writing philosophical dialogs in order to prove, rationally, the existence of a common morality, the divine, and the absolute. The key to his doctrine lies within man, within the simplest and most familiar of known substances; the Conscience of Man. In his book, *Mere Christianity*, Lewis writes of this Conscience, "...human beings, all over the earth, have this curious idea that they ought to behave in a certain way, and cannot really get rid of it. Secondly, they do not in fact behave in that way. They know the Law of Nature; they break it. These two facts are the foundation of all clear thinking about ourselves and the universe we live in." (*Mere Christianity*) Now, Lewis expounds that this is not the law of nature as we see it in the modern sense, as the law of gravity or of entropy, but the law of nature in the old thinking, what Lewis describes as "The Law of Human Nature." Unlike the other laws of nature, this is a law that man can choose to violate, and, when he does, as with physical laws, there will be certain results. This is similar to the premise that if a man walks off a building, the result is that the law of gravity comes into play, and he will fall, be injured, and perhaps die. Likewise, the violation of the Law of Human Nature bears certain consequences.

There are those who protest that the Conscience is not a valid evidence for

Lewis's argument of a common morality—that the Conscience is merely the "herd instinct" that we human beings have developed over the ages for the sake of survival. However, others have made the distinction between the common morality and the simple "herd instinct." Will Vaus, in his work, *Mere Theology*, illustrates thus, "Suppose you see...someone who is drowning...Your first instinct may be to help the person who is...drowning because that person is a human being just like you, and that's what you would want if the situation were reversed. That is your herd instinct coming into play. In the next second, however, you will be thinking that you don't want to get involved because you don't want to get hurt. That is your instinct of self-preservation. Our instincts are often in conflict with one another, and over and above our instincts we often hear another voice, the voice of conscience, telling us what we should do." (Vaus).

The instinct for self-preservation can be overwhelmingly strong. Contrarily, it is very often that the Conscience tells us to obey the weaker of our instincts, refuting the theory that the Moral Standard is simply the "herd instinct" in human beings. The Moral Standard prevails despite—or perhaps, because of—our instincts; it is not an instinct in itself, but a true Law of Nature.

Refutation of

Philosophical Dualism and Balance

Lewis used his extensive capacity for reason in his arguments refuting the

ideals of Dualism (the idea that the cosmos is controlled by one ultimate good being and one ultimate bad being, neither one more powerful than the other, in an eternal struggle of which the earth is a center point). In the first chapter of *Mere Christianity*, Lewis writes,

If Dualism is true, then the bad Power must be a being who likes badness for its own sake. But in reality we have no experience of anyone liking badness just because it is bad. The nearest we can get to it is cruelty. But in real life people are cruel because they have a sexual perversion, which makes cruelty cause a sensual pleasure in them, or else for the sake of something they are going to get out of it—money, or power, or safety. But pleasure, money, power, and safety are all, as far as they go, good things. The badness consists in pursuing them by the wrong method, or in the wrong way, or too much...wickedness, when you examine it, turns out to be the pursuit of some good in the wrong way. You can be good for the mere sake of goodness, you cannot be bad for the mere sake of badness... (Mere Christianity).

Writes Ph.D. and author of *C.S. Lewis's Dangerous Idea*, Victor Reppert,

regarding this doctrine, "...this is not only an argument against dualism, but also against the doctrine of the cosmic sadist [God as an evil power who derives pleasure in causing humanity pain]. The idea that the creator of the universe might be evil is not plausible since evil cannot exist on its own, but is always a perversion of good."

The Human Will:

The Solution to the Problem of Evil

Armand Nicholi wrote, in his book, *The Question of God* (a comparative analysis of C.S. Lewis versus Sigmund Freud), that, "To live life is to suffer pain...Pain is an intrinsic part of our existence." As long as mankind has pondered his existence, or the existence of a divine creator, one question has always arisen in protest to the idea – essentially, the problem of evil. If there is a God, why does the world suffer from war, disease, sorrow, and death? Lewis describes the problem thus, "If God were good, He would wish to make His creatures happy, and if God were Almighty He would be able to do what He wished. But the creatures are not happy. Therefore, God lacks either goodness, or power, or both. This is the problem of pain, in its simplest form." In the earlier part of his philosophy, Lewis established that the idea of God being evil, or a cosmic Sadist, was not plausible because, "Goodness is, so to speak, itself: badness is only spoiled goodness. And there must be something good before it is spoiled." (Mere Christianity) So, if God is, until further

established, a good entity, then why the problem of pain? Lewis writes, "...if God is wiser than we His judgment must differ from ours on many things, and not least on good and evil. What seems to us good may therefore not be good in his eyes, and what seems to us evil may not be evil." (The Problem of Pain) On close examination of the premise, the conclusion appears self-evident, but, for many, it is a necessary clarification of God's judgment. If God is good, then we have no right to question His judgment – He must be right.

This conclusion may be enough for some people, but not most. Lewis recognized this, and acceptably fleshed out the solution to the problem of evil in the chapter of *The Problem of Pain* entitled, "The Fall of Man," as follows, "The Christian answer to the question proposed in the last chapter is contained in the doctrine of the Fall. According to that doctrine, man is now a horror to God and to himself and a creature ill-adapted to the universe not because God made him so but because he has made himself so by the abuse of free will." (The Problem of Pain) This free will, like the conscience, is a key point of Lewis's philosophy, and the one solution to the problem of pain. But, critics object, if God knew that man could make the decision to disobey and thus taint all humanity through his sin, why would God take such a risk in giving us free will? Lewis puts it this way: If humanity were made up of automatons, designed and programmed to obey God, there would be

no merit in our existence. The merit begins, Lewis believes, where God left off—at the moment He gave His people the gift of choice. "God created things which had free will—and free will, though it makes evil possible, is also the only thing that makes possible any love or joy worth having" (The Problem of Pain).

Unfortunately, man decided to use this free will to disobey The Law of Nature, The Conscience, The Moral Standard; then came the Fall, the exile from Eden—thus, the world, through its own choosing, has been and will continue to be afflicted with the problem of evil, what Lewis called, the Problem of Pain.

The Argument of Reason: Refutation of Naturalism and Materialism

There is one blemish on the philosophical career of C.S. Lewis, one that tarnished people's opinion of his arguments – this is the Anscombe affair. Lewis believed materialism (and naturalism, likewise) to be self-refuting. "One of the first philosophical arguments I ever encountered was C.S. Lewis's argument...that naturalism is self-refuting because it is inconsistent with the validity in reasoning." (Reppert). Lewis submitted his supposed refutation of materialism (and, simultaneously, naturalism) to a group of philosophers called The Socratic Society, and his formula was criticized by one Elizabeth Anscombe. Lewis recognized her as correct and was made to re-evaluate his whole sequence of reason; with time, he was able to overcome Anscombe's

proposed difficulty, inserting the changed “Argument from Reason” in a later edition of his book, *Miracles*. Unfortunately, the confrontation between Lewis and Anscombe has grown into something by which most philosophers use to dismiss Lewis altogether, very few recognizing that Anscombe, herself, spoke very highly of Lewis’s revised argument (Vaus). A brief summary of Lewis’s reasoning is expressed very well in the following sentence: “If my mental processes are determined wholly by the motions of the atoms in my brain, I have no reason to suppose that my beliefs are true...and hence I have no reason for supposing my brain to be composed of atoms.” (*Miracles*)

In a philosophical chapter on the argument from reason, *C.S. Lewis’s Dangerous Idea*, Victor Reppert broke down Lewis’s revised train of thought and expressed it in the following sequence: “1. No thought is valid if it can be fully explained as the result of irrational causes. 2. If materialism is true, then all thoughts can be fully explained as the result of irrational causes. 3. Therefore, if materialism is true, then no thought is valid. 4. If no thought is valid, then the thought “materialism is true” is not valid. 5. A thesis whose truth entails the invalidity of the thought that is true ought to be rejected, and its denial ought to be accepted. 6. Therefore, materialism ought to be rejected, and its denial ought to be accepted.” (Reppert)

“When Lewis talks about the validity of reason, he is talking about something broader than deductive validity...Perhaps it might be better to substitute something more familiar in the theory of knowledge, the idea that of a justified belief...” Reppert continues with this idea in a version of Lewis’s train of thought, “1. No belief is justified if it can be fully explained as the result of irrational causes. 2. If materialism is true, then all beliefs can be explained as the result of irrational causes. 3. Therefore, if materialism is true, then no belief is justified. 4. If materialism is true, then the belief “materialism is true” is not justified. 5. Therefore, materialism should be rejected,” (Reppert).

The Christ:

An Christological Sustenance for the Probability of Christianity

While the Conscience of Man was a revolutionary idea for Lewis’s personal philosophy, it led him to the acceptance of theism only. The ideals of Christianity (God incarnate dying and resurrecting for the sins of humanity), he had yet to accept (Surprised by Joy). Upon deeper analysis, however, it became clear to him that Christ’s divinity was the only logical route to take.

A man who was merely a man and said the sort of things Jesus said would not be a great moral teacher. He would either be a lunatic—on a level with the man who says he is a poached egg—

or else he would be the Devil... Either this man was, and is, The Son of God: or else a madman or something worse. You can shut Him up for a fool, you can spit at Him and kill Him as a demon; or you can fall at his feet and call Him Lord and God. But let us not come with any patronizing nonsense about His being a great human teacher. He has not left that open to us (Lewis).

However, this trilemma can only be accepted if one agrees on the certain warrants it implies. In order to accept Lewis's trilemma, we must first accept the premises and the following assumptions,

- 1) Jesus' claims in the Scripture are best interpreted not merely as claims to be the Jew's Messiah but claims to be God.
- 2) The Gospels are a reliable historical record of what Jesus said and did.
- 3) No sane person can form the false belief that he himself is God. [And]
- 4) The claim "Jesus is God" is more antecedently probable than the admittedly improbable claim that Jesus was a great moral teacher and either a liar or a madman... rather than debating these assumptions, apologists have simply repeated the mantra 'liar, lunatic or Lord,' while opponents have cried in

response 'false dilemma.'

Neither of these responses, in my estimation, does justice to the complex issues the trilemma raises" (Reppert).

Lewis himself recognized these warrants, and spent several pages of his book, *Miracles*, in arguing the truth in them. However, to delve into his extensive reasoning in support of these warrants cannot be adequately addressed within the limited pages of this research paper without delaying the communication of Lewis's holistic philosophy. Nevertheless, the reasoning is well worth further exploration for those intrigued with this specific facet of Lewis's philosophy.

Influences of Lewis's Philosophy

From a young age and throughout his life, Lewis was a devourer of knowledge. By nature an earnest scholar, he read continuously and critically. In reading, he discovered that his brand of hard-nosed atheism was becoming harder and harder to defend by pure logic and reason alone. His influences were many – the most prominent, many may recognize: G.K. Chesterton, St. Augustine, Plotinus, Thomas More, Evelyn Underhill, Richard Baxter, George McDonald, and Thomas Aquinas, among others. He was also significantly familiar with the teachings of Kant, even so much as to address some of Kant's beliefs in his book, *The Problem of Pain*. His beliefs in comparison to Kant's continue below.

The Moral Philosophy in Comparison with Other Prominent Moral Thinkers

Lewis did not believe in the simplistic solution to philosophical debate by falling back solely on fideism. He believed in strong rationalism, and part of his philosophy rested in the idea that the existence of divinity could be proven by rationalist analysis and logic alone, with his primary evidences identified, as follows, “The Argument from Longing,” “The Argument from Conscience,” and “The Argument from Reason.” (Vaus) Lewis’s beliefs greatly contrast that of other moral thinkers, but, in this paper, we will focus on the comparison between Lewis and the renowned and revered modern empiricist philosopher, Immanuel Kant. Kant was one who thought outside of the norm, who challenged the status quo. He is often credited with revolutionizing modern epistemology, (the study of how we, humanity, know what we know) when he asked the famous question, “Can we really know anything at all?” Though Kant was a man of faith, he had certain warrants regarding this subject – his philosophy with regard to faith was simply that faith cannot be argued, and that morality is something that can be understood only under fideism. He took faith in an all-or-nothing stance, that it was impossible to prove on either an intellectual or a philosophical level. Lewis thought differently.

Their opinions on the nature of moral obedience differed significantly, as well. Lewis believed that man ought to reap

joy from the complete serving of God under the Moral Law...Kant believed that an action was only particularly moral if a man went out of his way and comfort to do it. In the words of Lewis (2001), “Kant thought that no action had moral value unless it were done out of pure reverence for the moral law, that is, without inclination, and he has been accused of a ‘morbid frame of mind’ which measures the value of the act by its unpleasantness. All popular opinion is, indeed, on Kant’s side. The people never admire a man for doing something he likes: the very words ‘But he *likes* it’ imply the corollary ‘And therefore it has no merit’. Yet against Kant stands the obvious truth, noted by Aristotle, that the more virtuous a man becomes the more he enjoys virtuous actions.”

How This Relates to Our Time

The arguments against Lewis’s philosophy, of the Conscience of Man, have been numerous and substantial in their nature. One of greatest arguments is that of the Historical and Cultural Relativists. They claim that the accepted social and cultural stances on morality have shifted through the years and among certain groups. Taking cues from G.K. Chesterton’s *Everlasting Man*, Lewis writes, as a rebuttal, that this is not necessarily the case. “I know that some people say the idea of a Law of Nature or decent behavior known to men is unsound, because different civilizations and different ages have had quite different moralities. But this is not true. There have been

differences...but these have never amounted to anything like a total difference...think what a totally different morality would mean. Think of a country where people were admired for running away in battle, or where a man felt proud of double-crossing all the people who had been kindest to him. You might just as well try to imagine a country where two and two make five.”

A completely different morality could have only one result: the abolition of mankind. Lewis dealt with this concept in the third chapter of his Space Trilogy, *That Hideous Strength*, and a later apologetic work, *The Abolition of Man*, in which he put forth further evidences in favor of a common moral conscience existent in humankind. Every race that has endeavored

to follow a “new morality” or “different morality” has only come to grips with its own destruction. Such foolish pursuit of elasticizing “good and evil” are evident throughout all areas of history and all ended in similar fashion: Sodom and Gomorrah, Maya and Aztec, Babylon, Rome, and, more recently, Germany. Lewis, himself, while in the trenches of World War I, saw the results of ignoring the Law of Nature. Indeed, there have been differences in individual groups’ perception of the Moral Standard, whether based in religion, culture, or the time in history, but these have been only deviations. The Conscience is still there, Lewis asserts, it has never been absent—there have simply been cases where people, whole myriads, have ignored the Conscience’s cry.

Bibliography

Chesterton, G.K. *The Everlasting Man*. Image Books edition 1955.

Lewis, C.S. *Mere Christianity*. HarperCollins edition 2001.

---*The Problem of Pain*. HarperCollins edition 2001.

---*Surprised by Joy*. Harcourt, Brace, & Company 1955.

---*Miracles*. HarperCollins edition 2001.

Nicholi, Armand. *The Question of God*. The Free Press 2002.

Reppert, Victor. *C.S. Lewis’s Dangerous Idea*. InterVarsity Press 2003.

St Augustine's. Answers.com. Encyclopedia of Education, The Gale Group, Inc, 2002.

<http://www.answers.com/topic/st-augustine-s-uk-parliament-constituency>, accessed March 17, 2007.

Vaus, Will. *Mere Theology*. InterVarsity Press 2004.

Pass or Fail

Jessica Tetrault

Jessica Tetrault's extensive research of the current education system makes this paper especially informative, and her clear writing makes it interesting, as well. Tetrault outlines some problems that are often ignored, and presents a persuasive argument for how education could be improved. This paper was written for Ms. Keller's English 102 class.

College bound students are no strangers to tests. An entrance exam is required at nearly every university in the country, and taking the SAT is practically a rite of passage for American adolescents. Tests are commonplace in the day-to-day curriculum of almost every high school. They are the benchmark that students are retaining what is being taught. Therefore, it is difficult to understand the recent furor over what is being dubbed "high-stakes" testing. As more states adopt an exit exam for high school graduation, failure rates are surprising parents and educators across the nation and calling into question the basic tenets of American education. If students cannot demonstrate their skill set after 12 years of schooling, they have failed in their responsibility of learning successfully. Standardized testing and curricula should be required to ensure that students leave high school well prepared for college and the work force with a set of basic skills.

A dramatic percentage of students who graduate from high school are unprepared for college level work. Even though the percentage of students headed directly to college is reported to be increasing, those students often have to take

remedial level classes covering material presumed to have been learned in high school. At Tacoma Community College alone, 46% of students take a math class at a level lower than 100 (Hucks). In an article in The News Tribune, Karen Hucks determined that 130 sections of Math 90 were offered at TCC in 2005. Math 90 covers material that is typically taught in ninth grade. These statistics offer a grim picture of high school math classes, and college students are faced with the burden of paying for classes in which they do not earn college credit. If all students were being taught the same information in their high school classes, it could be argued that more students would be proficient in high school work.

This disparity in success can be best evidenced in a comparison of proficiency rates between states. In the state of Mississippi, Education Week's Rudy Crow found that "[i]n 2005, 89% of 4th graders were proficient on the state reading test. However, only 18% of those 4th graders were proficient on the NAEP [National Assessment of Education Progress] exams. . . [i]n Massachusetts, 50% of 4th graders were proficient at the state level, and 44% were proficient on the NAEP" (28). Crow's

findings bolster the argument for national standardized curricula. It is unfair for state administrators to label students as proficient in one area of the country, and have standards so high in other states where those same “proficient” students would not be able to earn diplomas. Educators in Mississippi do an injustice to students by labeling them proficient in a state exam and allowing them to fail national exams.

The state of Virginia has instituted an exit exam with very strict standards. Currently, high school students must be able to “analyze the regional development of Asia, Africa, the Middle East, Latin America and the Caribbean in terms of physical, economic and cultural characteristics and historical evolution from 1000 AD to the present” for the 10th grade geography exam, according to Michael Casserly’s article “National Education Standards. Casserly also notes that the “standards are too vague, too broad and too long. Students would have to double the amount of time they spend in class to cover all the material, and the average person would need a degree in geography to meet that one standard in Virginia” (2). Students who can not pass the reading exam after receiving schooling in Mississippi certainly would not be able to reach these extensive standards. A nationally standardized curriculum would bring students “back to basics”, a phrase that parents are mistakenly equating with “dumbing down” of curricula. Instead, a back to basics approach ensures that students are not substituting core courses for electives and instead are receiving

formalized education in topics that can be built upon in higher education.

“Basics” schooling proponents claim that this idea equalizes educational opportunity for all children no matter where they live. The Paideia model, presented by Mortimer J. Adler, outlines a plan to not only teach students basic skills, but also plans to promote active learning and participation instead of rote memorization of facts.

In its barest form, Paideia’s first objective is to “acquire organized knowledge by didactic instruction, lecturing, and textbooks in the areas of language and literature, mathematics and natural science, and history and social studies. [Then] development of intellectual skills and skills of learning by coaching, exercises, and supervised practice in the areas of reading, writing, speaking, listening, calculating, problem solving, and exercising critical judgment. [Lastly] improved understanding of ideas and values by Socratic questioning and active participation by discussing of books (not textbooks) and other works of art, and involvement in music, drama, and visual arts.”

It is clear that this model emphasizes basic skills in the early stages of education, but these skills are used as the building blocks for critical thinking and improved upon throughout an academic career.

In an article that directly rebuts the Paideia model, John Holt takes the antithesis approach to standardized curricula. Holt claims that “schools are among. . .the most destructive and most dangerous institutions in modern society. [People] are *performing* for the judgment and approval of others, and no one is ever free from feeling that he is being judged all the time.” Holt argues that children should actually drive their own learning and be able to select the education that they want to receive. However, this would actually worsen the school system that Holt already derides. How can we expect students to drive their own education when they cannot even *read* at proficient levels? It is unrealistic to believe that students will be successful under their own merit simply because they are allowed to make more choices. Currently, students do indeed have some autonomy in choosing classes even at the high school level. If Holt’s ideas were true, students would not be supplementing math classes with electives—and if they were, they would still be able to assess at basic levels in core classes. Until school systems can provide test scores that prove students are learning what they need to know, electives must be set aside and basic skills prioritized.

Opponents of standardization point out that there are some schools who are delivering positive results, and that those schools should not be punished but applauded. In some situations, parents are so willing to have their children in “high performing” school districts that they are

willing to move their families to entirely different states. However, these high performing schools may be making problems with testing worse. In Oakland, California, the Aske family was shocked at the feverish pace of the neighborhood kindergarten. Peg Tyre of Newsweek found that the Aske’s 5-year-old daughter Ashlyn could not keep up with the rigorous curriculum. There was a 130 word list of words to read, homework, and a weekly essay on favorite animals or vacations (28). If students couldn’t read the list of words, they needed to get tutors or risk being held back. Tyre observed “students falling asleep at their desks at 11am” and crying over homework (29). The Askes are moving to Washington to find a school that is successful, but not as intense.

This example illustrates how important standardization actually is. In an increasingly competitive world, early education is becoming more about “skills and drills” than about learning. Walter Gilliam is a child-development expert at Yale and claims that “early education is not just about teaching letters but about turning curious kids into lifelong learners. It’s critical that all kids know how to read, but that is only one aspect of a child’s education” (qtd. in Tyre). The Paideia model outlined by Adler would eliminate these hyper-competitive schools and focus all early education on creating building blocks for lifelong learning.

Locally, the state Department of Education has yet to take on accountability for the dismal failure of the Washington Assessment of Student Learning (WASL)

exit exam. Peter Callaghan reported recently in The News Tribune that the math section of the WASL, which 50% of last year's sophomores failed, will be postponed as a graduation requirement until 2011 (B1). Until the test becomes a graduation requirement, the 50% of people who are not able to pass will still graduate and perpetuate the cycle of remedial college classes. In order for educators and administrators to increase performance, a firm commitment must be made to drastically reform school curricula and to support those students who need the extra help. Washington is one of 25 states that currently require an exit exam, but one of only 6 requiring students to participate in some type of remediation if they fail the test.

David T. Conley is a professor at University of Oregon's college of education who has been helping to develop the WASL. His plan outlines "an unusual form of remediation for students who need to take another whack at the math portion" of the exam, says Catherine Gewerty of Education Week. Currently undergoing review in the Legislature, this could be offered to students beginning in the fall of 2008. The idea would be to "break the WASL into three sections and teaching and testing those sections separately as part of a class. Passing all 3 sections would serve as an alternative way to pass the WASL" (10). Under this plan, the state would allow students who still did not pass to go through an appeals process, where they could use their grades and a

collection of class work as "proof of proficiency" (Gewerty 10).

This idea of using course grades as a substitute undermines the whole premise of an exit exam. Colleen Wenke examined just how pervasive cheating is in the average American high school in her essay, "Too Much Pressure." According to Wenke, "a national survey conducted in 1997 by *Who's Who in American High School Students*, as many as 98% of students who participated in the survey admitted to cheating" (534). If even the students who are seen as "high achieving" are copying homework and test questions to get there, it's no wonder that they cannot pass the math portion of the WASL. Honoring those grades as proof of proficiency allows for too much ambiguity and does not conclusively prove that a student knows material. The state must commit to changing curricula and focusing on individual achievement and knowledge of topics.

No one is claiming that school reform will be easy. It will take a tremendous amount of effort and a considerable amount of time and funding. Despite reports of the contrary, in a United States Federal News Service report teachers did not list their greatest challenge as "teaching to the test." Instead, the "greatest challenges in making our high schools ready for the demands of the 21st century are funding, adequate number of teachers, adequate number of classrooms, and strong support for students who need extra help" (USFNS). Educators are slowly coming around to the idea that basics should

come before electives. Out of the 8 challenges listed in the survey teachers listed “loss of vocational or elective classes” as 6th in importance.

There are certainly schools that manage to impart the appropriate knowledge to students throughout their education, and those students head off to college or the work force and are successful. It is not enough for educators to label those students successes

and simply allow all other students to be labeled as failures. In today’s society parents, educators, and administrators need to commit to working together to make all students successful. The best way to do that is to provide one clear definition of proficiency across the nation, and one clear vision of how to achieve it. Only then will all American students be able to pass the test.

Works Cited

- Adler, Mortimer J. “The Paideia Proposal: Rediscovering the Essence of Education.” Taking Sides: Clashing Viewpoints on Educational Issues. 2007: 18-24.
- Callaghan, Peter. “The Governor Makes It Clear: WASL Will Go On.” Tacoma News Tribune. 8 Feb. 2007: B1.
- Casserly, Michael. “National Education Standards.” 14 May 1999. CQ Researcher. Tacoma Community College Lib., Tacoma, WA. 7 Feb. 2007. <http://library.cqpress.com>.
- Crow, Rudy, Paul Vallay, and Michael Casserly. “The Case For National Standards in American Education.” Education Week. 5 Mar. 2007: 28, 40.
- Gewerty, Catherine. “Remediation For Exit-Exam Failure Proves Daunting.” Education Week. 10 Jan. 2007: 10.
- Holt, John. “Escape From Childhood.” Taking Sides: Clashing Viewpoints on Educational Issues. 2007: 25-29.
- Hucks, Karen. “Colleges Pick Up Slack On Math.” Tacoma News Tribune. 21 Feb. 2007: A1, A8.
- Tyre, Peg. “The New First Grade: Too Much, Too Soon?” Newsweek. 11 Sep. 2006: 34+. Expanded Academic ASAP. Thomson Gale. Tacoma Community College Lib., Tacoma, WA. 7 Feb. 2007.
- United States Federal News Service. State Board to Review Final Survey Results on High School Graduation Requirements. Washington: 17 Jan. 2007. 28 Feb. 2007.
- Wenke, Colleen. “Too Much Pressure.” The Bedford Reader. 9th ed. Boston: 2006. 532-535.

Magic Hands

Vickie Federline

Vickie Federline's submission was a favorite among the female editors. Federline's paper was written for Lewellen's English 101 class. She takes the reader on a journey back to her childhood where she grew up with a stepfather who was abusive and alcohol dependant. Federline's paper is dramatic, suspenseful, and worth the read.

I'll always remember the day I found out my hands were magic. It was early October in Fresno, so it was still fairly warm. I hurried out the front gate of my middle school in route to the elementary school four blocks away where I met my three little sisters every day to walk them home. I said my usual daily prayer on the way that God would protect us and keep us from harm; that nobody would get mad today. They were waiting on the bench out front and ran to meet me. There was hugging and comparing of school work and art projects, and best of all, there was laughter. I knew we would always be okay as long as we were together.

We got home and made us our afternoon snack, and we all sat down at the kitchen table to do our homework. Then we heard a truck outside. "Oh no!" I thought desperately. "What is he doing home so early?"

Then it hit me. I hadn't refilled the ice tray after our snack. Now there would be hell to pay. There was only one ice tray, and he had to have his margaritas when he got home from work. I knew better, and now I would pay.

We all moved to the living room as he came in the front door. He set down his lunch pail without saying a word and went straight for the blender. "Um, hi Steve. How was work?" I asked.

He ignored my question and said, "Finish your homework, I'm gonna make this drink, and I'll be in the bedroom until your mother gets home. Don't bother me" Then he opened the freezer.

"You fuckin' kids!" Then my eye was suddenly on fire. I realized after a second that I had been hit with the corner of the ice tray. "I work all day, and I just want to come home to a cold drink and you can't even refill a fucking ice tray?" Then he had me by the hair. He dragged me to the front door. I could hear my sisters screaming for him to stop as he opened the door and kicked me out down the flight of concrete steps that led up to our apartment. "You wanna be cooled off with all of my ice? Cool your ass off down there!" and he slammed the door shut.

The neighbor came out of her apartment because she had heard the commotion, and saw me crumpled at the bottom of the stairs. "Mi hija what happened?" she cried as she ran to my side.

“I fell down the stairs; please Rosa, call my mom at work!” I tried to get up, but I couldn’t move without explosive white hot pain shooting through my body and brain. I strained my ears to listen, to see if I could hear my sisters crying, or if he had left them alone. I fell asleep.

As it turns out, I had broken my left leg, sprained my right ankle, broken two ribs, burst an eardrum, and had bruises everywhere except my hands. As I stared in amazement at my hands on the ride home, I marveled at the fact that they didn’t have a scratch, they didn’t hurt a bit. Then it struck me. God had heard my prayers. I had prayed every day since Steve had married my mom that He would give me a way to protect my sisters, and He had answered. Magic hands. Invincible hands. Nothing could hurt them. That was obvious. I knew that the next time we were to be forced to suffer Steve's wrath, my magic hands would save us. Magic hands have no fear.

I didn’t have to wait long to use my newly discovered secret weapon. It was a couple weeks after my “accident,” so the sprained ankle had healed, but I was still on crutches for the broken leg. It was getting cooler outside so after my Mom and Steve locked themselves in the bedroom for the night, I started a fire and told my sisters we were going to have a slumber party in the living room. They gathered their sleeping bags while I ordered a pizza with my babysitting money. We put in *The Little*

Mermaid, and we were ready for the perfect night.

Halfway through the movie, we were having a grand old time. We were laughing and singing along and having a downright first class slumber party. Then we heard the most dreaded sound you could hear. The bedroom door opened. We all quit what we were doing and crawled next to each other and sat very still, but it was too late. He came stomping around the corner, partially hunched over with his neck craned out, veins bulging, like a hillbilly Frankenstein. In his right hand, he held the dreaded wooden paddle that he had crafted in the garage for just such an occasion.

“Lisa!” he barked my youngest sister’s name. “I can hear you laughing all the way down the hall!” I had never before seen a grown up that hated the laughter of children more than our stepdad did. “You get over here, and I’m gonna teach you some respect!” Lisa started crying and clinging to me, and I knew this was the time. I stood up on my one good leg between Steve and my sisters and held my arms out in front of me, palms facing our tormentor. I know if they had been facing me, I would have seen them glow, because I could feel it.

“No” I said. “We are having a slumber party and no boys allowed” I don’t really know where those words came from. When I heard them, it didn’t sound like me saying them, but rather I was hearing them on a distant television set. I looked at my magic hands and saw they had snatched the paddle

out of his hand. He took a step half step backwards and kind of shook his head, probably in shock.

He started back towards me and I turned around, and threw the paddle in the fireplace. I looked back at him, and he said “Fuck you kids anyway. Just shut the fuck up for the rest of the night” then he walked back down the hall. When I heard the bedroom door close, I let out a breath I didn’t realize

I’d been holding. I looked down at my sisters who were cowering in the corner, staring at me. “It’s okay little sweeties, there will be no more paddle,” I told them. I gathered them all up in my arms, and we sat by the fire and watched the paddle burn. None of us said anything we just held each other. As I looked down at my magic hands, I knew God had heard us and everything really would be okay.

Stop Me If You've Heard This One...

Erik Anderson

The format of Erik Anderson's paper for Comeau's Philosophy 101 is different, to say the least. Despite the unorthodox style this paper offers very in-depth philosophical discussion. Anderson really captures the dialogue of three very devoted philosophers out for a beer.

Narrator: A dualist, a materialist, and an idealist walk into a bar. After a few drinks of silence, they cleverly sway into a discussion on mind and body. The exchange of words is as follows:

Dualist: Mind and body work together as one. The mind, however, is the ultimate controller. C. E. M. Joad stated (pg. 386), "In addition to the body and the brain, the composition of the living organism includes an immaterial element which we call mind; that this element, although it is in very close association with the brain, is more than a mere glow or halo surrounding the cerebral structure, the function of which is confined to reflecting the events occurring in the structure; that, on the contrary, it is in some sense independent of the brain, and in virtue of its independence is able in part to direct and control the material constituents of the body, using them to carry out its purposes in relation to the external world of objects." Sort of like a car being the body (in a physical sense), but the mind being the engine that is powering the car (in a nonphysical sense). The body is non-thinking, mechanical, public, and an object. The mind is thinking, purposeful, private and a subject. Our interaction with the world is physical, but our minds interactions cannot be seen or touched such as emotions, desires, and ideas. With this being said, the mind and

body are completely separate, but must work together to produce results.

Materialist: Whoa, whoa. The mind is thought up by our complex brains. Like Hugh Elliot said (pg. 380) "...that the condition of 'knowing one has a mind' is a condition which can be stated and accounted for in rigidly materialistic terms. When the epiphenomenalist himself asserts that he has a mind, the movements of his vocal cords by which he makes that pronouncement are by his own theory led up to by a chain of purely material sequences. He would make just the same pronouncement if he had no mind at all." Essentially, there is no mind. We are made up matter; the entire universe is made of matter. Believe what science tells us. We are all motion and redistribution of matter. Emotions, desires, and ideas are all located in different parts of the human brain. Not only can you see the mind, but you can touch it as well. Just cut one's head open and see if his mind talks to you.

Idealist: No, no, you've got it backwards, materialist. The brain is thought up by our mind. There is no such thing as matter; there are only minds that involve thoughts and/or experiences. A. A. Luce says (pg. 419), "Now the theory of matter brings in totally different considerations; it asks me to believe that all these sense-data and *sensibilia* do not

constitute the real table.” And he also goes on to say (pg. 423), “Man is spirit and sense. To form and guide his experience man needs knowledge of spiritual causes and sensible effects. Matter comes under neither category; *ex hypothesi* matter is neither spiritual nor sensible; therefore it can contribute nothing to a knowledge of causes; it cannot be seen or touched, and therefore it cannot tell me when or how to push and pull things I touch and see around me.” Reality is universal thought and/or experience; emotions, desires, and ideas are what create the world we live in today. How else would you explain existence, monkeys? Ha, ha, ha.

M: What the hell are you talking about, idealist? Nobody believes that.

I: So, where do your ideas come from, Materialist? Those are certainly not material, now are they? If they were, I would be able to see right through your argument, now wouldn't I?

D: I have the answer to that, Idealist. Science is the study of matter, correct. Science was found in the mind and also depends on the mind. Take math for example, 3.14 will always equal π . Why? Because it is as physical as our mind. It is made up or thought of and will never change. Therefore, the mind must be separate from the matter. However, matter does exist. If I pinch you, it will hurt, won't it, idealist?

M: Of course it will hurt. The nerves are connected to the brain, therefore causing pain. It is a self-defense mechanism our bodies have; we are born with it.

I: Hey, no need to interrupt. It is an illusion that our minds have created. Our minds are so wrapped up in what we have created that the illusion of pain would seem real.

M: If it is an illusion that our minds have created, prove it to me and smash this empty bottle of beer over your head. Bartender, get another round for the ladies and me.

I: Don't be absurd! I am not going to try that.

M: Why, because you will feel pain? You must rethink your beliefs, Idealist, or prove them to me with concrete evidence. You're saying if you play with fire it won't hurt you. See, all events can be described as matter plus motion plus energy equals the universe. Again, quoting Elliot (pg. 375), “The propositions which I here desire to advance is that every event occurring in the Universe, including those events known as mental processes, and all kinds of human action or conduct, are expressible purely in terms of matter and motion. If we assume in the primeval nebula of the solar system no other elementary factors beyond those of matter and energy or motion, we can theoretically, as above remarked, deduce the existing Universe, including mind, consciousness, etc., without the events therein may be theoretically expressed in terms of matter and energy, undergoing continuous redistribution in accordance with the ordinary laws of physics and chemistry.” Fire is a form of energy, your hand is a form of matter, moving your hand over a flame is motion. The universal answer is that it will hurt you.

D: Just drink your beer, materialist. For the mind is the temple, not the body. I think,

therefore I am; that is the only certainty. Rene Descartes came to the conclusion (Pg. 457), "I find I have insensibly reverted to the point I desired; for, since it is now manifest to me that bodies themselves are not properly perceived by the senses nor by the faculty of imagination, but intellect alone; and since they are not perceived because they are seen and touched, but only because they are understood or rightly comprehended by thought, I readily discover that there is nothing more easily or clearly apprehended than my own mind." Yes, fire will burn us if touched, for we have experienced this. But, how do we know fire is real? There is a gap between what we think we know and what is for certain, for nothing is certain, except that I exist. We can only know what is most probably true through experience, observation, and what our mind makes sense of. Don't get me wrong, for our senses can be deceiving; that is why the mind is the most reliable source. However, how else can we find what is most probably true? We must use the mind to discover through the body.

M: You said it, through experience and observation. But I will also have to say that existence or knowledge also relies on heredity. Some people are born geniuses, like me. This is how everything works. This is how we can predict things. This is why history repeats itself. This is what is most probably true. Through experience and observation, we know that if I jump I will always land, that is because of gravity. If I perform a lobotomy on either of you, you would not be able to think. Your ability to do so would be taken away, but you would still be breathing; you would still be alive.

D: I will stop you there, materialist; alive indeed. For you may have taken my speech, but not my mind. Like idealist said, you can never see what I am thinking, even if I don't reply. If you could, you would see that you are wrong in some aspects, materialist. Take music, for instance; how is it possible to put together annoying sounds to make terrific ones, if one's mind is not at work? Or how is it that globs of paint can produce a masterpiece? And why will some people appreciate these instances more than others?

M: Why else. Humans are the superior creature. We have the ability to think using our brains. It is differences in brain chemistry, and how and what we interact with that makes us unique from each other. I have already gone through this with you knuckle heads.

I: How do you know, materialist, that we are indeed superior, and to what? We are all confined to our perception; whether it be true or not, how will we know? A. A. Luce says (pg. 418), "I open my eyes and see. What precisely do I see? I stretch out my hand and touch. What precisely do I touch? What precisely do we see and touch, when we see and touch? That is our question." For all you know, we could be pawns in a universal game of chess. It is matter that is causing you idiots to overlook the bigger picture. Matter cannot be perceived, for instance, none of us can see an atom; correct, materialist? Therefore, an atom is carefully thought up by the mind and most probably doesn't even exist.

M: We may not be able to see an atom; however, by the use of the scientific method, we know atoms exist. Ernest Nagel would

say (pg 481), “Nevertheless, scientific method is the only way to increase the general body of tested and verified truth and to eliminate arbitrary opinion.” Yes, an arbitrary opinion such as yours, idealist.

I: This is rather similar to the question dualist asked you earlier. Tell me this, materialist, if a tree were to crash in the middle of the woods and no one was around to hear it, would it make a sound?

M: Of course it would make a sound.

I: You’re wrong; how could it make a sound if nobody heard it? A sound is an idea within the mind. That is why every sound is heard differently; it is perceived, just like everything else that comes from your senses.

Bartender: I am sorry to intrude, but I’m going to have to cut you guys off. You’re starting to stumble and babble on about a subject that is so clearly laid out. The materialist is absolutely right. Knowledge of the mind is based on heredity, experience, and observation. Scientific method is what is most probably true. For people have direct evidence for such instances. Everything

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dualist and idealist say are indirect probabilities. Every day, we learn more and more about the brain and how it works. We know different parts in the brain control different character aspects of a person. There is no such thing as a mind and, ultimately, we have no purpose in life, but to fulfill the time we have for ourselves during it. The reason dualist and idealist have come to their beliefs is the uneasy future of death; it frightens them into thinking existence goes beyond life. Nobody wants to die; therefore, they must excuse themselves from it. The beliefs of dualist and idealist appear to be a form of tenacity. Do you three want to live forever? This is the question you should ask yourselves, and I am sure you will all say no. For how boring would it be to live forever, and if entities did, wouldn’t they be all knowing? Wouldn’t we be all-knowing beings? I am not an all-knowing being so I can’t be certain of this, but it is what I believe to be most probably true.

N: The ingenuous men slowly rise to their feet and stumble out of the bar, more confused than ever.