

CITY TECH WRITER

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Outstanding Student Writing From All Disciplines

Jane Mushabac, Editor in Chief

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Preface

What was it like in a U.S. Marines boot camp in Lejeune, North Carolina, in 1997? What's it like having dinner at Brooklyn's historic River Café? What steps can a diabetic take to make sure vacation travel works out well? Why is bendinsensitive optic fiber of great value? What is cryptology and how is it advancing? What does a beloved willow tree say about city life?

The student writers of *City Tech Writer* Volume 3 pose questions that let us see the world with renewed pleasure—and concern. We learn a lot. We feel the pulse of technology. We get a glimpse of great works by Plato and Poe, Maxine Hong Kingston and Paul Rusesabagina, Leonardo da Vinci and Frank Gehry. The juxtapositions of writing from different disciplines and a variety of cultures and moments in time are surprising and energizing. Readers, you're in for a treat.

I want to thank the faculty in eighteen disciplines who inspired fine writing and selected and submitted their students' best work; Prof. Mary Ann Biehl who led her ADV 4700 classes to produce sixty remarkable cover designs; Graphic Arts Program Director Lloyd Carr who as before coordinated the graphics, tapping the visual creativity at City Tech, and had GRA 4732 students and GRA 3513 students respectively format and print the cover; and Prof. Steve Caputo and printers George Pompilio and Peter Pompilio, whose commitment to excellence assures the journal's quality. I'm grateful to President Russell Hotzler, Provost Bonne August, and Dr. Stephen Soiffer for their invaluable support and encouragement from the top; and the President's Executive Assistant Marilyn Morrison for her help and thoughtfulness. Professors Aparicio Carranza, Djafar Mynbaev, Renata Budny, Aida Mysan, Nina Bannett, Mark Noonan, Peter Spellane, and Patricia Williston graciously helped me think through questions of many kinds; Michele Forsten and Dale Tarnowieski, respectively Director and Assistant Director of Communications, have done yeoman work in publicity; and English Department Secretary Lily Lam and College Assistant Felicia Jones have been generous, resourceful, and wonderfully efficient. On a sad note, we mourn the loss of Dr. Joseph Rosen who as Director, Coordinated Undergraduate Education (CUE) in 2004-2005, responded so positively to the proposal to start this publication. Do it! he said and provided the support and enthusiasm of the best kind to get the journal off the ground.

Most of all, however, I thank the student writers whose work has been selected for publication in this volume. Their writing is direct, bold, and memorable, and reflects the full range of meaning of college work.

Jane Mushabac, Editor in Chief

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Ghosts

Sarah Pollack

I have always craved solitude. I remember my father introducing me to the philosophy of Henry David Thoreau, absentmindedly commenting on Thoreau's rather eccentric views of human nature and society. As an adolescent in a state of turmoil and change, I embraced Thoreau's anti-social perspective. I needed no one; adopting the role of loner and social outcast, thriving on isolation, I sought out many lonely places. Though adulthood has forced me to carve out an awkward niche for myself in the world, I still return sometimes to these forsaken spots to clear my mind and reassure myself that we as humans have not ruined quite everything in our path.

One particularly lonely retreat, to which I make the occasional journey, stretches out quietly from an obscure corner of the Queens shoreline unknown to most New Yorkers. Its history is as rich as its landscape. An army base and nuclear missile storage site in the past, Fort Tilden was shut down in the early 1970s (Kilgannon) and became a unit of Gateway National Recreation Area. Characterized by its pine forest and delicate ecological balance, the sandy, undulating expanse of land on the western edge of the Rockaway peninsula is dotted with abandoned army barracks and storage buildings. Their rough salted stone walls, worn with time, and punctuated by gaping, empty window frames looking inward to blackness and shadows of the past, provide an apt setting for my gloomy reflections on life and its purpose. Old gravel roads bordered with desert-like shrubs, and pine trees dwarfed by the sea breezes, run endlessly straight out to some defunct destination, or curve mechanically back on themselves, or suddenly intersect like an intrusive thought. Trails have been beaten into the undergrowth for the adventurous to explore. One of these leads across the sand dunes to a secluded beach for the most part undisturbed by human presence. I often take this path, which leaves me gazing at the rare sea birds skittering about on the ocean's edge. They, in turn, quizzically look my way for a moment, then decide that I am not much of a threat and cautiously resume their fishing. I wonder if my presence bothers them; I sometimes feel an occasional pang of guilt for invading their habitat. My disgust with the encroachments of human beings upon nature and wildlife makes no exception for myself.

As I face out towards the sea, the surreal monolith of Battery Harris looms behind me, carved into a low hillside. The hill, actually, is man-made; it served to camouflage the huge gun that was housed there during two world wars

and the Cold War with Russia (Kilgannon). Trained on New York harbor and poised to strike at any enemy who approached by sea, its eerie presence lingers in the stillness of a science-fiction landscape. A concrete bunker is all that remains now, but the weight of war rests on this place. The serenity is deceptive.

Climbing to the top of this hill, I can see immediately the strategic significance of the locale. The entire harbor opens out to view, with a spectacular panorama of the Jersey shore, Coney Island, the Manhattan skyline, and Jamaica Bay. From here, the palette of the dunes and forest below can be fully appreciated, an impossibly faceted array of green hues infused with sand and sky. Exhilaration is inevitable, as the salt-laden air conquers all worldly troubles.

My father showed me this place when I was young, not yet a teenager. He, too, is a lonely soul, and I suspect that the Frisbee games which he so often engaged me in were just an excuse to visit some open expanse and gaze at the horizon. Just as the ships slowly glide into view from an immeasurable distance, the secrets of old Fort Tilden have gradually unfolded themselves to me over the years. Exploring other branches of Gateway National Recreation Area has given me insight into a different time, when America was braced for war on the home front, and New York was the front line of defense. I was surprised to learn that one of the first regiments of women soldiers was housed at Sandy Hook, New Jersey, across the harbor (Rasa). Ah, then, we were well protected.

Sometimes, on my return here in the spring or autumn, I try to imagine the men who aimed these cannons, who watched for the enemy, whose drill formations resounded in an uncertain dawn. They were young, no doubt, and not unlike the men and women who defend us today. Then the sea breezes turn suddenly cold, and the place seems lonelier still. It is time to begin the journey home.

References

Kilgannon, Corey. "To the Battlements, and Take the Sunscreen: The Joys of Fort Tilden." *The New York Times* 21 July 2006, sec. Arts. 7 June 2007 Times Select Archives.

Rasa, Mary. "Sandy Hook." *The Women's Army Corps.* n.d. 6 June 2007 http://www.nps.gov/gate/historyculture/index.htm.

Pioneers, Patriots, and Ladies: Origins, Social Issues, and Impact of The Women's Army Auxiliary Corps

Sarah Pollack

The good position of women in today's society seems undisputed to the casual observer. In many fields we enjoy equal pay, equal employment, and equal respect from our peers. We take for granted our voting rights and freedom to express our discontent or opinions. However, achieving women's equality was difficult to accomplish and it is hard to impress upon the general public how much controversy surrounded the ground-breaking social transformations that have changed women's lives. The initiation of women into the United States military was one such controversy, and from the beginning, its proponents challenged what were well-established views of female passivity and inferiority to males. In doing so, these advocates of change created a new image and ideal of the American woman.

America, at its entrance into World War II, was a nation in turmoil. Even the most indifferent bystander felt the tides of change sweep through his or her exclusive world, whether because of the sudden call to duty of a friend or family member, burdensome increases in the cost of living, the prevalence of frightening newspaper headlines, or the warnings and pronouncements of politicians and authorities. With grim certainty we set foot in the cauldron which was boiling away overseas; unsure of success, we nonetheless mobilized our young men, willing and unwilling, for departure and dispatch into harm's way. As they vanished from sight, those left behind were forced to accept the reality of wartime and the changes that went along with it. American women, being by far the largest segment of the population to be excluded from these drafts, no doubt felt more frustrated than ever (Sherman 52). They'd had their first taste of freedom and equality; they were just beginning to infiltrate workplaces all across America as a career-driven, independent labor pool, earning and spending their own wages. They demanded and won respect in many areas for the first time in history. So it was natural that the Armed Forces be their next target in the great push for women's rights, recognition, and liberation. Many, according to E. Doben (a WAAC veteran), questioned the value of their pre-war occupations, at a time when a man's work was being classified as necessary or unnecessary for the war effort. The young women, particularly, felt abandoned and restless as eligible

husbands were sent in droves overseas, and they were left to enter adulthood unbetrothed—a grim fate for a girl in the 1940s.

They had not long to stew in useless worry and fret over the fates of their men. After all, the 19th amendment (granting women the right to vote) was still fresh, and feminist leaders had been trying since the 1920s, albeit unsuccessfully, to establish an official female presence in the armed forces. It is hypothesized by some that if the first World War had gone on for much longer, the U.S. would have had no choice but to enlist its women as auxiliaries in the service (Treadwell 6). Anita Phipps, then acting as Director of Women's Programs, United States Army, proposed to create a band of women soldiers, trained according to army regulations, to serve as "low-grade personnel," i.e. clerks, stenographers, laundry workers, janitors, messengers, seamstresses, and other skilled and unskilled workers (Treadwell 12). The intent was twofold: to appease and befriend the newly-formed women's groups who, as recently commissioned voters, had taken a decidedly anti-military stance; more practically, it would release men for combat duty in the event of future conflict (Treadwell 10). Phipps's suggestion was met with immediate disdain; her position was summarily abolished, and her tentative plan buried in paperwork (Sherman 50). Military duties, no matter how trifling, were men's work, and in spite of the hundreds of women who volunteered their efforts during previous years, the army and the government refused to officially incorporate them into the service. They had, in 1901, begrudged the title of "Army Nurse Corps" to the group of indispensable and valiant women who healed those wounded on the front lines; however, ambiguous organization and restrictive clauses kept them essentially separate from the military and prevented them from receiving pay or other benefits equal to their male counterparts (Sherman 49). Many were able to overlook these biases and do their jobs out of pure patriotism and love for the country which insisted on keeping them as second class citizens. (Interestingly, these women were volunteering their services in the armed forces before being granted the right to vote!) For many more, though, this was not enough.

British and Canadian women had already proven their worth during World War I; both countries enlisted women as auxiliaries, successfully increasing the numbers of (male) soldiers sent into the fight, and eventually driving back the enemy (Treadwell 32-34). The contributions of these ladies were considered indispensable; the British even went so far as to draft their women into the service (Sherman 52). In China, women were known to have joined the communist rebellion, often out of extreme poverty and mistreatment by their families. The Communists provided them with clothing, food, and training, and these newly liberated women fought alongside the men to overthrow Chiang Kai-Shek's Nationalist forces (Young 93-99). Rebellious ladies had found their way into the Russian military, as well, as Barbara Engel explains:

Most of these women fought at the front, about 200,000 of them in the air defense forces; thousands more fought the Germans as rank-and-file soldiers....and as driver-mechanics in tank units. A few female officers led battalions of men into battle. ...Although

Russian women had served at the front and taken up arms at earlier stages of the nation's history, in particular during World War I and the civil war that followed the Bolshevik revolution, they had never before served in such numbers, nor had their role been so important to military success. (Engel 139)

Following the lead of the British and Canadian military, Representative Edith Nourse Rogers introduced a bill in 1941 (Bellafaire) to provide for the creation of a women's "semi military corps...to serve with the Army in noncombatant capacities anywhere in the world" (Baldwin). This was not the first such bill ever to be seen in Congress; along with Phipps's proposal, three others had been voted down or simply stalled into futility in previous years (Fisher). But circumstances were changing quickly for the army and other military organizations. The attack on Pearl Harbor left Americans no choice but to plunge headlong into the Second World War, and the army's resources and troops were being stretched to their limit. The advances in communication and motorization created new jobs in the air warning service, telephone and telegraph operations, radio signal transmission, transportation, and more (Bellafaire). An increasingly bureaucratic system meant the creation of hundreds of army clerical jobs, which, by army regulations, would necessarily be staffed by men trained otherwise for combat (Meyer 52). And these men were suddenly in short supply. The agencies in the government that had so staunchly refused women entry into their domain began to eye with interest their fairer counterparts who clamored for the chance to do their share in the war effort. The army was forced to admit its predicament: vast numbers of men serving clerical, administrative, and other non-combative purposes could be easily replaced, if not surpassed in efficiency, by women; the increase in numbers of troops available for combat could potentially turn the tide of the war and lead the allies to victory. Though there was some amount of controversy surrounding their inclusion—one senator is quoted as saying that the idea "casts a shadow on the sanctity of the home" (qtd. in Baldwin)—the women were in. The real struggle and eventual proving ground lay ahead.

The Women's Army Auxiliary Corps, or WAAC, was formed as the Rogers bill was signed into law on May 14, 1942 (Rasa). It stood as the only group of women that had ever been sanctioned to serve with the United States Armed Forces on active, military detail (Treadwell 45). Basic height and weight regulations were established; in addition, it was required that a WAAC be between 21 and 50 years old, in good health, and a high school graduate (Rasa). It was preferred that she be unmarried and without dependents. Black women, while allotted a certain number of positions in the volunteer corps, would be segregated from whites; an amendment which called for no racial discrimination of any kind was rejected, supposedly to speed the bill's passage through Congress (Baldwin). For some WAAC members, this was their first experience with segregation (Adams 76). For most it was an all too familiar reality.

The first applicants to the Corps began their six-week basic training as Officer Candidates in 1942 (Treadwell 63). This initial group was slated for the task of training and commanding the future WAACs, in addition to receiving specialized instruction in other fields. Many details required adjustment at first; for example, the uniforms issued were designed on a male model and fitted poorly on female figures (Rasa). Drill regulations, too, had to be rewritten; where the regulation called for the thumb to be aligned with the seam of the trousers, there were no trousers; where regulation required that soldiers align themselves by the second button on the shirtfront of the soldier to the left, the shirtfronts were so varied and uneven that efforts to form a straight line became almost comical (Adams 38). The competition between companies during basic training was intense; under the command of Major Charity Adams, the segregated black troops consistently proved themselves superior to the whites in their precise marching and drill formations (Shea 90). Additionally, "They entered...the school with dignity and pride and conducted themselves in a manner that commanded respect from their white contemporaries and from the officers and enlisted men with whom they came in contact" (Shea 89).

Other problems existed on a deeper level. Racism and bigotry were far from eliminated by the excellence of the Negro contingents alone (Adams 206). Religious discrimination among recruits was unavoidable as well, as American girls of the 1940s were not as open-minded as they are today (Meyer 72). Elayne Doben, who enrolled in the WAAC in 1943 to become an Auxiliary First Class, was one of the few Jewish members of the Corps. She recalls "snide [anti-Semitic] remarks from some of the girls...If you were smart, you just ignored them and didn't associate..." The men, too, created problems for the new recruits. According to Mrs. Doben, some men thought the women were there mainly for their "entertainment," resulting in stricter rules regarding privacy and association between men and women on the base (including the first-ever army regulation window shades!). Later on, overseas, troop leaders in the South West Pacific Area (or SWPA, where 5,500 women were eventually deployed) even resorted to the use of barbed wire to maintain separation between the sexes (Fisher). As more women attained officer status, however, this became less of an issue. Women began to train and command other women.

The most persistent and prevailing obstacle was the resentment which the male soldiers harbored against the newly enlisted WAACs, as noted by Mrs. Doben, WAAC veteran. These women were unabashedly challenging their masculinity, replacing them in their secure administrative and secretarial positions, unseating them as mechanics and telegraph operators, ousting them as cooks and bakers, and sending them off to the front lines of the battle to fight! This was not always a pleasant surprise for a soldier who had been happily stationed at home in the U.S., typing up supply orders and authorizations in a comfortable, albeit militarized, office setting (Bellafaire). There was some additional amount of jealousy present, as well; the women received more than their fair share of media attention. Of course, the press was not altogether supportive:

From the beginning, a frivolous press focused on the trivial and the sensational, including how GI underwear would have to be modified, whether makeup would be issued, and if female enlistees could date male officers or vice versa. The WACkies...were lampooned mercilessly. (Sherman 60-61)

Change never does come easily.

As more and more women rose through the ranks, from Auxiliary to Lieutenant to Captain and even as far as Major and Colonel, the problems of acceptance into the male-dominated army world continued (Meyer 73). The attitudes of soldiers, as well as the general public, were altered undeniably, forcibly, and historically, particularly with regard to women's leadership (Treadwell 669-670, 681-685, 699). It was unprecedented in American society that a man be subservient to a woman. Even everyday customs, such as holding doors or walking on the curb side of a street, were subject to role reversal in light of army regulations (Shea 174-176). Rank preceded gender on every level, beyond question. Soldiers had no choice but to respect their superiors, regardless of sex. It was the beginning of equal opportunity!

In spite of all the obstacles, the WAACs persevered in their work, contributing countless hours to aid the war effort. They served as secretaries and stewards, mechanics and machine operators. They learned Morse code and telegraph operations, convoy transport, and aircraft warning signals. They were trained in how to pack parachutes for skydivers and to draw weather maps and topographic maps (Shea 14-23). By the middle of 1943, after only one year of existence, the Women's Army Auxiliary Corps was considered essential to the success of the Allies. At one point, a suggestion was made to include women in the draft (Treadwell 95; Sherman 53). With no further doubts as to their capabilities as soldiers, a new bill was proposed dropping the auxiliary status and further integrating the women's corps into the regular army:

After more posturing about American womanhood, the traditional sexual order, the sanctity of the home, and, most important of all, concern for the possibility that women might command men, Congress agreed that the WAAC had been an experiment which had conclusively proven women's value. They deserved the "equal protection of the uniform and a recognized military status." (Sherman 57)

With the transition in status from WAAC to WAC, all enlistees were given the choice of remaining in the service or opting out. About twenty-five percent chose to leave; some expressed dissatisfaction with the organization; others, such as Mrs. Doben, wished to marry (in her case, a soldier) and pursue a different lifestyle. Still others reported feelings of isolation, unfriendly commanders or hostility from male enlistees as their reason for accepting discharge (Treadwell 227-229). Those who chose to remain were rewarded with full military status, which included access to many army benefits that were previously unavailable to women ("Waacs Come of Age ...").

By the end of World War II, there were over 99,000 WACs serving in nearly all capacities of the army, with the exception of combat duty (Treadwell 765-767, 770-771). All other branches of the military had also incorporated women into their ranks, with female navy, air force, and marine contingents to be found overseas as well as stateside (Sherman 56, 58; Treadwell 772-773). There were many casualties, and many more injuries in the line of duty. When victory was finally declared, 657 women were, for the first time, decorated for their valor alongside the men (Bellafaire). They could no longer be called exclusively homemakers or housewives; they could no longer be categorized as shy, timid, or submissive creatures. These women proved to America and the world that they were as decisive and capable of leadership as any man. Their discipline could not be questioned. It was a milestone in women's history, however tainted with bloodshed and grief.

My grandmother, Elayne Doben, joined the WAACs on January 30, 1943, exactly one day after her twenty-first birthday. She enlisted seeking adventure, travel opportunities, and a sense of purpose in life. As a Jew hearing reports of the Nazi advances and the massacre in Europe, she, like most of the women, hoped that her efforts-in her case, as an administrative aid-would bring the Allied forces to a swift, decisive victory. While necessity forced military leaders to accept women into their ranks, the WAAC's unparalleled vigor and indispensable skills paved the way for a changing country to recognize the value of a woman in uniform. But their success in this arena was only one aspect of a larger success: the continuing emancipation of women from the restrictive roles they had played for centuries, the palpable shift in attitudes of America and Europe towards the previously unchallenged dominance of men in the social structure, and the re-evaluation of custom and tradition with respect to male/female relationships. As historian Mattie Treadwell writes, "In a world where new frontiers had been hard to find, they had found one; in an age where pioneers and their problems were a memory, they had been pioneers" (764).

References

- Adams-Early, Charity. *One Woman's Army: A Black Officer Remembers the WAC*. College Station, TX: Texas A&M University Press, 1989.
- Baldwin, Nona. "Bill to Put Women in Army is Passed: Senate Votes 38 to 27 to Enroll Them in Service Auxiliary Corps." *The New York Times* 13 May 1942: 21. 9 June 2007 Times Select Archives.
- Bellafaire, Judith A. "The Women's Army Corps: A Commemoration of World War II Service." *CMH Online*. February 17, 2005. U.S. Army Center of Military History. 12 June 2007 http://www.army.mil/cmh-pg/brochures/wac/wac.htm.
- Doben, Elayne [Veteran, Women's Army Auxiliary Corps]. Personal interview. New York, NY. 16 June 2007.
- Engel, Barbara Alpern. "The Womanly Face of War: Soviet Women Remember World War II." Women and War in the Twentieth Century: Enlisted

- With or Without Consent. Ed. Nicole Ann Dombrowski. New York: Garland, 1999. 138-159.
- Fisher, Lt. Col. Diane R. "Trail Blazers: U.S. World War II Military Women." *Military Review* 75.4 (July/August 1995): World War II Almanac: n.p. 10 June 2007 EBSCO Military & Government Collection.
- Mallon, Winifred. "Women Corps Bill Likely to be Voted: Washington Officials Believe Congress Will Adopt Plan for Army Service." *The New York Times* 23 Jan. 1942: 22. 9 June 2007 Times Select Archives.
- Meyer, Lisa D. Creating G.I. Jane: Sexuality and Power in the Women's Army Corps During World War II. New York: Columbia University Press, 1996. 51-54, 71-74.
- Rasa, Mary."The Women's Army Corps." *Gateway: History and Culture* (Stories). n.d. National Park Service. 10 June 2006 http://www.nps.gov/gate/historyculture/stories.htm.
- Shea, Nancy. The Waacs. New York: Harper, 1943.
- Sherman, Janaan. "'They Either Need These Women or They Do Not': Margaret Chase Smith and the Fight for Regular Status for Women in the Military." *The Journal of Military History* 54. 1 (January 1990): 47-78. 10 June 2007 JSTOR.
- Treadwell, Mattie E. *U.S. Army in WWII: Special Studies: The Women's Army Corps*. Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1953. (This publication may also be viewed online in its entirety at: http://www.army.mil/cmh-pg/books/wwii/Wac/index.htm#contents).
- "WAACs 'Come of Age'; May Lose One 'A.' " *The New York Times* 11 Feb. 1943: 15. 10 June 2007 Times Select Archives.
- Young, Helen-Praeger. "Why We Joined the Revolution: Voices of Chinese Women Soldiers." Women and War in the Twentieth Century: Enlisted With or Without Consent. Ed. Nicole Ann Dombrowski. New York: Garland, 1999. 92-111.

Humbling

Alex Lozada

I have often asked myself, "What have I learned?" in a given situation. I have leaned from my mother love and compassion. I have learned from school to be book smart and have aspirations. I have learned from the streets self-preservation and common sense. I was taught and have learned well in all aspects of life; however, I was not taught balance. The question I neglected to ask myself was, "Where do I find or learn balance?" As my mother watched me go in my own direction (in my teen years), she envisioned me going down the wrong path, and I surely was. When I was younger, my family was always moving around, so I never had friends for an extended period of time. High school was where I settled in the longest, so the friends that I made there were to be my niche. I was hanging out in the streets late at night with my "boys," smoking and drinking and causing a ruckus. We thought we were cool and we also thought we were invincible. We were in our own little world of delusional grandeur. We thought that getting harassed by cops from time to time was a war story for our peers. And in my pleasure of regaling them with our escapades, I lost myself.

One summer night I came home after one of my outings and my mother stopped me to have a talk with me. No, not a talk where she was inquiring about my night, but a talk that was asking me where I was going in life: what am I to make of myself? She told me what I learned at home and at school should not be thrown away so easily. She mentioned to me where I could find the balance I didn't know I needed and should've been looking for. "Join the military," she said. And after much deliberation I did just that, given my other options at that time: going to school (which I was tired of at that stage in my life), bouncing from job to job, running the streets, winding up in jail, or worse yet, winding up dead. With the military branches that the U.S. had to offer, I decided to join the one I knew the least about, the Marines.

Immediately upon entering boot camp at Camp Lejeune in North Carolina on September of 1997, I was "broken down" and the process of being remolded was begun. On the one hand I was looking forward to joining the Marines. On the other hand, I had a problem with authority and being told what to do, so boot camp did not sit right with me. Not to see the light of freedom for three months! My platoon, which consisted of forty to fifty recruits, was stripped of the streets and our families. We were also stripped of ourselves, made to speak in the third person. We did not deserve the word "I," but rather "this recruit."

The first step was physical training. Remove the fight from the dog by exhausting it, so the foundation can be built. On the other hand, I did not lose my fight but rather allowed them to mold and teach. Just like a sponge I was ready to soak up the knowledge and filter out the "garbage." I was not going to allow myself to be brainwashed and roboticized, for I was not bred to be a living robot nor a mindless drone. In the beginning, exercise and lectures were on a daily basis. During the lectures they sat whole companies (about six platoons each) in auditoriums and rambled on for what seemed like hours on end. The lectures were boring, ranging from old war stories to the birth of the Marine Corps. Although the lectures were boring as all hell, I learned to pay attention even in the most tiresome of moments. If I or any of my comrades fell asleep during these lectures, we would all be punished. This taught us to look out for the man next to us, so uniformity was the key.

In order to succeed, we had to throw selfishness out the window, just like the Musketeers: "All for one, and one for all!" Punishment would translate to more exhaustion, i.e. physical workouts such as cleaning the barracks in the most obscure manner, yet with the exercises having the most creative names. One such exercise was the Indy 500. Garbage cans were filled to the brim with soap and water, then kicked over. Our objective was to mop up the floor, and push the water out of the entrance door, but we had to use our towels. Starting from one end of the barracks we were lined up in a track and field runner's starting position with towels in hand ready to race to the door, and this had to be done over and over until the floor was dry enough to walk on. The Quarter Deck was a more centralized "workout area," and one did not go to the Quarter Deck for being a good recruit. Outside the Drill Instructor's hut was where the sweat puddles formed. I recall the floor being a cold, hard, olive green slab of cement with red orange tape squaring out the perimeter. Here the workouts were more intense, and my disposition towards my situation made me a glutton for punishment. Cycling through exercises, my body had to use the muscles that were not in general use; we went from jumping-jacks to push-ups to sit-ups to leg- lifts and other exercises I had never heard of before.

To build upon camaraderie and cohesiveness, we camped out in the wilderness and had to complete a slew of tasks and overcome obstacles that would utilize our whole squad. A squad had ten to twelve recruits, and a platoon four squads. We'd have to transport an injured member of our squad out of the hot zone and into the safety zone, or transport supplies to a designated area. This taught us to work with what we had, to adapt and overcome. We were taught to be the McGyvers of the military, the so-called A-Team.

When it came time for hand-to-hand combat or CQC (Close Quarters Combat) and rifle training, safety was of utmost importance. In CQC the use of deadly force was for self-preservation. I learned to give it my all, so that if it ever came time for the real deal we would be prepared for the worst. If I were to go in half-heartedly, it would be a disservice to me and my combat buddy. On the rifle range, safety for the man next to us was key, for we carried live ammo on the range. We had to be ever vigilant and aware of our surroundings because we

were shooting a target at five hundred yards down range. It was imperative that no one was ever in front of the muzzle even if the weapon was not loaded. The safety was always on lock until our fingers were on the trigger.

The Crucible was the apex of three long and arduous months. The culmination of all that we learned was packed into fifty-four hours with eight hours allotted for sleep. Altogether there was about a forty-mile hike; we were loaded with gear. I realized while I was going from station to station what we had done and what was done to us from day one was not for naught. Even the lectures gave me a sense that I was upholding a sense of history and tradition even while I was pushing through the "final exam." When a member of our platoon would fall back we would pick up the slack, never leaving a man behind. We were as strong as our weakest link, and our moral support drove that link to strive harder. In the end I felt like I went through a rite of passage in becoming more of a man; I was no longer in rough waters. I filled a gap, I found balance. Surely today I still teeter as I continue to grow. I am still defiant to authority in my own way, but only when it impedes my satisfaction, my well-being. Finally, I am careful not to deviate from the golden rule, "Do unto others"—or with my spin on it, "Look out for others."

An Ordinary Man

Marcia Sellers

In all likelihood, it may have been the unrelenting heat of the sun against my browning skin or the distant tune on the radio of "Big Girls Don't Cry." I am uncertain. Yet, the memory of that day feels as real as the day itself. Looking back, the signs were present, but were ignored. The house was like a kettle on a stove. Eventually the mounting pressure would release and the whistle would blow.

I recall struggling to breathe, and realizing at any moment the next breath could be my final one. His hands were powerful, and smelled of rage. His eyes were as dark as a moonless night. Yet, they changed. Perhaps, it was the mirror image of his rage or the unyielding image of determination shining from my eyes. I would like to believe it was my newfound strength he saw. For I had decided the abuse would end. No more unexplained blows, no more disconcerting words which tear at the soul, and no more lies. But I know my life was spared because I was not alone. My strength encouraged others not to accept injustice any longer. I have had a lot of time to reflect on that period of my life. Who was the victim? Was it my hard-working mother who tried to distract her children from the horrors with materialistic objects? Was it the children who struggled to understand why a parent would harm them when every family's television showed warm welcoming parental love? Or, was it my father who was devastated by the sudden loss of his eyesight?

After the birth of my eldest daughter, I again questioned my childhood. How could love turn into such ferocity and resentment? Humanity is truly in despair. I have come to terms with my past. I respect it and understand that it has revolutionized my life and made me the person I have become. Understanding unforeseen events transforms the individual; I have moved forward in life. Always I have chosen virtue and struggled with my impiety.

In Paul Rusesabagina's autobiography, An Ordinary Man, the reader is given a chilling account of the genocide of 1994. The reader is introduced to the two major tribes in Rwanda: Hutu and Tutsi. An invisible line separates the two tribes controlling their thoughts and beliefs. The hatred for each other stayed buried underneath traditions and government policies. Rwanda's history is polluted by rhetoric, a rhetoric which ignited the Hutus to initiate a mass murder of the Tutsi people. Rusesabagina sincerely urges Rwandans to pride themselves on their ability to recount particular moments in history. "It is a rare person here, even the poorest grower of bananas, who cannot rattle off a string of

significant dates....They are like beads on our national necklace: 1885. 1959, 1973, 1990, 1994," says Rusesabagina (14). Nonetheless, Rwanda's history was defined by outside influences. A British explorer, John Speke, decided to differentiate the two tribes (17). The Tutsi were chosen as the elite. Physically, biblically, scientifically, and intellectually, Tutsi were considered superior. And, so an ideology became a belief system through references to the Bible that were solidified by the publication of text. Constantly hearing of their worthlessness, the Hutu were primed for action, driven by self-loathing. No longer were the Hutus able to see their Tutsi countrymen as people. Only when you dehumanize individuals can your soul allow you to butcher, rape, and exterminate another race of people. All that had been set in place had destroyed the Hutus' confidence. They were compelled to adopt a novel response, violence.

Rusesabagina insists society has failed to remember the potential of words. Words can shift a person's sentiments and provide control in an uncontrollable situation. Rusesabagina claims his nature, "I am not a politician or a poet. I built my career on words that are plain and ordinary and concerned with every detail"(xvi). When one makes a conscious effort to become an individual and reject conformity, force is not needed to bring forth change. And so, it becomes a person's responsibility to emerge as an individual.

Ralph Emerson's essay, "Self-Reliance," addresses the rise of the individual:

There is a time in every man's education when he arrives at the conviction that envy is ignorance; that imitation is suicide; that he must take himself for better, for worse, as his portion; that though the wide universe is full of good, no kernel of nourishing corn can come to him but through his toil bestowed on that plot of ground which is given to him to till. (10)

Emerson would agree that Rusesabagina was a true individual. He did not succumb to the overwhelming violent behavior of his fellow Hutus. Wisdom is achieved by a realization that life is orchestrated by the choices we elect. We can choose to stand— or fall together in ignorance.

A series of events galvanized the people to commit the genocide of 1994. Rusesabagina refutes the idea that the genocide of 1994 was directly linked to the fear of a sudden loss of Hutu power or "a pointless bloodbath that happens to primitive brown people" (53). The leaders and the wealthy of the Hutus recognized the Tutsi, the Rwandan Patriotic Front, were indeed gaining ground, which posed a threat to the Hutus' continuing reign. Shrewdly, the Hutus utilized strategic devices to ensure Hutu control. Established in August, 1993, Radio-Television Libre des Mille Collines, also known as RTLM, organized by a professor of history, supplied dodgy rhetoric for the daily lives of the Rwandans. The radio station RTLM blasted messages of hatred painting a picture of the Tutsi as the enemy. Slowly, the jargon of the radio station became acceptable ideology. The seed was planted and it was carefully, meticulously, cultivated. The media took on several forms. *Kangina* (Wake It Up), a newspaper, brought forth a print form of the dangerous rhetoric. The publisher was proficient in

exploiting rising fear. He sensationalized the dark thoughts of Hutus and produced entertainment (65). In response to the rising fear, an influx of machetes was shipped by various overseas suppliers and purchased by the general public. If you voice dark thoughts until they become not an ideology, but a belief, and meanwhile place a physical weapon in a hand, you have designed a formula for genocide.

Rusesabagina claims the genocide of 1994 could have been avoided if certain factors were put into play. Societal law and order are futile when power and money are threatened. Rwanda's history depicted the Hutu as inferior. American Indians believe that once words are spoken they become true; Rwanda's Hutu internalized this belief system and grew into their label. This drove the majority to seek reprisal and gain power. Yet, the invisible line remained. In a state of constant fear, Rwanda's Hutu leaders and wealthy sought any means to maintain their reign. It is human nature to protect what you cherish most. And so, they decided on any means necessary and abandoned societal law and order. As for the common Hutu, they were simply puppets performing what the Hutu elite could not bear to do. If for one moment the common Hutu had questioned their actions and all that preceded the genocide, perhaps more individual thinkers would have emerged.

The individual rejects conformity. The individual reflects and devises a system that will not only be true for him or herself, but for everyone. The individual believes humanity is essentially good. Overwhelming circumstances destroy the equilibrium of virtue and malevolence. Rusesabagina is the individual. Terror and chaos besieged him; his life was incessantly threatened. Yet, he faced adversity and his weapons of choice were words. Rusesabagina fulfills the predetermined destiny of a great leader. Out of the iniquity, an individual is transformed and becomes a fervent voice amongst a sea of machetes.

An additional favorable outcome of the genocide of 1994 was the sense of community within the Hotel Mille Collines. Rusesabagina asserts Rwandan life continued to progress within the walls of Hotel Mille Collines. Weddings, and new life are examples of the progress of normal life. The once eternally present line which separated Hutu and Tutsi was no more. It was replaced by a conventional need to survive in the midst of pandemonium.

It is imprudent to suppose we are not given a choice in life. To believe change can only materialize through force, violence, or intimidation is a modus operandi for destruction. The genocide of 1994 is a clear reminder of this.

References

Emerson, Ralph Waldo. "Self-Reliance." *Lead, Follow, or Move Out of the Way: Global Perspectives in Literature.* Dubuque, IA: Kendall/Hunt, 2005. 9-26.

Rusesabagina, Paul. An Ordinary Man. New York: Penguin, 2006.

Advances in Cryptology: An Introduction to Quantum Cryptography

Johanna N. Barreto

The following discussion presents the development and growth of cryptology. It explores the very first methods used to hide secret messages from unauthorized individuals; the ones utilized today; and finally, promising methods for the future. The battle between code makers and code breakers, and the advances of technological innovations, have forced the continuous development of cryptology. The world depends on security to prevent identity or property theft. The purpose of this work is to identify some cryptographic techniques that can be used to securely transmit data through computer networks.

Cryptography (in Greek *crypto* means hidden and *graphein* means to write) is the art of developing secret codes and ciphers. Cryptanalysis is the art of breaking them, often called eavesdropping. The study of both is cryptology which is mostly used in network security. It involves software to create algorithms, and hardware to send and receive information. This project concentrates on the following types: Classical, Modern, and Quantum Cryptography (Singh).

Classical cryptography started two thousand years ago with the need to secure communications. Kings, queens, and heads of the military relied on it to protect their country or themselves from the enemy. Fear was the main motive that generated the creation of secret codes and ciphers. Prior to that, messages were hidden instead of coded, which came to be known as steganography (in Greek steganos means covered). For instance, a message was hidden within a hard-boiled egg; ink made from aluminum and vinegar was used to write on the shell. The ink penetrated the shell and the message would become invisible. Only the intended recipient could read the message by removing the shell. However, any method that is discovered by the enemy forces a change to create a better method. Julius Caesar was the first one to implement a substitution cipher (Caesar Shift) that consisted of shifting the letters of the alphabet a number of places to the right or left. Cryptanalysts began to use frequency analysis to encipher the intercepted messages. In the English language, some letters are used more often than others. For example, the letter e has the highest frequency while the x has the lowest. Such a sophisticated technique was challenged when a polyalphabetic substitution cipher was implemented. It utilized more than one Caesar shift to encrypt the message (Vigenère Shift). It was an added security feature, but it was not invincible. These methods, however, stood strong for decades, helping win and lose wars between countries or opposite parties (Bosworth; Singh; Washington).

Modern cryptography has reached a very high level of security to protect government and banking transactions. It involves complicated mathematical functions that only a computer can solve within a reasonable time. The creation of integrated circuits and of computers facilitated the advancement of cryptology. On the one hand, cryptographers could input a plaintext and let a computer program output the corresponding cipher-text. On the other hand, cryptanalysts could check for thousands of possible keys that would produce a meaningful plaintext. What makes it possible for methods such as the DES and RSA algorithms to be secure is the time it takes to find the secret key. The DES (Data Encryption Standard) was first submitted by IBM with the name Lucifer to the NBS (National Bureau of Standards). The NBS or NIST (National Institute of Standards and Technology) made it the official data encryption standard in 1977. The major concern up to this point had been the "key distribution problem," because the sender and the receiver needed to have met at least once before to coordinate the key. Another alternative is to send a courier with the key which reduces the security of the system and increases the expense. The objective was to find a way to encrypt a message without the inconvenience of the key distribution. The solution was a Public Key Cryptosystem that consisted of two different keys: the public key and the private key. The RSA uses that technique, providing more security and freedom to send the public key through a corrupted transmission cable. The RSA was proposed by Rivest, Shamir, and Adleman in 1977. This method has proven to be effective and is now being used by banking institutions and government agencies (Singh; Washington).

Quantum Cryptography is the newest and most secure way to protect data traveling in a network. The data is translated into light pulses and its carrying-channel is an optical fiber. Fiber optics is a leading-edge technology that is already replacing the traditional metallic cables because of the safety and speed of its transmission capability. This subject is still in research and development. It is based on quantum mechanics and physics because in principle it can perform computations that classical computers cannot. One of the characteristics that makes Quantum Cryptography secure is that the data will never be compromised by an intrusion because only by observing the light will the pulses be changed. In addition, the intrusion can be detected by the sender and receiver for the same reason (Hesseldahl).

Caesar Cipher

Each letter of the message is shifted a number of places to the right or to the left in the alphabet.

Alice (sender) and Bob (receiver) must agree in a secret key to be able to encrypt and decrypt the messages they wish to send to each other. The key is the number of places in the alphabet to be shifted (Bosworth).

The encryption takes that key and shifts each letter in the plaintext that number of places to the right.

The decryption takes the key and shifts each letter of the cipher-text to the opposite side, to the left.

Frequency Analysis: Cryptanalysts began to use frequency analysis to encipher the intercepted messages. For instance, the letter e has the highest frequency while the x has the lowest. Even with the Caesar Shift, there will be one letter that appears more often than others and that will most probably be the substitute for the letter e.

Vigenère Cipher

The Vigenère cipher is a poly-alphabetic substitution cipher that involves the use of two or more cipher alphabets. A secret word is used to identify which cipher alphabet to use with each and every one of the letters. The secret word is repeated as many times as necessary to encrypt all the letters of the plaintext. The process starts by identifying the first letter of the keyword which tells us that the cipher alphabet starts with that letter. Then, the first letter of the plaintext is going to be encrypted according to that alphabet. The second letter is going to be encrypted according to the second letter of the keyword. It is simply a different Caesar Shift for each letter of the plaintext.

It is meant to increase the security of the communication between Alice, the sender, and Bob, the receiver. Eve, the intruder or eavesdropper, cannot use the Frequency Analysis technique to reveal the message (Singh).

For cryptanalysts, it became more difficult to break this cipher. However, if the message were long enough, frequency analysis could be possible by finding

the length of the key. Frequency analysis could be used separately on the letters encrypted by the same letter of the keyword.

DES Algorithm

The DES Algorithm follows a set of standard steps to encrypt a message. The decryption process, as always, is the inverse of encryption. It is a block cipher, which means that it takes a block of sixty-four bits, and encrypts each block separately. The message must be converted into its binary ASCII equivalent. A binary number is a string of ones and zeros, each representing a bit. A single character is stored in bytes and a byte represents a group of eight bits. Therefore, the DES takes eight characters at a time for encryption, and then takes the following eight characters separately (Washington). The algorithm involves permutations and XOR bit-wise operations.

The DES is faster than the RSA Algorithm, which makes it more suitable for the fast world we live in. The RSA, then, is used to encrypt the DES key which solves the "key distribution problem."

RSA Algorithm

The RSA Algorithm has proven to be the most secure and convenient method for the encryption of messages. Although it is easier than the previous method, DES, a computer can take longer processing the information. That is the reason why the RSA is most often used to send the secret key needed for methods such as the DES, instead of being used for the encryption of a message. It is called a "Public key cryptosystem" or an "Asymmetric system" where there are two separate keys, one for encryption and the other for decryption. All the previous methods are called symmetric due to the fact that Alice and Bob have the same key.

Bob has the two keys: the private key (must be kept secret) and the public key (can be published in a phone directory or on the Internet). Anyone who wants to send a message to Bob can look up his public key and encrypt the message using a standard formula. Neither Eve nor Alice can deduce the private key from the public key. Therefore, Alice can encrypt a message to Bob with his public key and he is the only one with the private key that can decrypt it (Washington).

RSA Algorithm:

- Step 1: Bob chooses secret primes p and q and computes n = p q.
- Step 2: Bob chooses the encryption key, e, with gcd (e, (p-1)(q-1)) = 1.
- Step 3: Bob computes the decryption key, d with d e^{-1} (mod (p-1) (q-1)).
- Step 4: Bob makes n and e public, and keeps p, q, d secret.
- Step 5: Alice encrypts m as $c = m^e \pmod{n}$ and sends c to Bob.
- Step 6: Bob decrypts by computing $m = c^d \pmod{n}$.

The only way for Cryptanalysts to find the plaintext is to factor n into its primes, p and q. By knowing the values of p and q, we can find the decryption key, d. However, the RSA is a one-way function: "It is easy to compute but difficult to invert."

The factorization of n is very difficult, almost impossible. This is what makes the RSA secure.

Quantum Cryptography

A quantum is an indivisible entity of energy. In Latin, *quantus* means "how much." For instance, a photon is a "light quantum" (Hesseldahl).

This is a new area of research that has the potential of guaranteeing absolute security in the future. It is based on quantum mechanics to secure communications because any attempt of Eve to read the quantum information will destroy it.

When a photon travels through space, it vibrates, and the angle of vibration is called the polarization of the photon. A Polaroid filter can pass the photons with the same direction as the filter and reject the ones perpendicular to it. Half of the diagonally polarized photons will pass through the filter, but these are reoriented to the direction of the filter.

Quantum Key Distribution (QKD): If Alice wants to send an encrypted message to Bob, then she can use the polarizations of photons. If Eve, the eavesdropper, wants to intercept this message, then she needs to identify the polarizations of each photon. She must choose the correct orientation of the Polaroid filter; otherwise she will probably get the wrong results. However, Bob is in the same position as Eve. He will guess the right polarizations only half of the time. In order for Bob to use the same Polaroid orientations as Alice, she has to get the list of polarizations securely to him, which leads to the "key distribution problem" (Gottesman).

Advantages of a Quantum System: Over an insecure channel (i.e. telephone line) Bob can tell Alice which scheme he used for each photon. Alice would tell Bob whether his choice was correct without actually revealing the direction of the original value (0 or 1). Alice and Bob can detect Eve's presence because Eve introduces errors to the transmission when measuring it with the wrong schemes. Therefore, Alice and Bob can discard those photons that have been corrupted.

Quantum computers are not yet a reality. However, they have the potential of solving certain types of problems much faster and more efficiently than a classical computer. In a classical computer, the data is measured in bits (0 and 1). In a quantum computer, it is measured in qubits ($|0\rangle$ and $|1\rangle$). Quantum computers could perform factorizations in real time, which will make RSA and other cryptographic methods useless (Hesseldahl).

Conclusion

The evolution of cryptology explores past, present, and future methods of encrypting and decrypting messages that prevent unauthorized individuals from taking advantage of such information. The battle between code makers and code breakers, along with advancing technological innovations, have forced the continuous development of cryptology. Quantum Cryptography is the most promising method to securely transmit data through computer networks. Quantum Computers will break any existing method like RSA and DES.

References

- Bosworth, Bruce. Codes, Ciphers, and Computers: An Introduction to Information Security. Rochelle Park, NJ: Hayden, 1982.
- Frequently Asked Questions. Mar 2007 http://www.tech-faq.com/cryptology.shtml>.
- Gottesman, Daniel, and Hoi-Kwong Lo. *Form Quantum Cheating to Quantum Security*. Mar 2007 http://www.physicstoday.org/pt/vol-53/iss-11/p22.html.
- Hesseldahl, Arik. *Special Report: A Quantum Leap in Data Encryption*. Nov. 6, 2006 < http://www.magiqtech.com>.
- Singh, Simon. *The Code Book: The Science of Secrecy from Ancient Egypt to Quantum Cryptography*. New York: Anchor, 2000.
- Washington, Lawrence C., and Wade Trappe. *Introduction to Cryptography with Coding Theory*. Upper Saddle River, NJ: Prentice Hall, 2002.

Bend-Insensitive Fiber

Joy L. Flores

Introduction

The ever increasing demand for bandwidth in the residential sector has pushed fiber optics manufacturers and service providers to develop Fiber-to-the-Home (FTTH) technology. Fiber has the highest transmission capacity, 25Tbps, of all mediums, but it is not as rugged and forgiving as copper. Current fiber installations in homes and buildings experience loss in signal strength because fiber has to be routed around tight corners, making it complicated and expensive to install. Sometimes holes would have to be drilled through walls in order to avoid bending the fiber optic cable, making fiber installations visually unappealing. Service providers like Verizon and fiber optic manufacturers like Corning are working closely together to develop fiber that can handle the smaller bend radii encountered in single-family units (SFUs), multiple-dwelling units (MDUs), and in-home wiring. Currently, only 5 percent of all FTTH installations in the United States are in MDUs (Deutsch, October 2007).

What is Fiber and How Does It Work?

A fiber-optic cable is made up of four basic elements: optical fiber, buffer, strength element and outer jacket. The optical fiber is a thin, transparent, flexible strand made of glass or plastic. The optical fiber consists of a core surrounded by cladding, which is covered with a protective coating. Its function is to carry a light signal. The buffer protects the fiber from environmental damage. The strength element protects the fiber from mechanical stress that may be encountered during installation and operation. The outer jacket holds all these elements together and provides further protection from environmental damage (Mynbaev, 2001).

The optical fiber carries a light signal by using a cladding with a refractive index that is less than the core's refractive index. This configuration achieves total internal reflection at the core-cladding boundary, but total internal reflection is lost when the fiber is bent. This is called bending loss. Bending loss occurs when the light beam traveling along the fiber hits the core-cladding boundary of the bent portion of the fiber causing the critical propagation angle to

become more than critical and therefore failing to achieve total internal reflection. There are two types of bending loss: macro-bending loss and micro-bending loss. Macro-bending loss is bending loss caused when the whole fiber axis is curved, such as around corners. Micro-bending loss occurs when there are imperfections in the geometry of the core-cladding interface (Mynbaev, 2001). Stapling fiber-optic cables to studs could cause micro-bending (Ross, August 2007).

Improving Bend Performance

Developments to improve the bend performance of optical fiber date back approximately twenty years. There are several ways to improve bend performance of a fiber. The core diameter can be reduced or the core's refractive index can be increased, or both. Another method is to reduce the refractive index of the cladding to less than that of silica glass by pressing the cladding fibers where a circular zone around the core is doped. This is called depressed clad fibers. A method called trench-assisted fibers can also be used. It is similar to depressed clad fibers but instead the doped circular zone is further away from the These methods have only produced small improvements. core. approaches were also developed to produce greater improvements in bend performance. The main approaches are known as hole-assisted fiber (HAF) and photonic band-gap fiber (PBGF). They provide greater improvement, but they are expensive to manufacture, difficult to connect, and are not backward compatible to existing standards defined by International Telecommunications Union Telecommunications Sector (ITU-T) recommendation G.652.D or current termination and field procedures (Deutsch, October 2007).

Standardization

The demand for better bend performance of fiber has led ITU-T to develop recommendation G.657 in 2006 to standardize the bend performance of these new types of fibers. Bend-improved fibers are defined by G.657.A, which limits improvement in bend loss to ensure backward compatibility with G.652.D, standard low-water-peak single-mode fiber. Bend-tolerant fibers are defined by G.657.B, where backward compatibility is not required so the focus is placed on improving bend loss (Deutsch, August 2007).

Recent Developments

Lucent, now Optical Fiber Solutions (OFS), was producing bend-insensitive fiber since the late 80s, but the first major breakthrough came in 2005 when, at the FTTH Council Europe meeting in Amsterdam, Nippon Telephone and Telegraph (NTT) introduced a fiber that could be tied in knots. The NTT fiber is known as HAF. The fiber can be tied in knots and maintain virtually zero loss because the cladding is manufactured with tunnels running parallel to the

core, relieving stress on the cladding when the fiber is bent. NTT's fiber was fine for user-installed networks but it was not meant to be fastened to the structure of a building and it was difficult to manufacture, expensive, and required special connectors (Ross, August 2007).

In July of 2007, Corning Inc. announced the development of optical fiber that is as forgiving and rugged as copper while still providing the bandwidth of fiber with virtually no signal loss (July 2007). Corning achieves this using nanotechnology. Corning calls its new development nanostructures optical fiber design. This design coats the core with reflective, tube-like nanostructures that guide the light back into the core when the fiber is bent, maintaining total internal reflection. In standard low-water-peak single-mode fiber, total internal reflection is lost when the fiber is bent. This causes some of the light to be absorbed by the cladding, resulting in some signal loss. This is unacceptable in an MDU installation, which requires the fiber optic cable to negotiate many tight turns.

This process is completely synthetic so no mechanical work has to be done on the fiber as in HAF. This makes the manufacturing of nanostructures optical fiber easier and more cost-effective for FTTH installations. This design is capable of achieving the bend radii of 5mm that is required to be comparable to copper cable. It is also compatible to current termination and field procedures, and backward compatible with G.652.D. This new technology will also enable the design of cables, hardware, and equipment, such as local convergence cabinets, that takes up less space, is lighter, more visually pleasing, and easier to get permits for (Deutsch, October 2007).

Concerns

There has been some concern expressed about how this new fiber will handle the abuse it will encounter in an actual construction environment where kinks can occur when a cable is pulled taut during installation. The fiber may initially work but these kinks could be a major problem over time. To minimize the chance of kinking, designers advise using ducts to run fiber through. There is also some concern as to how it will handle sag when it is horizontally installed, especially in garages and attics where there are extreme changes in temperature. There have been mechanical stress problems reported. When fiber is installed during the cooler season, the sag increases when summer comes around. Also, if installed during the hotter season, the cable goes taut when winter rolls around (Ross, August 2007).

Corning has reported that it has thoroughly tested the thermal and mechanical performance of its nanostructures fiber in their labs. Corning has also started testing its fiber in an actual building in mid-September, 2007. Corning introduced its nanostructures collection of optical fiber, cable, hardware and equipment at the FTTH Conference in Orlando on September 30, 2007. This collection is known as the Corning ClearCurve solution and they reported that the fiber would be ready for distribution towards the end of 2007 (July 2007).

Future Trends

Verizon has said that it will be ready to use Corning's nanostructures optical fiber when it becomes available. In "Corning Intros New Bend-Insensitive Fiber Technology," the Corning president and chief operating officer, Peter F. Volanakis, said, "There are more than 680 million apartment homes worldwide, including more than 25 million in the United States. The high cost of installation and difficulty in delivering fiber to the home made this market unappealing to most providers. We have been working closely with these carriers to create a solution that will make this more economically viable for them and for their customers" (July 2007). Once Corning's nanostructures optical fiber is made available, I believe we will see a massive deployment of FTTH in this market in the coming years. We should also be seeing further development in end equipment to take further advantage of fiber's bandwidth capabilities.

Conclusion

It seems like not so long ago I was using dial-up. Technology changes so fast and seems to be able to overcome just about any obstacle in its path. With this new technology, the telecommunications industry should be able to satisfy society's hunger for bandwidth. This may help create more jobs to handle the deployment of FTTH in areas where it was previously impractical. It may even help improve the economy. In the pursuit of satisfying society's insatiable appetite, we must keep in mind that we want to be as environmentally friendly as possible. Only time will tell what the future may bring.

References

- "Corning Intros New Bend-Insensitive Fiber Technology." *Lightwave.* 23 July 2007. 30 Nov. 2007

 http://lw.pennnet.com/articles/article_display.cfm?Section=ARCHI&C=NNEWS&ARTICLE_ID=300848&KEYWORDS=Corning&p=13
- Deutsch, Bernhard, and David R. Velasquez. "Bending Over Backwards." *Corning*. Aug. 2007. OSP. 30 Nov. 2007

 http://www.corning.com/docs/clearcurve/EVO_757_Bend
 %20Technology.pdf>.
- Deutsch, Bernhard, and David R. Velasquez. "New Technology Provides Breakthrough for MDU Fiber Installation." *Corning*. Oct. 2007. Lightwave. 30 Nov. 2007 < http://www.corning.com/docs/clearcurve/70320-203e.pdf>.
- Garvey, Patrick. "An Overview of ITU-T G.657: Characteristics of Bend Insensitive, Single-Mode Optical Fiber for Access Networks White

- Paper." *Corning*. Apr. 2007. Corning Incorporated. 30 Nov. 2007 http://www.corning.com/docs/opticalfiber/wp7115.pdf>.
- Mazzarese, David. "AllWave FLEX ZWP Single-Mode Fiber." OFS. June 2006. 30 Nov. 2007
- Mehta, Stephanie N. "Bend It Like Corning." *Corning*. 6 Aug. 2007. Fortune. 30 Nov. 2007.
 - http://www.corning.com/docs/corporate/media_center/69738_E_Print_R1.pdf>.
- Mynbaev, Djafar K., and Lowell L. Scheiner. <u>Fiber-Optic Communications</u> <u>Technology</u>. Upper Saddle River, NJ: Prentice Hall, 2001.
- Ross, Steven S. "The Inside Story: Corning's New Bend-Insensitive Fiber is a Wow." *Corning Cable Systems*. Aug. 2007. Broadband Properties. 30 Nov. 2007
 - http://www.corningcablesystems.com/web/library/litindex.nsf/\$all/EVO-803-EN.pdf.

CAD/CAM System Technology

David Kim

The development of innovations in restorative dentistry is a continuous, ongoing process. Historically, dental technicians have dealt with creating and manipulating small objects entirely by hand. The advent of new technologies has brought more efficient and automated ways of fabricating dental units. The revolutionary technology that interests me is the CAD/CAM system. CAD/CAM stands for computer-aided design and computer-aided manufacturing. CAD/CAM dentistry is an area of dentistry that utilizes CAD/CAM technologies to produce fixed dental prosthetics, such as crowns and bridges. I will elaborate on the advantages and disadvantages of such systems and the impact they will have on the dental lab industry.

Of about 50 million crowns made each year in the U.S. approximately one million are CAD/CAM-produced (2006, October). Although traditional crowns continue to dominate the market, there is growing interest and availability of CAD/CAM systems. There is a lot of discussion in the industry these days about the future of dental technology and whether digital technology is going to cause a sudden dramatic change in the way people perform their work. It is a confusing time for laboratory technicians and owners, as well as dental tech students, as we are in the transitional stage of beginning to rely more on digital technology. I suppose the support for this digital technology is uneven with some dental technicians welcoming CAD/CAM and others, probably the majority, fearing such changes, and understandably. Instead of ignoring the fears about what is bound eventually to become mainstream (perhaps not so much for people that have been working in this industry for decades and nearing the end of their careers, but more for people like myself that are new to the field), we should

learn more about these innovations and find out what all the hype is about. Once we get a grasp of it, then we can decide whether it is worth learning and investing time in, instead of having to be coerced to learn it for the survival of your business because your competition decided to be open-minded years before you.

The adoption of CAD/CAM systems is slowly growing. Although this technology has been available to small business owners for over a decade, only now is it starting to become more affordable. The best CAD/CAM systems can go for up to \$200,000, but more and more manufacturers are now offering affordable standalone scanners (Calabro, 2007 January). What this means for lab owners that use CAD/CAM is an efficiently made high-quality product. The crowns made using CAD/CAM are very durable, made of a material called zirconia. "This strong, biocompatible, esthetic, radiopaque, cementable material is being embraced by dentists and it's driving the demand for CAD/CAM systems used to mill and fabricate zirconia, as well as other understructure materials" (Carr, 2005 November/December). The CAD/CAM process also eliminates a number of steps that are subject to human error and cause distortion. The elimination of steps and daily mishaps leads to a decrease in time to fabricate the fixed prosthetic. A decrease in time to make a crown means a dental lab can accept more cases and add more dentists to the client list, and therefore make a lot more revenue than before the implementation of the digital system. These systems also allow for a wider range of customization of the crown, which in the end allows for a more pleasant and shorter experience for the patient of the client-dentist.

Now, onto the more controversial parts of this technological wonder. Other than the high cost of purchasing a CAD/CAM system and its implementation, there are other issues people in the dental lab industry will eventually have to face. Once this digital technology becomes affordable enough to start to affect the competitiveness of dental labs that lack CAD/CAM machines, many jobs could be lost. Or even worse, customers may decide to buy CAD/CAM systems themselves. To date, more than 5,000 dentists in the U.S. have purchased chair-side CAD/CAM systems, and many laboratories have reported a noticeable decline in work from these clients (Marsico, 2006 September).

As these CAD/CAM systems become more advanced with more models of machines to choose from, and inevitably become cheaper, it's only a matter of time before every laboratory has one of these machines. Many jobs will be lost, but in the long run adjusting to the CAD/ CAM systems will mean the survival of a dental lab. These CAD/CAM systems will undoubtedly drop the prices for fixed dental prosthetics just as outsourcing and "McDental Labs" are doing today, but on a smaller scale, making the future outlook of dental lab business even tougher. From the looks of it, the industry will continue to thrive for at least another decade or so, but the future is up to individuals themselves; if we want this technology to come, it will; if not, manufacturers will simply lose interest in developing it.

References

- Calabro, K. (2007, January). CAD/CAM: In high gear at California symposium. *LMT Communications*. Retrieved November 3, 2007 from http://www.lmtcommunications.com/articles/cal_symposium.asp
- Carr, K. (2005, November/December). The Digital Revolution-DLOAC attendees eager to ride the wave. *LMT Communications*. Retrieved November 3, 2007 from
 - $http://www.lmtcommunications.com/articles/digital_revolution.asp$
- (2006, October). Digital technology: Is it a tipping point or a shift? *LMT Communications*, Retrieved November 3, 2007, from http://www.lmtcommunications.com/articles/digital_DTA.asp
- Lesh, D. (2006, April). 10 tips for choosing a CAD/CAM system. *LMT Communications*. Retrieved November 3, 2007 from http://www.lmtcommunications.com/articles/cadcam_10tips.asp
- Marsico, M. (2006, September). 6 ways to compete with chair-side CAD/CAM. *LMT Communications*. Retrieved November 3, 2007 from http://www.lmtcommunications.com/articles/chairside_cadcam.asp

Frank Gehry's IAC Headquarters

France-Irene Morusma

Once upon a time: Frank Gehry!

Frank Gehry has taken on an almost Le Corbusier status recently. When one hears of a Frank Gehry building, one thinks innovation, creativity, and surprise and, most often, acontextuality and modernity.

I find all of this to be true of what used to be a truck garage, the IAC Headquarters located at 555 West 18th Street, New York, on the West Side Highway across from Chelsea Piers. It was completed in 2007.

I was hoping that seeing pictures of the IAC/InterActive Corp building wouldn't spoil the fun. It did not. But as in the pictures, the building seems to disappear in the clouds, like a sail. With its white-washed glass and curvilinear exterior, it seems to meet the clouds. Great angles of this building can be seen from two city blocks away on 18th Street. The structure sits at the corner of 18th Street and the West Side Highway, yet it appears to have more than one "corner" due to all the ins-and-outs of the glass exterior.

The building's acontextuality is loud. There are no other buildings in the vicinity like it, none with a glass exterior, none with so many angles, none creating this cloud-like or sail-like experience. On the other hand, it maintains the average height of the surrounding structures. But that average height won't last long. New construction adjacent to the IAC is going up. For example, an 11-story building by Annabelle Selldorf, Jean Nouvelle's 20-story condo, and a condocum-gallery by Shigeru Ban and other apartments by Robert A. M. Stern and Neil Denary are in the works ("He'll Take Manhattan," 2007).

Presently surrounding the IAC site are schools, truck garages, storage warehouses, a women's prison and, across West Street, the well known Chelsea Piers. The building is surrounded by structures with stone facades, and others of heavy masonry facades, none as modern as the IAC.

The innovation of the structure is that it is made of all reinforced concrete slabs and columns. It's a concrete superstructure. The columns, instead of being vertical, were erected with a tilt, lending to the unusual shape of the skeleton hence also the exterior. Lasers were used as a guide for proper positioning of the columns (http://iacbuiding.com/interactive/content.html).

Enclosing the structure is the glass curtain wall. Each sheet or panel was individually designed, first on a model, then with the data fed to the fabricator. Out of the total 1,450 curtain wall panels, 1,150 are unique. They were

manufactured or sent flat, then underwent cold warping. The curvature in the glass was achieved by cold-bending it on-site. It is the tensile strength of the silicone adhesive anchoring the fourth corner of each sheet of glass that lends to its flexibility, and that determines a maximum torque of up to four inches. The three corners were first connected, then the fourth was manually forced into place. A special anchoring system was designed to absorb tolerances between frame and wall. The anchors, of vertical and horizontal aluminum brackets, bolt to the slab edge, then slide three dimensionally until the connection point is found. As with the tilted concrete columns, a 3D model, in conjunction with a GPS system and lasers, was used to find the exact location ("He'll Take Manhattan"; http://iacbuiding.com/interactive/content.html).

The glass surface, clear across the middle section, shades gradually to opaque white due to mini-ceramic frit dots, the densest at the top and bottom of each sheet of glass.

From the outside of the IAC building, standing close to the glass, one can see the inside through the unobstructed view which is about eye level. One can see that the form of the lobby follows the form of the exterior. As you gaze up a few floors, also from the outside, you see the set-up of the cafeteria also follows the form of the exterior. Looking back at the open floor plan rendering which follows linear design of cubicles against a linear exterior, you see form seems to follow function. On the east side, you find the only point in the design where it does not curve like the other facades. The arrangement of desks and chairs seems the curves of the wall of the within (http://iacbuiding.com/interactive/content.html).

Looking for the entrance with only the help of the IAC dark blue and yellow logo, we see the glass doors continue with the glass curtain wall making the entrance difficult, rather than easy, to find. I understand this since an overhead or lighting or support of any kind announcing the entrance might take away from the exterior design of the building. The two entrances, one on 18th Street and the other on 19th Street, are not particularly dramatic in any way.

Once inside, in an open forum, like in a gallery, you are greeted by the security/reception desk, and then the dramatic 118-foot-long video wall, as you follow the curvilinear wall of the lobby. The video wall is an integral part of the design. It advertises a number of IAC brands, such as Ask.com and Match.com. It is somewhere between advertisement and art.

I would like to have seen Frank Gehry's Guggenheim Museum in person or some other work to compare that building with this one. However, at its present location, this structure, I would argue, is hardly tame. According to the *New York Times* review, the IAC building is a "...subdued tower of light..." in the sense that this structure is "...oddly tame..." (Ouroussoff, 2007). It's true, the entrance and part of the lobby were a little unimpressive in comparison to the surprise of the exterior. They seem tame when compared to the exterior. I could agree on that note.

Overall, however, the building is well executed and its form actually follows the specifications to reflect the client. I can imagine that each curve, angle, and corner would represent each of the more than sixty brands of the IAC.

References

He'll take Manhattan. (2007, April 4). *The Architect's Newspaper, Online*. http://www.archpaper.com/features/2007_06_iac.htm http://iacbuiding.com/interactive/content.html
Ouroussoff, N. (2007, March 22). Gehry's New York debut: Subdued tower of light. *The New York Times*. http://www.nytimes.com

William Orpen's Self-Portrait

Kevin Parker

Self-Portrait by William Orpen is currently on display at the Metropolitan Museum of Art. The painting was created in 1910 and was donated to the museum by Jacques Gelman and Natasha Gelman in 1914. The portrait is approximately 26 x 32 inches and is oil on canvas. The period in which the portrait was done is considered the modern period and the interesting aspect of this portrait is that it allows you to briefly become Orpen when you are viewing it.

The depth of the painting is displayed in the form of a mirror. The viewer looking at the painting can imagine himself as Orpen, although at first glance, you might not pick up on the details of the portrait, or know exactly what you are looking at. It appears Orpen simply wanted to capture himself in everyday life. This is a great example of realism in art.

The composition of the painting is interesting and works in terms of visual trickery. Orpen is placed in the center of the frame, which is within another frame that causes the viewer's eyes to be drawn to him. What appears to be merely a framed portrait within a frame is actually a painting of a large mirror on a shelf. Orpen is present in the painting because he is standing in front of the mirror looking at himself. The notes on the wall alongside the mirror are different colors and are like post-it notes or letters.

The precise duplication of the liquor bottles and a painting rag on the shelf below the mirror makes it clear that they are seen in the mirror. The various notes placed on and around the mirror create a feeling of space in the painting. Even though William Orpen is the main subject of the painting, you feel other areas in the painting get a lot of attention too. You may literally go from looking at a portrait, to imagining standing in the same spot as the artist, on the same day and at the same time.

William Orpen's *Self-Portrait*, displayed in the Jacques and Natasha Gelman Galleries, is very well placed. The setting of the gallery is similar to a formal living room, and the painting is on a wall with much open space around it, sort of the way a mirror would be. The space you are given to look at the painting helps you appreciate it visually. It is easy to become so drawn into the painting

that you feel you are looking through the eyes of Orpen just by looking into his eyes in the mirror in the painting.

In the painting Orpen is a very distinguished well-to-do young man. The shelf below the mirror holds paintbrushes and rags, the tools of Orpen's trade. One also realizes that he has an appreciation for alcohol because of the two bottles he has on the shelf. Orpen is painted holding a riding whip, which is most likely present to let people know that he is an avid horseback rider. The bowtie, derby hat, gloves. and striking pose give Orpen an appearance of a refined man, although his eyes seem to have a tone of anger.

Orpen's *Self-Portrait* will continue to intrigue all viewers who simply see it as a traditional portrait until they make sense of all the elements and realize that they are actually staring into a mirror. Some may even make a case that this is not a true portrait, but rather a picture of a mirror's reflection. Either way, William Orpen does a masterful job of creating a painting that challenges viewers' perceptions and is playful at the same time.

Liquor Liability: The Sale of Alcohol

Terri Lu

Drunk driving has long been a prominent cause of motor vehicle accidents in the United States, and there is no question that intoxicated drivers should be held responsible for their careless actions. But what about the bars and food establishments that served the alcohol to these drivers minutes or even hours before an accident? Should the drinking establishments be held liable for serving their patrons alcoholic beverages when that's the main reason they're in business? Forty-two states plus the District of Columbia have dram shop laws in effect that say yes to bars being liable, while eight states which have no such laws say no. The term *dram shop* comes from "18th century businesses in England that sold gin by the spoonful called a dram" (Legal View).

Dram shop laws, also known as liquor liability laws, "hold the server [of] alcoholic beverages liable for injuries or damages caused [by] a person who had been given alcohol when service should have been refused" (Saltz, 1993, p. 95S). Dram shop laws affect the hospitality industry deeply across the United States in numerous ways depending on the stance which the liquor liability laws of each state has developed. Dram shop laws differ between the states in the amount of liability and how narrowly or broadly these laws are interpreted (Legal View).

There are typically two types of dram shop laws, first party liability and third party liability. First party liability is "where the person served at a bar or restaurant injures him or herself and sues the establishment" (Perlik, 2004). There are some "dram shop laws [that] specifically prohibit the intoxicated person who has only injured themselves from filing suit" (Legal View). The second more common one is third party liability, "where an intoxicated person who was served [alcohol] injures a party who consequently sues the establishment that served the alcohol" (Perlik, 2004).

A majority of the states with dram shop acts have specific wording to describe the offense of serving alcohol to intoxicated individuals. It is illegal to serve alcohol to patrons who appear intoxicated along the following specifications: "obviously intoxicated, visibly intoxicated, appears to be intoxicated, reason to be is intoxicated, [and] apparently under the influence of liquor" (Pacific Institute, 2003, p. 20). Even though there is a difference in wording, there is usually no major effect on the civil suit.

New York is one of the many states with dram shop laws that control the hospitality industry. New York State dram shop laws state that drinking establishments will be held financially liable for the alcohol-related accidents caused by their patrons after they leave. In addition to dram shop laws, New

York has enacted the Alcoholic Beverage Control (ABC) law to define and explain the restrictions, regulations, and liabilities pertaining to the sale of alcoholic beverages in the hospitality industry. ABC law section 65(2) prohibits New York drinking establishments from serving alcoholic beverages to visibly intoxicated individuals (Dargan, 2004, p.1) and lists the signs of intoxication that servers need to recognize. Servers are encouraged to look for signs such as "bloodshot eyes; slurred speech; mood swings; smell of alcohol; loud, abusive, profane language; and staggering or falling" (Division of Alcohol).

Failure to recognize these signs may result in civil suits and financial liability against the establishment or even the server. The ABC laws state that the penalties, in addition to civil fines, range from suspension, cancellation and revocation of the license of the establishment (Division of Alcohol). According to the Liquor Liability Policy:

In New York, liquor liability arises from the following statute, amended in 1985: *N.Y. Gen. Oblig. Law Chapter11, Paragraphs 100-101*. Action is based on injuries to the person, property, means of support of any person by an intoxicated person, or by reason of the intoxication of any person, whether resulting in death or not. The right of action may be pursued against any person who shall, by unlawful selling to or unlawfully assisting in procuring liquor for such intoxicated person, have caused or contributed to such intoxication. The person pursuing this right of action has a right to recover actual and exemplary damages. (p. 5)

It is important for drinking establishments to understand the detailed aspects of the laws since New York liquor liability laws are more precise than that of other states with such laws. The New York law "specifically refers to *the unlawful sale of liquor* in contrast to some laws that impose liability on persons having anything to do with the sale of liquor" (Liquor Liability Policy, p. .5).

The status of liquor liability in the United States is divided into four groups. The Liquor Liability Policy states that New York belongs to Group B which "applies in jurisdictions where moderate liability is imposed." Group A which "applies in jurisdictions where no liability is imposed" includes the state of Kansas. Of the states that have not enacted dram shop liability laws, Kansas "continues to follow the common law rule holding that alcohol vendors are not liable for third party injuries" (University of Kansas, 2003, p. 3). In Kansas, a third party cannot sue the drinking establishment where the intoxicated individual was served alcoholic beverages (Legal View).

While Kansas does not have dram shop laws, the state has created the Alcohol Beverage Control which imposes penalties for serving liquor to a minor or already intoxicated person. The Kansas Alcohol Beverage Control enforces financial penalties for "knowingly serving [alcohol] to an intoxicated person" at "\$300 for a first offence, \$600 for second offense, \$1000 for third offense and involuntary cancellation, suspension or revocation of license for more than four violations in twelve months" (University of Kansas, 2003, p. 4).

In short, both New York and Kansas prohibit the sale of alcoholic beverages to minors and any visibly intoxicated person, however, the difference between the two states is that New York State liquor liability laws allow for civil suits against any drinking establishment which serves alcohol to a patron that later causes a third-party accident after leaving the premises.

In a *New York Times* article, John McQuiston writes about former Police Officer John N. Kane, who was forced to retire after sustaining injuries that caused permanent disabilities. Former Officer Kane was assaulted outside a Long Island tavern by three men who had been drinking there. Under the state's now 133-year-old Dram Shop Act, the tavern is responsible for the civil damages caused and has agreed to pay \$275,000 to the retired officer. McQuiston noted that "public awareness of the statute was [finally] increasing" after being unnoticed for so many decades prior to this case.

References

- Dargan, T. J. (2004, September). Burden of proof in dram shop actions. *Nassau Lawyer*. Retrieved October 15, 2007, from http://www.lewisjohs.com/uploaddir/NassauArticle.pdf
- Division of Alcohol Beverage Control: State Liquor Authority. (n.d.). *Handbook for retail licenses*. Retrieved October 12, 2007, from http://abc.state.ny.us/JSP/content/handbookRetailLicenses.jsp
- Legal View. (n.d.). Liquor liability and dram shop laws. Retrieved October 15, 2007, from http://liquor.legalview.com/articles/57763/
- Liquor Liability Policy. (n.d.). *Rough Notes*. Retrieved October 13, 2007, from http://www.roughnotes.com/onlinedemo/pfm/300/361_0100.htm
- McQuiston, J. (1985, February 24). Bar owner to pay assault victim. *The New York Times*, p. 33.
- Pacific Institute for Research and Evaluation. (2003). *Alcohol beverage control enforcement: Legal research report*. Retrieved October 12, 2007, from http://www.nllea.org/reports/abcenforcementlegalresearch.pdf
- Perlik, A. (2004, May 1). Cases in point. *Restaurants & institutions*, 114 (10), 67-74. Retrieved October 12, 2007, from Hospitality & Tourism Complete.
- Saltz, R. F. (1993). The introduction of dram shop legislation in the United States and the advent of server training. *Addiction*, 88 (S1), 95S-103S.
- University of Kansas. (2003, November 13). *Dram shop*. Retrieved October 13, 2007, from http://web.ku.edu/~rlevy/PPC_F03/Drafts/Lloyd.pdf

"Managing Diabetes on the Move": Article Summary

Thomas Furgiuele

Gwen Hall's article "Managing Diabetes on the Move" (2006) addresses multiple factors that diabetics must take into account in order to successfully manage their diabetic condition while on vacation or traveling to foreign countries. People who are living with diabetes are traveling more often, in part due to the process of globalization. In this article, Hall states that there is a transformation going on; diabetic care is shifting from practitioners who specialize in the treatment of diabetes, to the arena of primary care physicians. For this reason, Hall suggests that nurses must be kept abreast of how to guide the diabetic client in planning vacation or travel.

One extremely important detail is to advise the client to be certain to disclose the condition to any company which offers traveler's insurance. As Hall states, "The small print will ask for 'material facts' to be divulged and diabetes is a 'material fact.'" If the client does not disclose his or her diabetic status, and an accident occurs, the insurer could charge that the event occurred due to a hypoglycemic aftereffect and would not be covered because the traveler did not disclose his or her diabetes.

Vaccinations are another major concern for the diabetic. When contemplating travel to countries that require vaccinations, Hall suggests beginning the process six weeks or more prior to embarking, to afford adequate time for any fluctuation in glycemic control. It is also put forward that if the blood glucose levels are not stabilized prior to a journey, the numbers are not apt to improve during that excursion.

Conveyance of medications will require some advanced planning, especially with regard to the more rigorous regulations set forth today by the airlines and customs officials. Clients should notify customs agents of the necessity for their diabetic accessories, and produce them upon request. Diabetic clients should obtain a letter from their primary care physician that authenticates

the condition, itemizes the necessary accourrements and hypoglycemic antagonist supplies, lists all current medications, and attests to the necessity for the client to have these items with them at all times to appropriately regulate their health condition.

Diet and nutrition are also taken into consideration. It is imperative, says Hall, that the diabetic client who is taking oral medications that increases insulin output, or has insulin dependent diabetes, maintain consumption of regular meals to avoid instigating a hypoglycemic attack. Hall recommends that, "People with diabetes should not resort to 'diabetic' special meals." Such meals are usually low in carbohydrates and are contraindicated in conjunction with the use of diabetic medications when trying to prevent hypoglycemia. A customary eating pattern with a well-balanced healthy diet should be maintained instead. Traveling with healthy snacks is highly recommended for those times when foods might not be readily available in order to avoid a hypoglycemic episode. Hall strongly advises that any diabetic who encounters food poisoning resulting in emesis, or loss of appetite, obtain medical intervention promptly.

With travel over long distances, time zones will change and therefore adjustments in medications may be necessary. These adjustments could be necessary due to the client being awake longer and partaking in more frequent meals or, because of the time differential, the client might miss a meal and retire to bed upon arrival. In either case, extra insulin should always be available for any fluctuating need, notes Hall.

The diabetic must also take into consideration the climate. Hall states that exposure to warmer climates will accelerate the assimilation of insulin and therefore the diabetic should engage in more frequent blood glucose monitoring. Because of diabetic-related neuropathies, clients traveling to hot climates should practice caution when walking on beaches, as they may not be aware of burns to the soles of their feet or sense sharp objects in the sand. Hall strongly suggests that diabetics avoid walking around shoeless. In addition, insulin, blood glucose monitoring equipment, and test strips that cannot tolerate extreme temperatures should be kept cool and dry at all times.

If the client is using the U-100 strength insulin, and is traveling to a country that utilizes either the U-40 or U-80 strength, Hall recommends that they learn to convert to these systems prior to traveling in the event that they are not able to obtain U-100 strength. Finally, it is suggested that clients never pack their insulin supplies in the luggage that they will check, as the airplane storage compartments get much too cold for the insulin. If traveling with someone, advise the client to divide the oral medications, insulin, and equipment between themselves and their traveling companion just in case either bag gets lost or stolen.

While scrutinizing all that Hall proffers as to the many concerns that the diabetic client may encounter while traveling, it has become evident to me that an entrepreneurial undertaking could arise from her scholarly recommendations. The development of a travel kit for the diabetic could easily aid in avoiding many of the aforementioned medical, bureaucratic, and environmental dilemmas that

could potentially occur while one is traveling. The travel kit would include a moisture-proof insulated container capable of maintaining a temperature between 59° and 86° Fahrenheit, in order to protect the insulin from thermal extremes and safeguard the diabetic testing strips and blood glucose meters from water damage. It should contain a U-40 to U-80 to U-100 strength insulin conversion chart for those times when the client finds himself or herself in the circumstance of having to use alternative-strength insulin. The kit would have a needle storage compartment, a portable sharps container, sterile alcohol towelettes, a telescoping hand-held mirror so that obese clients could more readily inspect the status of their feet, and a compartment for all documentation verifying and confirming the necessity of all related diabetic medications and accessories as well as insurance certificates. A diabetic travel kit would significantly enhance nurses' ability to better prepare clients for travel and help to impede unforeseen traveling predicaments. The development of a travel kit would simplify the preparation for traveling and thus improve the quality of life and contribute to adherence of diabetic treatment during vacations.

Reference

Hall, G. (2006). Managing diabetes on the move. *Practice Nurse* 32 (11) 29-32. Retrieved October 1, 2007, from Academic SearchPremierhttp://web.ebscohost

Fire and Burn Safety Presentation

Jimmy Francois

Today, more than 4,000 Americans die each year in fires, and over 20,000 are injured. According to the Firesafety.gov Directory, "Figures show that each year \$200 million in property is destroyed in fires attributed to children playing with fire...The USFA encourages parents to teach children at an early age about the dangers of fire play in an effort to prevent child injuries, fire deaths and fire setting behavior in the future."

As a parent and a nurse advocate, I looked forward to disseminating lifesaving information to children in my community. On February 14, 2007, I went to P.S. 91 along with four of my classmates to discuss the topic of fire and burn safety with the kindergarteners and first graders. A week prior to that date, I spoke to the principal, Mr. S. Long, who granted us permission to speak to the children. The school is at 532 Albany Avenue in Brooklyn. There were over forty participants, five- and six-year-olds, including my daughter. As I looked into the audience and saw the amount of energy the children had, I wondered how we were going to effectively teach and hold the attention of these children for forty-five minutes. The answer came quickly as we briefly reminded each other to focus on Erikson's developmental stage for this age group. With that in mind, we introduced ourselves and began our presentation.

Rather than give a speech to the children, we presented the information in the form of audience participation, realizing that children in this age group generally like to help and join in activities with peers. There was an overwhelming response when we raised or purposely offered a wrong solution. For example, when we asked the children, whether we should put butter on a burn, they all shouted no! Then we asked them, "how about jelly or peanut butter?" After laughing among themselves, they were so eager to respond that many of them were raising both hands, and anything they could raise without getting into trouble. Interestingly, behavior was not a problem even though the children were filled with excitement. All the teachers had to do was raise two fingers and count to three, and there was complete silence. This demonstrated to us that children of this age group are very much aware of rule-governed behavior. In harmony with Erikson's theory for this age group, we also observed that the children were beaming with smiles and confidence when we commended them for correctly answering a question or for following our instructions.

In doing the puppet show, my classmates and I were pleasantly surprised. We were under the impression that these children had outgrown Sesame Street characters and would be easily bored with them. How wrong we were! Even though our voices were a far cry from the original characters, the children greatly enjoyed the puppet show. We noticed the effectiveness of using the puppets as a teaching tool when we saw the overwhelmingly positive response to the brief review we had after each skit. The review reinforced the lesson learned and allowed two of our members to set up for the next skit without the kids fully being aware of it. They also immensely enjoyed singing the "stop, drop, and roll" song. However, the climax of the show was when we performed the stop, drop, and roll and had the children crawl under the blanket we had set up. Some of the children even wanted to go twice. We were happy that most of the children got to participate in this activity since they enjoyed it so much.

The goals of our presentation were to help young children to: (1) know how to avoid getting burned around the home, (2) know how to avoid setting fires, and (3) know what to do in the event of a fire. We realized that our objectives were met when during our final review all our participants were able to identify verbally potential dangers around the home. The children agreed to speak to their families about what they learned and about making an escape plan in the event of a fire. At the conclusion of our presentation, we thanked the teachers, the principal, and the children for their wholehearted participation. I thoroughly enjoyed doing this assignment and was pleasantly surprised at the overall response. Well over two months have passed since we did the assignment in my daughter's school, and many of the kindergarteners still come up to me and say, "stop, drop, and roll." An experience like this presentation really helped me to see the value of knowing the stage of development of the children in our audience, and the good that can come from community service.

References

Allstate Insurance Company. (1999). Secure your peace of mind: Fire safety and prevention tips. Video. Northbrook, IL. Allstate Insurance Company.

Berk, L. E. (2005). *Infants and children* (5th ed.) Boston: Pearson.

FireSafety.gov.forkids. *Home fire safety*. Retrieved November 3, 2006, from http://www.firesafety.gov/kids/flash.shtm

FireSafety.gov. (July 2006). *Curious kids set fires*. Retrieved November 7, 2006 from http://www.usfa.dhs.gov/downloads/pdf/fswy1.pdf

Wong, D.L., Hockenberry-Eaton, M., Wilson, D., Winkelstein, M.L. & Schwartz, P. (2001). *Wong's essentials of pediatric nursing* (6th ed.) St. Louis, MO: Mosby.

Fire

Julietta Vicente

On Easter Sunday, April 8, 2007, my family and I experienced a terrifying event. Shortly before 9 o'clock that night, we had to rush out of our apartment on the first floor. The apartment next door was on fire. As a result of this horrifying event, fifty-three people were injured, and three passed away, a child, an elderly man who lived on the second floor, and a firefighter. The seventeen-story building is located on the Grand Concourse and 175th Street, in the area between Tremont and Mount Eden. In addition to the dead and injured, apartments were affected all the way up to the ninth floor and on the three floors below us that have basement apartments.

Everything started around 8:30 but at first it was small. My next door neighbors did not warn anyone and instead tried to put out the fire themselves. When it got out of their control, they began to take out their belongings. The lady that lives below them had water leaking in her bedroom and came upstairs to find out what was going on. Once she reached the apartment, she noticed that the people were taking out all their music equipment and other things. When she looked inside, she saw the fire and tried to warn as many people as she could. But, since the people from next door were always noisy, we thought that it was just a regular day for them, just that they were a little louder than usual. My brother, who was watching sports on television with my father (who came to visit), complained to my mom, and told her it sounded as if they were putting up a new wall next door.

Meanwhile my sister was in our room doing homework. She heard the commotion outside and looked out the window. Our room is the furthest back in the apartment and looks out the back of the building, which is on Walton. When you walk into the building we live on the first floor, but when you look from the back you can see the other floors that are below us, so it looks like we are on the fourth floor. She saw that there were a lot of people outside and they were pointing at us, yelling to get out of the apartment because the apartment next door was on fire. I was in my brother's room working on a research paper I had to do for school and did not hear the commotion. It was ten minutes to nine when I decided to go to my room to watch the Hispanic version of *American Idol*—

Objetivo Fama. I saw my mother running around the apartment telling us: "rápido pónganse ropa que hay fuego,"— "fast put on clothes, there's a fire."

When we were ready to leave the apartment, we ran to the door. Before my mom opened it, I could see around the edges a bright red-orange light in the hallway. My mother opened the door only to see the flames right at the door. We don't have a fire escape. We have an emergency door. When we ran to that door to get out, we realized that we were trapped in the apartment and that the fire had spread to the hallway. We had no other choice than to run to my room and scream out the window for help. There were only two to three fire trucks trying to put out the fire, and no ladders to help those stuck in the apartments.

During the beginning of the winter season, I had asked my father to remove the air conditioner because my room would get cold at night. Having that air conditioner removed was our salvation. My father tried to find a way to let us out through the window but no matter what, we had to jump. Our neighbor from upstairs was going to drop his air conditioner down in order for his family to jump as well. But, there was a lady who had thrown herself out of her third floor window to save herself, and had jumped straight into the shattered glass on the ground. Lying on the ground, cut on her face and legs, she was calling for her child who was in the apartment with other family members. She warned us the air conditioner was about to be thrown and we waited. But her family tied blankets to get out through their living room windows. Meanwhile, those waiting above us on higher floors began to tie blankets together in knots to get out.

The fire was spreading fast, blocking two staircases and trapping a lady in the main elevator. She was able to get out on the fifth floor where she ran into her family and was able to get outside. People were trying to rush out to the one staircase that was not affected by the fire. When those tenants stuck inside got out, they were screaming desperately to find their relatives.

Meanwhile, in our apartment my mom began to have a nervous breakdown. We sat her down on my bed and tried to calm her down. She told me to run to her room and get our passports just in case we were asked for identification. When I opened the door, I immediately closed it so that the smoke wouldn't get into my room. I ran to her room, took the passports and sped back to my room. My sister was on the phone with the fire department the entire time. Before we jumped out, I called my uncle to rush over to the area and told him there was a fire. He said "O.K. I'm on my way." One by one, my father held our hands while we accommodated ourselves to take the six-foot jump to the fire escape below our apartment. From there, there were little steps that led to the mini-yard. My sister was first, and then me. My mom came down, then my brother and finally my father. From the mini-yard we climbed down the rest of the stairs that led to the street. Since the ladder didn't reach the street, the fire department put a ladder there for us to finish climbing down.

When we got to the street area, my uncle, aunt and cousins were already there. We tried to get help from the fire department for the lady that was lying hurt in the mini-yard. From across the street we saw the apartment next to ours burn, the bedrooms, the living room, the kitchen. We saw the fire spread to the staircases into the hallways, to the apartment upstairs. Everyone came out wrapped in blankets since they did not have enough time to grab coats or any jackets, and it was a cold night. There were employees from the Red Cross walking around, offering coats to those who didn't have any. We had family members call us to see if we were okay since they saw the fire on the news. Two of my cousins rushed over to help in any way they could.

When the fire ladders got there (half an hour after we got out), they helped the lady who was lying on the ground with her child wrapped in blankets. Everyone was moved away from the back because the ladder was going to break windows. My uncle had his car parked a block away and took us there to keep warm. Although my mother had calmed down a little, she was still very nervous and very scared just like everyone else. After a while my uncle took my little brother and my aunts and cousins home. Half an hour later my cousins came back with sweaters, socks, hats, and gloves for us since we had to just throw on anything to rush out of the apartment.

At around 11:30, everyone walked up the steps on the side of the building to get to the front of the building. There the Red Cross had a stand offering hot drinks and hot food for us. The police department also ordered two double public buses, with heat, to come to the front of the building for the tenants. When the fire department said we could go back into the building, everyone rushed off the buses to the front of the building. They gave us just an hour and a half inside.

They were only letting people up by floors and they took your name at the door. We were able to get through but couldn't pass the security desk since the lights were out. The super's wife had a flashlight which semi-lit the hallway. The walls were pitch black, the tiles of the floor had come off with the heat, and the doors were burned down to the metal, which was melted. The smell was horrible, a mixture of smoke and fire. Our door flung open just by our tapping it. The floor was flooded from the water and we had to watch our step so we wouldn't trip over the broken tiles. In the apartment, thankfully, nothing got damaged. At the time the only damage we saw was the flooded floor, and the burnt doors. We took as much clothing as we could because we could not spend the night there; we stayed at my aunt's apartment. My cousins, along with my uncle, helped us take out what we needed.

When we got outside, there was a reporter from the *New York Times* who saw us putting bags into the car. He came over to us and asked for an interview on what had happened. Since I was the only person in the group of five that lived in the building I was the only one interviewed. The interview took about ten or so minutes. The interviewer was amazed at how we were able to get out of the apartment and that our apartment was not affected. My cousins helped me put my bags into the car, and we drove away.

When we arrived at my aunt's house, everyone tried to go to sleep. But everyone was traumatized by the event and could not sleep, so we stayed up talking. At around two in the morning, everyone headed to their rooms to try to get some sleep. Lying in bed, I could hear everyone tossing and turning.

I couldn't sleep because every time I closed my eyes I blanked out and just replayed the whole night in my head. Every time I heard any little noise, I would jump and look around to see what was going on. I tossed and turned along with everyone else that night. At six in the morning, everyone who slept in my cousin's room woke up and kept on talking about the tragedy.

The morning after the fire, my mom and I decided to go to the Section 8 office to request an emergency transfer. We arrived early in the morning, about 9 a.m. We filled out the paper stating the motive of our visit. Not too long after we arrived, my mom's caseworker came out to call us. In her office, we spoke about the situation and told her that it was impossible for us four to remain in our apartment with all the damage to the building. She told us that they could not do anything for us, but told us to fill out a regular transfer form and mark it urgent. The only help she gave us was putting the transfer into the computer and sending an investigator to check out the building.

From other tenants in the building my mom heard that the investigator from Section 8 said that the building was fine and still habitable. This really disappointed the tenants because although the building structure is still fine, the lobby is destroyed along with staircases and elevators. The smell of the smoke and fire remains strong. At two meetings for the tenants, it was stated that the smell of the smoke that remains in the building may turn out to be cancerous.

Since that week due to spring break students had no classes, I spent all week going back and forth with my mom to the building trying to figure out if there was any news about when the insurance company would begin to work on the damages. Four weeks after the fire, nothing was changed. There was no one coming in and fixing the doors or floors. The only companies that have come in are Verizon for the phone lines, and Con Edison checking if the gas was okay to be used. Con Edison just said that there will not be gas in the building for three months.

On April 14th, I accompanied my mom to the Red Cross office. Here the case worker who met with us was very nice and helpful. She asked us if we needed anything, blankets, clothes, and/or food. She asked for proof of the people who lived in my apartment. She handed us a package explaining what people should do if they've been in a fire. She gave us forms which we have to fill out in case our door was still not fixed a week later. Tenants pay one dollar of rent until everything is fixed. She also gave us a letter stating that there was a fire in the building and that we had gone to the Red Cross office. Along with all of this, she gave us two cleaning kits to eliminate the smoke smell from the apartment.

When we went to clean up the apartment, we noticed that the floor was dirtier than before since the fire department and investigators kept entering the apartment to see if it was affected in any way. People who enter and see the apartment cannot believe that the fire was right next door to us and that our apartment was not really affected. It took us an entire day to clean the apartment, and even so the smell remains. Days after cleaning the apartment, the smell of smoke is still present as if nothing was used to try and eliminate it. Not even

leaving the windows open so that the air could circulate helped the smell to disappear.

The Red Cross recommended that my mom take my younger brother to a psychiatrist to help him with his trauma. We received a letter from this psychiatrist stating that we could not return to the apartment since he was suffering from post-traumatic stress. She asked for this letter to be shown anywhere needed to prove that we could not return to our apartment.

Two weeks after going to the Section 8 office and filling out the transfer form, we went back. My mother had the letter from the psychiatrist that she had gotten the day before. Another case worker received us since ours was not in yet. We handed the letter to her and she made a copy to keep on file. She asked us to fill out another transfer request for an emergency transfer to put into their computer system. While we were walking out, my mother's caseworker was walking in. She asked what we needed and said that she was going to take the request to the supervisor. The caseworker who assisted us earlier told us to call back the following week to be filled in on whether or not we are getting the transfer. When we called the following week, she responded with a lot of attitude saying she had not taken the papers in and that we had to wait because they had a lot of work to do.

A few days later I called again. Since the case worker was out, someone else answered the phone. She gave us a direct line to call because in the computer it said that we are in the system for an emergency transfer. When we called the direct line, the lady spoke to my mom and told her that she indeed was in for an emergency transfer but we needed to wait for the letter in the mail. According to what the lady told my mom, we were to be receiving the letter soon since we were not in a condition to be waiting any longer.

Although my aunt generously offered all of her support and opened the doors to her home, I must admit that we are pretty uncomfortable. Most of us sleep on the floor on mattresses and others on the couch. It has been a good experience after all, however, since now the family has gotten closer. Also, everyone is very much aware of anything that might result in a fire. Everyone is always checking their smoke alarms making sure that they are working. The communication between families has grown tremendously since we need each other's support more than ever. This may have been a bad situation to be in, but I'm glad about the fact that it brought my family closer together.

Five months after the fire, I am still living in my aunt's apartment. It has been uncomfortable having so many people in a two-bedroom apartment. Life is not the same and privacy is very limited. No one has their own space and there are fights over the bathroom, and, since everyone watches different shows at different times, the television.

When it comes to the apartment, the only change has been that a few weeks ago the doors were changed in all the apartments with damaged doors. Just recently, another apartment was on fire but it was vacant. Luckily, someone noticed and called the fire department quickly to prevent it from turning into

something bigger. For the smoked walls, the landlord's office provided a primer to cover the black spots, but you can still see the black through the primer.

I go to the building frequently to check up on my things that are still there. Everything is fine, but every time I step in the apartment I feel like the experience is coming back and it will happen again. However, it is just a feeling that comes over me when I first enter, and after a while in the apartment it goes away. The only feeling that remains is that if I hear a lot of noise and commotion I immediately go and check. If I get the smell of smoke, I check everywhere to make sure that everything is fine. Not so long ago, I used to go to sleep at five in the morning and spent all night awake scared at any little sound that I heard. I used to go to sleep at five because at that time everyone else woke up. It was like I protected them at night, and they protected me in the morning.

The apartment that we will be moving into soon is finished and sealed with the bank. The only thing that we have to wait for now is for Section 8 to send their official to inspect the apartment and make sure that nothing will go wrong. It feels weird saying that I will have a new address since I thought that I would be living in that building until it was time for me to move out on my own, or when my parents retired and went back to their country. Still I try to keep strong and keep moving my family forward. It is like we are each others' mentors and try to get through all of our problems together.

Now in February, we are living in our own apartment and are a close family. We take care of each other and thank God for showing us why no one should ever "take life for granted." One minute you're sitting watching television, the next you're trying to find a way to stay alive. We have been somewhat able to overcome the paranoia of going through another fire, even though we jump at the smell of smoke and any loud noise. Many people bless us when they hear the story of how everything happened and how we were able to get out of our apartment.

The Economic Impact of

All-Inclusive Resorts in Jamaica

Misaki Kondo

Jamaica is described as everyone's idea of a tropical paradise. Its sunshine, blue Caribbean Sea, white sand beaches, and breathtaking scenery attract more than a million visitors each year and make it one of the popular destinations in the Caribbean (Jamaica Tourism Board [JTB], 2007). According to the Caribbean Tourism Organization (2007), Jamaica welcomed an estimated 1,678,905 tourists in 2006. The tourism industry is an important economic sector in Jamaica, which is represented mostly by the development of all-inclusive resorts.

This paper examines all-inclusive resorts and how they affect the economy of Jamaica. Despite their popularity and profitability, a closer look at all-inclusive resorts reveals that the revenue they generate brings limited benefits to locals. The research explores the problems that all-inclusive resorts are facing, including the negative consequences of enclave tourism, high leakage rate, the structure of ownership, low employment generation as well as cost of infrastructure. The result demonstrates that the benefits that all-inclusive resorts bring to Jamaica do not live up to their claims, and their contribution to the Jamaican economy needs to be greater. The paper concludes, however, by predicting that all-inclusive resorts will stay in Jamaica by finding a way to be sustainable and to share their benefits with the host country.

Introduction

Abraham (1999) sarcastically describes Jamaica's all-inclusive resorts as "islands themselves, deliberately separate from the life of the tiny nation" (p. 1). Once seen as everyone's paradise destinations, all-inclusive resorts in Jamaica are now viewed as a form of tourism with little benefit for locals. Tourism

represents the biggest industry in the world, and has been a source of economic development of many developing countries, including Jamaica. After Jamaica's export agriculture declined sharply during the depression in the 1930s, tourism gradually became the industry that held the promise of jobs, income, and development (Pattullo, 1996). From the early stages of its tourism development, all-inclusive resorts have been part of Jamaica's tourism product. Indeed, Jamaica's own Gordon "Butch" Stewart was one of the founders of the Sandals chain of all-inclusive resorts. These resorts have become an entrenched part of Jamaica's tourism product, and with the island increasingly dependent on tourism, it is hard for the government and tourism proponents to accept that the economic benefits of all-inclusive resorts to local Jamaicans are limited.

Turner and Troiano (1987) define all-inclusive resorts and enclave tourism:

In general, an all-inclusive resort offers the traveler lodging, meals, and recreational activities for a single price that also includes airport transfers, service charges, and gratuities (tipping is usually discouraged). In theory, travelers can be entirely carefree during their stay to enjoy the vacation without worrying about additional costs for such things as meals, windsurfing lessons, or the services of a tennis pro (pp. 25-26).

In short these resorts charge their guests a fixed price for all the necessary products and services needed for an entire stay. All-inclusive resorts are based on enclave tourism which represents all types of travel that provide independent areas with all the products and services needed by tourists (Roessingh & Duijnhoven, 2004). Cruise ships and other all-inclusive vacation packages also fall into the category, and the major characteristic of enclave tourism is an isolation of tourists from local environments.

Overview

Located in the Greater Antilles, Jamaica is the third largest island in the Caribbean and is surrounded by the Caribbean Sea on all four sides (McCoy, 2003). Although Jamaica is still classified as a developing country, its excellent natural environment, year-round warm climate, white sand beaches, and beautiful landscapes attract over one million tourists each year (JTB, 2007). Today, the tourism industry in Jamaica is one of the most important economic sectors, and its impact on the country is enormous.

Tourism in Jamaica, however, differs from tourism in other countries. It is represented and dominated by all-inclusive resorts along the island's coast. The origin of all-inclusive resorts in Jamaica goes back to 1976 when John Issa opened Negril Beach Village in Negril, now known as Superclubs (Eversley, 2003). Five years later, in 1981, Jamaican native Gordon "Butch" Stewart opened up his first Sandals Resort in Montego Bay (Eversley, 2003), now known as one of the Sandals chain. As both Superclubs and Sandals expanded their business to other islands in the Caribbean, many other all-inclusive resorts such

as Couples, Sunset, and Riu Hotel & Resorts opened up their properties in Jamaica. In 2004, PricewaterhouseCoopers announced that there were a total of 39 all-inclusive resorts in Jamaica, which accounted for 53 percent of the island's hotel rooms. Additionally, all-inclusive resorts accounted for 79.4 percent of the hotels with 100 rooms or more (PricewaterhouseCoopers, 2004).

All-inclusive resorts have been developed over decades, and have clearly been a big part of Jamaica's tourism product. All-inclusive resorts have played a critical role in the tourism development in Jamaica and have led the trends for the industry. Since they first appeared in the 1970's, all-inclusive resorts have become a significant segment of Jamaica's tourism.

Negative Economic Impacts of All-Inclusive Resorts

However, at the same time, all-inclusive resorts in Jamaica have been unable to maximize the tourism industry and find long-term solutions to improve Jamaica's standard of living. A strong and frequent argument is that little of the revenue generated by all-inclusive resorts goes into the local economy. All-inclusive resorts and enclave tourism absolutely influence the amount of money that flows into the local economy, but keep local Jamaicans at a distance from tourism benefits. The issue here is very complex and is intermixed with many aspects of Jamaica; Jamaica's historical, social and political background strongly affect the way that the profit from all-inclusive resorts slip from its economy.

Leakage is the big cause of this phenomenon. Leakage is the unwanted leaving of money from a country as a result of taxes, wages, imports, and profits that are paid outside the country. The leakage rate for all-inclusive resorts in Jamaica is estimated relatively higher than ones in other countries (United Nations Environment Program [UNEP], 2002).

Although Jamaica gained independence from Britain, Jamaica's colonial past remains a burden. In colonial times, Jamaica was reliant to a large degree on mining, and imported many other types of products from other countries, particularly from Britain. Even now colonial rule weighs on Jamaica; mining is still one of the country's important economic sectors but many other resources are imported into Jamaica. In fact, the country's resources are limited and Jamaica still finds it necessary to depend on other countries. Therefore, Jamaica remains unprogressive and needs to import many products from other countries to satisfy tourists' needs and wants, which results in leakage.

Although the data for Jamaica's leakage is unavailable, a study by UNEP (2002) estimated leakage for the Caribbean as a whole at 80 percent. This rate indicates that only about \$20 will remain locally when tourists spend \$100 on their vacation in the Caribbean. Like most developing countries in the Caribbean, Jamaica suffers in effect from a new form of colonization and does not have enough of its own resources, or its resources do not meet tourists' standards. Indeed, most guests at all-inclusive resorts expect the same high-quality products and services as they can receive in their advanced home

countries. As a result, many resorts often must import food and drinks, furniture, cooking equipment, and even building supplies.

Sandals Resort in Negril, Jamaica, demonstrates well the need for importing products from other countries. Dining and restaurants are one of the most important features of all-inclusive resorts, where guests enjoy unlimited food and drinks any time of day. Like other resorts, Sandals Negril is proud of its six different restaurants and the food it offers: Jamaican, American, French, Italian, and Japanese (http://www.sandals.com). However, where on earth do they buy caviar for French dishes' toppings, prosciutto for pasta, or dried seaweed for sushi rolls? It is clear that the resort needs to purchase those and many other products from companies in other countries, because Jamaica does not have the industries to supply these goods. As the resort purchases imports, much of tourism's income leaves the country by means of leakage.

To reduce leakage, it is suggested that all-inclusive resorts offer more products that are local. For example, instead of highlighting American, French, Italian, or Japanese foods, resorts can emphasize Jamaican food, using local vegetables and fish. However, many resorts are afraid that they will lose their guests with only Jamaican products and services. Thus, it is hard for many all-inclusive resorts to accept that providing Jamaican products benefits both the resorts and the local economy. As a result, all-inclusive resorts in Jamaica keep importing products, and are unable to keep a significant amount of tourism income within the country.

Moreover, the ownership of all-inclusive resorts affects Jamaica's high leakage rate. Most all-inclusive resorts in Jamaica are owned and run by large multinational corporations that operate in other Caribbean islands or other countries. The examples include Sandals, Superclubs, Riu, Couples, Sunset and Wyndham Resorts (PricewaterhouseCoopers, 2002). Some of them are Jamaican-owned, but they all have their properties expanded elsewhere in the world. When multinational corporations dominate the country's tourism, leakage arises because the profits are taken back to their home countries; ownership by multinational corporations encourages taking money away from the local companies and the economy.

Positive Economic Impacts of All-Inclusive Resorts

However, proponents of all-inclusive resorts point to the fact that these all-inclusive resorts bring large numbers of visitors to the country, who must travel through local airports and towns to arrive at the resorts. It is also argued that all-inclusive resorts provide jobs in areas that are economically impoverished and away from the major centers.

Furthermore, in 2005, Gordon "Butch" Stewart, a founder of the Sandals Resort chain, received the Caribbean Hotel & Tourism Investment Conference Lifetime Achievement Award for his accomplishments and contributions to the community (Boodram, 2005). The Sandals Montana Bay, for example, is one of the resorts that are pioneering new ways to work with local communities by

launching the Mafoota Farmers Market. The Market takes place rent-free every Friday by the taxi stand on the property; local farmers bring and sell their fresh produce there (Boodram, 2005). This market demonstrates that all-inclusive resorts can significantly increase the amount of money which reaches local hands by supporting local farmers (Boodram, 2005).

The Reality of All-inclusive Resorts in Jamaica

Even so, little or no definitive data is currently available to prove that all-inclusive resorts do affect Jamaica's economy positively, and the degree of their economic contribution is still questionable. Positive economic impacts are limited, and many experts and reports cannot deny the negative evidence of all-inclusive resorts in Jamaica.

Another problem of all-inclusive resorts, in addition to high leakage and the ownerships, is that they tend to decrease the multiplier effect, an effect in which an increase in spending produces increased income and consumption greater than the first amount spent (Schuster, 2006). In other words, money spent by guests at all-inclusive resorts does not always flow into the economy, stimulating growth in other sectors. When a new hotel is set up, for example, it usually creates jobs directly in the hotel. The hotel also needs to purchase supplies from local business, which will bring more businesses to the area. Moreover, as the workers in the hotel or local business people spend some of money they earn, it will result indirectly in creating jobs elsewhere in the economy. This is how every dollar spent by tourists has a long positive impact on the whole economy unless it leaves the country as a form of leakage. For all-inclusive resorts, however, the money does not circulate through the economy as it does in the given example.

A study by UNEP (2002) states, "in most all-inclusive package tours, about 80 percent of travelers' expenditures go to the airlines, hotels and other international companies, and not to local businesses or workers." This means, of course, only 20 percent of the profits are received by the host country. Because tourists buy most of their products or service together with their accommodation before they arrive at the country, little of the money they spend flows into Jamaica's economy. The only time tourists find themselves spending money is when they purchase food or souvenirs at the airports, or when they take transportations to their resorts. Other than that, they enjoy activities or lessons offered in the resorts, not worrying about spending another penny, or they simply spend all afternoon tanning poolside with their gossip magazines and glasses of piña colada handy.

Although much needs to be done to improve economic standards, all-inclusive resorts can increase the amount of money that reaches the Jamaican economy by promoting local tours and encouraging guests to visit local attractions. Unfortunately, however, few all-inclusive resorts in Jamaica are currently highly involved with local communities, and it is still far-off in the future for them to coexist with local communities.

As reported by Abraham (1999, p. 1), Stephen Raphael, a taxi driver, spoke out in response to a recent fare cut due to pre-paid airport transfers; "Tourism is our main industry, but with the all-inclusives, the tourist dollar is circulating only there, and tourists who come to our country don't see its beauty." His claim reconfirms that tourists' expenditures do not flow and spread to other sectors of the country and encourage growth throughout the economy. All-inclusive resorts actually shut out local business from accessing tourism income.

Furthermore, a job for a local Jamaican at an all-inclusive resort does not help to improve money generation into the economy. Although no statistical data is currently available for the number of local people employed at all-inclusive resorts, a UNEP study (2002) concludes that all-inclusive resorts hire fewer people than other types of hotels. Additionally, the working conditions aggravate the situation. Many of the best-paid managerial positions at all-inclusive resorts are taken by people outside of Jamaica with only entry-level jobs for locals, for example, housekeepers who make an average of \$8 a day (Abraham, 1999). The seasonal character of the jobs at all-inclusive resorts also creates economic problems that include job insecurity. Many of the workers are not promised employment from one season to the next. These facts reveal that little of the tremendous amount of money generated by all-inclusive resorts actually goes into Jamaican households.

Lastly, the infrastructure development stimulated by all-inclusive resorts costs the Jamaican government a lot of money. Because all-inclusive resorts bring a large number of tourists into the country and the resorts are usually located far away from cities, the government finds it necessary to build physical infrastructure. However, infrastructure is not inexpensive. Building airports, roads, and other facilities can easily cost millions of dollars, and the development costs result in the need for borrowing and high debt service charges.

The World Bank has been working closely with Jamaica to help the country's economic growth and development. The total lending to Jamaica is US\$150 million as of 2007, and the Bank spends US\$29.3 million of the money specifically on the Inner City Basic Service project, designed to improve the quality of communities by providing access to basic infrastructure, such as airports, roads, sewerage and water supply (World Bank, 2007).

Ironically, the Jamaican government runs into debt as they welcome visitors for all-inclusive resorts. Moreover, spending an enormous amount of money on infrastructure may reduce government investment in other critical areas such as education and health. Hence, building infrastructure does not always help to improve the quality of local Jamaicans' lives, but rather has unfavorable economic effects on the country.

Conclusion

The tourism industry is supposed to generate economic benefits to host countries. In developing countries, Jamaica included, the tourism industry is the main sources of the economic improvement. However, all-inclusive resorts,

considered Jamaica's primary tourism product, have many hidden negative consequences and provide limited local economic benefits.

At the same time, there is considerable scope for all-inclusive resorts in Jamaica to improve the benefits to local communities, and increase the money generation into the economy. In fact, according to Hawkes and Kwortnik (2006), locals, governments and other hospitality organizations put a great deal of pressure on Jamaica's all-inclusive resorts to coexist with local communities. Promoting and selling tours of the community by local people or employing qualified local persons wherever possible helps the resorts to be involved in community contribution and ease the pressure. Slowly this is beginning to happen, and all-inclusive resorts will find a way to stay in Jamaica with a new vision of sustainability and community contribution.

References

- Abraham, Y. (1999, March 7). In Caribbean, dream vacations fan discontent; many travel packages leave island businesses out in cold. *The Boston Globe*, sec. A, p. 1. Retrieved October 31, 2007, from Lexis-Nexis database.
- Boodram, A. (2005) CHTIC 2005 concludes that Caribbean tourism is robust. *Caribbean Voice*. Retrieved October 29, 2007, from http://www.caribvoice.org/Travel&Tourism/CHTIC%202005.html
- Caribbean Tourism Organization. (2007, June 12). Latest tourism statistics [Electronic version]. *Annual Caribbean Tourism Statistic Report*.
- Eversley, M. (2003, September 19). Popularity of all-inclusive resorts stokes island controversy. *Cox News Services*. Retrieved October 31, 2007, from Lexis-Nexis database.
- Hawkes, E., & Kwortnik, R. J. (2006, November). Connecting with the culture: A case study in sustainable tourism. *Cornell Hotel & Restaurant Administration Quarterly* 47 (4), 369-381. Retrieved September 26, 2007, from Hospitality & Tourism Complete Database.
- McCoy, J. E. (Ed.). (2003) Jamaica. In *Geo-data: The world geographical encyclopedia* (3rd Ed., pp. 273-276). Detroit: Gale. Retrieved October 17, 2007, from Gale Virtual Reference Library Database.
- Pattullo, P. (1996) *Last resort: The cost of tourism in the Caribbean*. London: Wellington House.
- The 2004 Jamaican hotel industry report [Electronic version]. (2004). *PricewaterhouseCoopers*.
- Roessingh, C., & Duijnhoven, H. (2004) Small entrepreneurs and shifting identities: The case of tourism in Puerto Plata (Northern Dominican Republic). *Journal of Tourism & Cultural Change* 2 (3), 185-201. Retrieved September 27, 2007, from Hospitality & Tourism Complete Database.
- Schuster, J. (2006) Fiscal Policy. In *Encyclopedia of world poverty* (Vol. 3, pp. 368-370). Thousand Oaks: Sage Reference. Retrieved November 27, 2007, from Gale Virtual Reference Library Database.

- Turner, S. M., & Troiano, C. S. (1987, November). Notes. *Cornell Hotel & Restaurant Administration Quarterly* 28 (3), 25-27. Retrieved October 31, 2007, from Hospitality & Tourism Complete Database.
- United Nations Environment Program. (2002). *Economic impact of tourism*. Retrieved September 12, 2007, from http://www.uneptie.org/pc/tourism/sust-tourism/economic.htm
- World Bank. (2007, March 3). Jamaica: Inner city basic services for the poor project [Electronic version]. *Project Appraisal Document* (Report No. 34741).
- World Travel & Tourism Council. (2007). The 2007 travel & tourism economic research [Electronic version]. *Tourism Satellites Accounting*. Retrieved September 21, 2007, from http://www.wttc.travel/eng/Research/Tourism_Satellite_Accounting/TSA_Regional_Reports/Caribbean/index.php

The River Café: A Dining Treasure

Gwendolyn Harewood

It was Monday evening, November 13, 2006, and I was quite excited about this particular class assignment. I was finally going to dine at the restaurant I've stared at for years from across the East River!

Reaching the neighborhood of my destination in time for my 6 p.m. reservation, I realized why I admire this section of Brooklyn, affectionately known by its acronym, "DUMBO" (Down Under the Manhattan Bridge Overpass). The cobblestone streets are romantic and remind me so much of the streets of my family home in Cambridge, Massachusetts. "DUMBO," undergoing a renaissance for several years now, is home to the River Café, my destination and a treasure that should be experienced by all.

Kudos to River Café owner Michael "Buzzy" O'Keeffe for successfully creating and maintaining his vision of an elegant waterfront restaurant in an area of New York City that was long viewed by many as neglected, isolated, unsafe and unattractive. O'Keefe opened the River Café in 1977, and his persistence and tenacity paid off early on. Diners come not just from Brooklyn, but Manhattan and all points of the metropolitan area. Diners at the River Café experience a restaurant that immediately won rave reviews and has substantially contributed to the rebirth of the Brooklyn waterfront.

The approach to the restaurant was breathtaking. I drove through the parking lot, which was adorned with lush greenery, and continued around the circular centerpiece in the courtyard, where a riot of exotic flowers gave a pop of bright color to the night. There, I was met with the bright smile of the valet. Thank goodness for valet parking, for street parking in the neighborhood is a challenge.

Entering through the restaurant's wood and glass doors, I noticed a nautical window on each side of the ante-way. These windows are a clever architectural feature that reinforces the restaurant's nautical setting and pays tribute to it at the same time. I entered the main reception area and the first thing I saw, toward the left, was a dazzling display of fresh, exotic flowers that also magnificently showcased the season's foliage. Clearly, the River Café has a florist on staff. So, my first look inside the River Café, coupled with the warm smiles of the hostesses and warmth of the grand floral display, confirmed that I had made the right restaurant selection.

I handed my coat to one of the hostess (she had taken my reservation, as I learned a bit later), who asked if I would be dining alone? I said I was waiting for my guest, and she then guided me along what appeared to be the "red carpet" to the main entrance of the dining room, when I was met with a warm smile from Patrick, the maître d'hôtel.

Upon responding to the warm welcome, I introduced myself and explained my purpose for dining at the restaurant. Patrick smiled and assured me that I would have a wonderful experience. Then my guest arrived, and we were escorted to our table.

As we walked through the dining room toward our seats, I could not help but bask in the beautiful views of the city seen through the large glass windows. While standing with Patrick, I had begun to take in some of the restaurant's ambiance and wondered why it was so darkly lit. It was while walking to our table and taking in the Manhattan view that I realized that the lighting was carefully chosen to let the famous New York skyline sparkle in all its glory.

My guest and I were seated at a table at the far end of the restaurant, where all the tables shared long, red lounge chair seating. No sooner were we seated when Timothy Shannon, our front server, approached the table to take our cocktail order. My guest ordered a cocktail and I ordered bottled water. I have to say that his demeanor was not quite as cheerful and bright as that of the staff I had encountered thus far, but I remained optimistic.

As Timothy left to place the order, our back server pointed the table with butter nestled on a small white porcelain dish, similar to the ones in the Janet Lefler Dining Room. He returned with the bread: semolina raisin and French rolls, which are baked on the premises. He displayed them as he described them, and then placed our choice on our bread plates. He did so with a flair, using a large utensil.

Left alone for a moment by the server, I could examine the table setting. It was set in the manner in which we have been taught. In spite of the miniature table lamp, I needed assistance from my guest in identifying the manufacturer of the pure white china, sparkling utensils, and elegant stemware. The appetizer plates were made by Villeroy & Bosch, the utensils by Christofil, and the stemware by Spiegelau.

Timothy returned by way of the back "side station," with what he described as "compliments of the chef." As he placed the demi cups and saucers, his menu knowledge came alive. He began with "Shrimp Bisque with sun-dried tomatoes and profiterole and basil oil." Well, I could certainly relate to the Shrimp Bisque, but the other ingredients were a bit of a mystery, so I looked to my guest, who is employed in the food industry, for help.

As I tasted the bisque, I pondered the right words to describe its taste and texture. Silky, smooth and decadently creamy: all these words describe the taste of the bisque as it flowed down my throat. I looked at my guest, who agreed that the chef's clever introduction to the food to come was a smart move for two reasons: "truly delectable," the bisque had us looking forward to our main meal; "on the house," it predisposed us to thinking that the entire River Café experience would truly be one of gracious, genteel, and luxurious dining.

As I mentally recounted the wonderful taste of the bisque, the back server appeared from the side station located directly to the right of our table, to clear the table quickly. The position of our table, in a corner, did not allow for the back server to clear the table or refill our water glasses from the right. Noticing that he was making an earnest attempt to clear our table with the least amount of disruption, I silently assisted by moving our cups and saucers closer to his reach. After all, we servers have to look out for one another!

Next, our captain, Silaine, gracefully "served" us the menu and introduced herself. Her menu knowledge was impeccable! Starting with the appetizers, including her recommendation, and then following with the entrees, Silaine spoke as knowledgeably as if she were the chef. Her pronunciation of the items and their respective ingredients were accurate and assured. When I asked about the fixed price she explained which menu items were included in that category and then went on to explain the "tasting menu." As a lover of seafood, I was undecided about the *Stuffed Bee Gee Shrimp* appetizer. Sensing my uncertainty, Silaine recommended that I try the *Duo Seafood*, a combination of Alaska King Crab leg and scallops. My mind then made up, I ordered the *Duo*, while my guest ordered the *Hudson Valley Foie Gras*.

As Silaine waited patiently, we determined our entrees. At the recommendation of my classmate, I ordered the *Crisp Duck Breast*. When asked how I wanted the duck cooked, my guest insisted that I order it done "medium," as opposed to well-done. My guest then ordered the *Colorado Rack of Lamb*, medium-rare. She urged me to start ordering my meats this way, in order to really savor their flavor. "Whatever!" I thought to myself, not being a fan of what I call "half-cooked meats."

While awaiting the appetizers, I asked my guest to explain what exactly foie gras was. She simply smiled and told me to take notice of the guests arriving at that moment. I noticed that a large party was entering, raising the sound level many decibels, from low and mellow to loud and excited, making it a bit difficult to enjoy the sweet tunes offered by the piano player.

The arrival of our appetizers brought me out of the semi-trance I was lulled into by the river and skyline views. My *Seafood Duo* was served on a long, narrow, rectangular china white plate with two sections: one for each part. The scallop was sautéed in clarified butter or light flavorful oil, set on top of miniature ravioli stuffed with what tasted like spinach. Before moving on to the Alaska King Crab leg, my guest had portioned off a section of her appetizer, which had been handsomely presented. The foie gras was cleverly perched atop a small, square piece of what turned out to be French toast.

At the insistence of my guest, I tasted the foie gras, which I had never eaten before. She told me what it was and my response was "YIKES!" I looked at my guest as if she were out of her mind! Me, eat duck liver? No thanks. Her persistence was such, however, that it drew the attention of Silaine, who came by to lend my guest support in her quest to have me sample this delicacy. Eyes closed, I sampled the pre-cut portion awaiting me.

Both my guest and Silaine watched my facial expression as I maneuvered this strange delicacy around in my mouth. Sweet with smooth, meltin-your-mouth texture is how I described it, as the two of them began to educate me about the food's history. When Silaine left, I was almost force-fed another piece by my guest. This time, it was accompanied by one of the slivers of

julienne granny smith apple and a cashew nut that rested in a sweet, syrupy sauce. My guest stated that the sauce tasted as if it was prepared in an "apple-cider reduction with pesto, sugar, and pumpkin." *Back to my Seafood Duo*.

My Alaska King Crab leg was served with fried squash blossom. The crab leg was delicious and cooked just right, not too chewy. Again, my guest helped me to understand the food. The squash was prepared like "tempura, stirfried in sesame oil and stuffed with some of the crab leg, which was made into a cream sauce." At the completion of this serving, the front server cleared the table and pointed it for our entrée.

My duck, served on a white oval dinner plate with rainbow Swiss chard, was topped with "caramelized yellow garden beans, with fresh pomegranate sauce and red wine duck croquette." The presentation was perfect. What intrigued me was the duck leg that resembled a breaded lollipop. Being one who appreciates presentation, I am delighted to say that Chef Steelman successfully executed this particular dish.

The duck itself was moist and seasoned to perfection, with a sauce that wonderfully enhanced its flavor. However it was the "lollipop leg" with which I was most impressed. Examining the leg, I realized it housed mashed potato and "something brown." Once again, I turned to my guest for clarification. Her guess was the mashed potato was used as a filler, along with some of the duck. The "lollipop" was also used to stabilize the leg. Very clever, I thought.

My guest's entrée was a double lamb chop with mint sauce, nestled atop golden brown fondant potatoes, with a single Merguez sausage. Forget sampling her lamb, I thought. It was simply too red for me! Disregarding the negative expression on my face, my guest had already sliced a sample for me to try. I have to admit, I was quite surprised by how deliciously moist the lamb tasted. It was no surprise that my guest insisted that I sample another piece, this time, with a sliver of the sausage. At the completion of this second course, our table was cleared and crumbed and we were "served" dessert menus.

On the list of desserts, I could not help but notice the wine skills demonstrated by the captain who was serving the table next to us. He presented the wine, label facing forward, to the gentleman, who gave a nod of approval. Next, the captain took his wine key and opened the bottle with finesse and speed.

Returning to the dessert menu, my guest and I agreed to order different desserts and trade samplings. I ordered the famous *Chocolate Marquise Brooklyn Bridge* and my guest ordered the *Apple Upside Down Cake*. We were determined to sample only a bit of each dessert. Ah... what can I say? In the end, we had eaten every bit of both. The Brooklyn Bridge was indeed a work of art and its chocolate, along with its rich ice cream, was marvelous!

Done with our meal, for we declined after-dinner beverages, I sat back with a long, relaxed breath and took note of the attire worn by the service staff. The captains wore black tuxedo-like suits, with shirts with bowties. The front servers wore white bolero jackets, black pants and bowties. With the exception of their long, slim black ties, the back servers were dressed the same way as the

front servers. I found this difference in attire a clever way to help guests distinguish different servers.

By this time the restaurant was filled almost to capacity and the noise level had increased substantially. Sensing Timothy and the back server inconspicuously looking at our table, we requested the check. Timothy presented the check, along with a bread plate adorned with a white doily, upon which two chocolate petit fours rested. We calculated the tip, paid the bill and proceeded to leave, but not before stopping to view the skyline one more time. This time, we enjoyed the view from outdoors, as we passed the service station with all the *mise en place* neatly ensembled on the three-tier wooden shelves next to the semicircular bar.

"Astonishing" is how I would describe the view from the deck. Back inside, we thanked Patrick for a lovely evening and darted down the red carpet as we made our way to the ladies room. It was average size, brightened with a simple floral arrangement at the entrance; the room was clean and sweetly scented.

Exiting the restroom in the reception area, my guest's inquiring mind led her to the entrance of the private party area. As I handed my coat ticket to Danielle, I was curious to see what caught her attention. I was taken aback by the ambiance of the softly lit room, with its "miniature rivers" flowing on each side of the entrance as you made your way into the room.

Remembering I had given Danielle my coat ticket, I left the room, retrieved my coat, only to notice my guest and a gentleman engaged in a conversation filled with laughter. I approached the two of them and extended my hand to the gentleman as I introduced myself. He gave me a firm handshake, and said "Hello." I stood there listening to the two of them talk restaurant business wondering what possessed my guest to strike up a conversation with this gentleman. Suddenly, a side door opened and an employee approached us saying, "Buzzy, your dinner is ready."

Hmmm... "Buzzy." Why did the name sound so familiar? Suddenly I literally blurted his name aloud, causing him, my guest and Danielle to chuckle. "Buzzy," as in "Michael Buzzy O'Keefe?" I asked. "I'm the one," he said, graciously taking my hand once again. I explained my purpose for dining at the restaurant and told him how much I enjoyed it. To show him I'd done my research, I commended him on the number of chefs who, due to his tutelage, had gone on to very successful culinary careers. Mr. O'Keefe thanked me and began naming chefs my guest knew. Another call from the staff brought our conversation to an end. Just before he was about to leave, I asked if he would mind signing my check. He smiled broadly and did so, while inviting me back.

"What a way to end the evening!" I said to my guest. She said, "Since you were brave enough to ask for his signature, why didn't you ask him to take a picture with you?" A picture! I had forgotten that I had my camera in my bag! Oh well. I guess I might just have to take "Buzzy" up on his offer and come back to dine again "By the Sea and Under the Skyline."

A Hidden Quality

Ganna Shpilberg

Choosing a term that suggests a hidden quality looked like an easy task; furthermore, every dictionary would provide a complete definition, the term's history, and an example of the term of my choice. On the other hand, there are always underwater currents that may carry away your precious idea. This challenging assignment was to choose some positive word, provide a few examples, and come to my own conclusion. It would come out as beautiful as an American cherry pie—always popular, delicious, and easy to bake. But I chose another way: finding a term that people are NOT comfortable in discussing. Oh, there are plenty, great numbers of those words that describe human nature in a negative way, show people's sinful thoughts, wishes, and desires. I decided I would like to talk about *jealousy*, one of the most common human qualities that makes the poor and the rich equal in life's competition.

According to the *Cambridge Dictionary of American English*, "jealous" means "unhappy and slightly angry because you wish you had someone else's qualities, advantages, or success" (468). Another definition in the same dictionary gives "jealous"—fearful about love—"fearful that someone you love loves someone else or is loved by someone else" (468). Ironically, there is an example: "Anna is jealous of any woman who comes near her boyfriend." Thank God this example does not pertain to my "hidden" quality. *The Longman Dictionary of English Language and Culture* offers another definition: "Jealousy is usually considered to be a more unpleasant feeling than envy. Compare: Ann has got a very nice job—I am envious" (703). Why is it always Anna given as an example? When I was born, my grandfather gave me this name to honor my grandma; nevertheless, the name Anna was given to every third baby girl in the world in the year 1980. The royal people and the poor gave this majestic name to their daughters to make them feel blessed. However, some of them were not especially blessed. Moreover, they were jealous!

Those little Cinderellas were definitely jealous, for their older step-sisters had whiter hands, prettier dresses, better chances to find a rich husband. As for

the "little princesses" born and raised in luxury, however, history also has numerous stories describing these pale creatures suffering from tuberculosis, dying from the "sin of incest," dreaming of peasants' rosy cheeks and "king-size bosoms." Those "poor" royal daughters, granddaughters, and nieces were not able to breast-feed their future kings! Weren't they jealous? Oh, yes, they were! Yet, they had no choice but to have some very healthy looking peasants feed their own babies. All right, they called them nannies. Meanwhile, of course, those nannies or wet-nurses who breast-fed the future kings, queens, generals, or just very rich people had no rights at all! Their own families were dying from hunger. History doesn't provide any examples of a member of the royalty decorating the woman who breast-fed him or her and saved this baby from malnutrition. Of course, these women were jealous! This is human nature—you want what you don't have. You wish for what you desire. You dream, yet your dream is not available.

All human beings are entitled to certain material possessions. Life is just impossible without them. We need food to live—it's a fact; however, some have plenty, others don't have enough to feed a baby. Aren't those who are starving jealous of those who throw luxury leftovers from their plates straight into the garbage without thinking of the "less fortunate"? We need a place to live, to raise our children, not just a shelter, not a basement where each day the dim light hardly lets people do their chores. Those who live in the basement are jealous of those who live in three-story "little mansions," and I am one of them. I envy those who can afford to raise their children in a place lit by generous sunlight, while I am raising my adorable two-year old son in the basement where the brightest light is the one that comes out of his heavenly blue eyes! Yes, I am jealous. Wouldn't you be?

I am closing my eyes and I am back in my childhood. There was plenty of sunshine, there was enough food to feed all my family, there were more than enough fruits and vegetables to give away. Still I was jealous, I was very jealous, and bitter tears were rolling down my cheeks, choking me, making my tender heart beat rapidly. I envied every girl who had a mother. I was told once that my mother was a stunning woman, tall, gorgeous, but heartless. Being raised by another relative, who had a kind heart, but was not the image of my mother, hurt me even more. I had no feelings toward her. She, on the other hand, might have been also jealous that she hadn't had children of her own; thus, she raised me as her own daughter. I did not love her. When she told me that there were many adopted children who admired their adoptive parents, I was not interested. Some years later, when I was in my teens, I recollected one "ugly" episode: my relative who raised me from the time I was a child proudly introduced to me and my grandma her future husband, the person who proved to be a devoted, kind, and caring man. That day he brought her a gift: a very elegant black full-length coat from Macy's. She looked very nice in it. She was excited, her eyes were sparkling, her happiness was genuine. She expected me to tell her how gorgeous that coat was! I said nothing. I didn't show any emotion. I did not give her a

single compliment. I was jealous that it was she who was given this wonderful, Cinderella-like coat. She still lives with this pain. I still live with this memory.

In conclusion, I would like to change the definition of jealousy from the one the *Cambridge Dictionary* told us. If I could, I would say: "One of the most natural qualities that every human being has regardless of its negative characteristics that show the worst of a human being's hidden qualities." I am not an exception, and neither are you, my reader. You might ask me if I am working on reducing jealousy's effect on my life. On the contrary, I am glorifying jealousy as one of the most avant-garde tools of the motivating artist. If you don't have something, do anything you can to have it. I will do anything to live in the charming house around the corner. I actually see the bedroom of my son on the third floor...

Let's embrace jealousy as a hidden element of survival.

Raising Birds

Luchen Lyn

Living in Southfield St. Elizabeth in Jamaica, I spent most of my time on the red earth of Southfield catching and raising birds. I developed my love for birds in 1999 at the tender age of eleven, and have always been told by various people including my mother Marlene, a party-loving woman, and my grandmother Vernice, a seventy-nine-year-old short-tempered woman, that I inherited bird loving from my father Winford, grandfather Vincent, and my Uncle Erick, who's now dead; they all used to love rare birds. As a kid in Jamaica, during my quest to capture birds, I was motivated by the way birds effortlessly glided through the air and continuously groomed each other's feathers. I have only managed to capture three species of birds: babble doves, pea doves, and baldpates. Now living in Flatbush, Brooklyn, I left my father Winford to take care of my birds, but I return to Jamaica three times a year to see both Winford and my birds. In St. Elizabeth, my best friend Darren and I built an L-shaped bird house from zinc, mesh wire, and board to protect my creatures of nature from the dangers of dogs, mongoose, and rats. In the afternoons, Darren and I would often watch the birds feed on the crushed corn.

I was raised in a household which had chickens and birds; the chickens were raised by my mother Marlene in a 4 x 8 rectangular-shaped chicken cage, and the birds were raised by my father Winford in a 4 x 4 square-shaped wooden bird house. At the age of eleven, I was mostly fascinated by the baldpates that my father Winford had and the way they would crouch on their roost and groom each other's shiny black feathers. I started searching the bushes around my house for bird nests, and two weeks later I found a baldpate nest with a young chick in it. After two months with the young baldpate, it slowly died in my hands when I fed it blackberries. The young baldpate couldn't digest the berries which were too big for its intestines and, as I helplessly watched it die, tears fell from my eyes. In the spring of 2001, a baldpate built a nest in a tashtree, which is about fifty feet from my one-family house; I waited five months before I could take the baldpate chicks from their nest. I put the chicks in a 3 x 3 wooden bee box, which was used by my grandfather Vincent to raise bees in.

In the summer of 2004, after three more successful nest raids, my father Winford and I built a 6 x 8 rectangular-shaped bird house from wood, zinc, and mesh wire, to accommodate my small brood of baldpates. The baldpates got settled into their new home quite quickly, and to my surprise they were reproducing quite rapidly. On the morning of July 23rd that summer, I would add

to my collection of birds yet another species while on my way to my friend Darren's house. The journey to Darren's house took me through a shortcut I often used. I approached a green rosemary tree where I saw a bird's nest—it was a pea dove's nest with two young chicks. I went and called Darren to help me retrieve the chicks; after a month in captivity and separated from the baldpates in the 3 x 3 bees box I had, the pea doves seemed lonely so I bought a pair of babble doves to guide and keep them company. The babble doves and pea doves would one month later fight and badly hurt each other; this showed me that they too, needed their own space. Darren and I decided that the birds needed a bigger bird house, so I asked my father Winford to build me a bigger bird house, but he said he didn't have the time to do it.

Darren and I took matters into our own hands, but we were delayed for three months due to a Category 4 hurricane that hit the island of Jamaica, with a wind speed of 145 miles per hour. Miraculously, my 6 x 8 rectangular-shaped bird house which housed the baldpates was not damaged. On January 3rd, 2005, Darren and I started construction on the new bird house, which we joined to the first bird house, to give it a distinctive L shape. The new section of the bird house, along with the old section, is made from shiny galvanized zinc, cedar wood, pine board, and diamond-patterned mesh wire; after two weeks the bird house was complete, and in the evenings Darren and I would often sit on building blocks watching the birds while they ate crushed corn and cooed. Now I'm in Flatbush, Brooklyn, but I travel three times a year to see my flock of birds, which now consists of thirty individuals in Winford's care.

At the age of eleven, I was fascinated by the way birds effortlessly floated through the air and I set out to catch as many as I could, but only managed to catch baldpates, babble doves, and pea doves. My birds reproduced at a rapid rate to give me a fleet of thirty, forcing me to build a bird house big enough to accommodate them.

Welfare

Maria A. Giraldo

Welfare in the United States has been subject to debate for years. Many Americans have been led to believe that welfare benefits are far too generous. They also categorize the people who receive these benefits as lazy, promiscuous, and immoral. In this essay, three different aspects of welfare will be discussed to unveil the reality of the issue.

Most of the United States population believes that welfare benefits are enough to cover the standard expenses of everyday living. They believe welfare even allows beneficiaries to have ample and comfortable lives. In Making Ends Meet, Edin and Lein interviewed a large group of families reliant on welfare to study how they managed their benefits to cover all their basic expenses over a period of a month. This study allows the reader to have an idea of what it really takes to survive on government aid for low-income families. It did not take long for the writers to prove that most of these predominantly single-parent families were struggling to survive on only a welfare check. These parents were still running short even after combining their welfare benefits with food stamps! Living in such a critical situation, these low-income mothers had to prioritize and find ways of stretching that money to the maximum. Food, household, and clothing expenses were of course the priority, and household represented the biggest expenditures of all. The solution many mothers opted for was living with parents who would assume most of the rent responsibility. The rent was a struggle, so you can imagine how it was to cover the rest of the expenses with the very little money left. Most of the mothers ran short of money long before the end of the month which forced them to find other ways to "fill the gap." Mothers had to be very resourceful; they had to hold reported and unreported jobs, shop at thrift stores and yard sales or, in the worst case scenario, hire a professional shoplifter for clothing. In addition, they had to go hungry once in a while to be able to supply their children's needs and it still was not enough; they would run short on their expenses most of the time. Mothers who have no option but to depend on the government go through a lot of stress and chaos due to being in continuous debt. Just living on their benefits affects the wellbeing of their children and themselves. In short, welfare is insufficient to provide a decent way of living. Therefore, the belief of the general public is erroneous and Americans should be educated about the subject.

Beside all the financial troubles and worries welfare mothers go through, they have an additional problem to be concerned about, the uneasiness of society towards their situation. They get judged, classified, and stigmatized for being welfare dependents. They are called lazy, promiscuous, immoral, and other

offensive names for not being able to support their family as society expects. What the "judges" do not realize is that the majority of welfare mothers are hardworking women who are passing through a rough patch. The last thing they need is somebody making the weight on their shoulders a heavier one. Ruth Sidel in "The Enemy Within" discusses the stereotypes of welfare mothers and compares them to the actual statistics and facts. All the stigmatizations that society has placed on them are refuted and proven to be mistaken. One of the first myths is of mothers enrolling in welfare to live uncomplicated lives, and without making efforts to have less of a dependence on the system. We have already discussed the insufficiency of welfare benefits to cover day-to-day expenses; therefore this myth has been completely ruled out. In addition, most of the women have had recent work histories prior to enrolling in welfare. When they do go on welfare, it is out of necessity and desperation—not out of laziness. They search for jobs, they seek good opportunities, they try hard, they want to regain their independence and with it, their financial stability. Meanwhile, they also search for other sources of income such as babysitting, which is paid in cash, to supply the needs that welfare does not cover and at the same time, prevent their benefits from being minimized by reporting another source of earnings. An even more ridiculous myth is of welfare women having many children to increase their government's allowance which also leads society to classify them as promiscuous. Statistics show that the average welfare mother does not have more than two children. Moreover, these women are conscious of the paucity of the benefit and are smart enough to realize that having more children will worsen their situations.

Classifying these poor women as promiscuous is just another way to denigrate them, and reaffirm their alienation from society. Finally, there is a myth that involves race. Black single mothers have also been victims of labeling. As Sidel describes, if you ask a group of people, even in a college classroom where the students have a certain level of education, what racial background welfare mothers predominantly belong to, most would say African-Americans. This belief is actually incorrect; white women are the main receivers of benefits (Sidel, 160). This is another example of the misinformation in our country today. It is wrong to believe everything that is said. When judging, one has to be properly informed. You must educate yourself on the subject, in order to be able to prize or criticize, or else you are unworthy of speaking.

Since society has been so judgmental on welfare and other benefits for low-income families, politicians, always seeking new followers, took advantage of this situation in the 90s and used it as bait to attract uninformed tax payers opposed to the "openhanded" aid provided by the government. The criticism had such an impact that in 1996 the welfare system went through an extensive reform, substantially reducing the benefits of people in need. In "Without a Safety Net" by Piven and Ehrenreich, the consequences of the 1996 welfare reform suffered by single mothers are addressed. Welfare, prior to the modification, was a kind of unemployment insurance for single mothers (163). Whenever they were out of a job, or were unable to find somebody to take care

of their children for a period of time, mothers sought welfare benefits while searching for solutions. With the changes to those benefits in 1996, single parent families do not have the backup they had prior to the reform. There is a lifetime five-year limit on welfare benefits at the present time and a long process for being determined eligible to receive benefits due to the multiple obstacles that needy families have to overcome. Before being considered for welfare, mothers will have visits from social workers to verify that they qualify. They also have to attend a two-week job-training course, fill out and provide expansive paperwork, and wait on long lines, among other things.

When single mothers apply for welfare, they are not submitting their application just for the heck of it. They are seeking the benefits because they are in serious need. Delaying their access to this money which they require for survival is cruel. It causes them unnecessary stress and prolonged suffering. Imagine getting fired from a job because you were unable to find somebody to take care of your sick baby. Beside the huge worry of having a sick child, you have difficult financial responsibilities. You have sought help at the Temporary Aid for Needy Families (TANF) offices, but they want you to contact your expartner first to see if you could obtain child support. Meanwhile, they have enrolled you in a two-week job-seeking seminar which you have taken twice already but which didn't count because you were unable to attend one of the lessons and had to start all over again. Finally, when you are done with the seminar and you have gone through everything to complete all the paperwork and fulfill all the requirements, they grant you mere peanuts with an expiration date. The five-year limit for benefits is the greatest problem of the new welfare system; it is just not enough! After welfare reform, the U.S. went through a recession and increased unemployment, making it hard for low-income families to find secure and reliable jobs. With the job market on a down slope, it seems especially unfair to single mothers. Being the head of the household, bringing the bread to the table, raising the kids, providing an education and many other significant things that they do by themselves, they have to go through hardships just trying to fulfill their roles and to bring a little stability to their households. This is another consequence of public misinformation; it is hard to imagine that these pressures to reform welfare were just cold-heartedness. Society needs to be educated about this issue.

Politicians have led our society to believe that welfare recipients are like alligators that have become dependent on unnatural feeding (Sidel, 157). Americans have been misled by our leaders. They, who are supposed to help society improve and unify, have instead, turned the people of our country against each other. They have used welfare as a shielding mirror to divert the attention from real and more controversial issues such as violence, unemployment, poor education, and war. They have also divided society so that groups within it have been created, leading to other social issues such as segregation. With these groups formed and turned against each other, it is easy for politicians to manipulate information to their advantage, slowing down the progress and betterment of the American people. Welfare recipients have been the target of

an enormous number of allegations. Poor women have been blamed for a lot of society's problems. If Americans were more unified and aware, and if they really placed themselves in the situation welfare mothers find themselves in, they would not be pointing fingers. They would not believe and follow their false leaders.

Each of the readings mentioned above focuses on a different aspect of welfare. The first one focuses on how welfare mothers make the most of their welfare benefits, the second addresses the myths and facts surrounding welfare recipients, and the third and last, provides a detailed explanation of how the 1996 reform affected single mothers. These readings complement each other to provide a picture of what welfare really is and how insufficient it is. The recent welfare reform affected most of the less fortunate members of society and nothing has been done to help improve their lives. Society has turned its back on single mothers. People have based their judgment on generalizations, and labeling. They have segregated single mothers, taking from them the few chances to come out of a bad economical situation. Many politicians have been misleading Americans to accept welfare myths that have already been proven false. America needs to be made aware that poor families are not the ones to be blamed and punished for needing assistance. If welfare is really a problem, it is not because it is creating a dependency for poor families. It is because welfare is not enough to perform the task it was created for.

References

- Edin, Kathryn, and Laura Lein. "Making Ends Meet on a Welfare Check." *Reading Between the Lines*. Ed. Amanda Konradi and Martha Schmidt. New York: McGraw Hill, 2004.
- Ehrenreich, Barbara, and Frances Fox Piven. "Without a Safety Net." *Reading Between the Lines*. Ed. Amanda Konradi and Martha Schmidt. New York: McGraw Hill, 2004.
- Sidel, Ruth. "The Enemy Within." *Reading Between the Lines*. Ed. Amanda Konradi and Martha Schmidt. New York: McGraw Hill, 2004.

Law: Oppressor and Subjugator In Harriet Jacobs's *Incidents*

Gerald Williams

In Harriet Jacobs's *Incidents in the Life of a Slave Girl*, the most explicit and pervasive effect of the law was to remind slaves that they were mere pieces of property or chattel. However, the story includes more subtle effects of the law, such as how the law works to encourage a capitalist system and society, how a family can mimic and unknowingly support a legal structure (even an oppressive and unforgiving one), and even how law can encourage behaviors and emotions perverse to human nature. In my essay, I will show how the law perpetuated the treatment of people as pieces of property, how the law encouraged people to act in ways that were unnatural, how familial structures epitomized disruption of the law, and how the law made passive resistance a more preferable course than direct confrontation.

In *Incidents*, law served as a reminder that slaves were pieces of property. The textual support for this argument comes from the various and gruesome crimes and punishments committed against slaves. For instance, the cruel whipping of a slave, and then his eventual death in a cotton press; shooting a female slave in the head; denying an old slave food under the assumption that his small amount of productivity required little or no food; and other injustices were committed with little or no consequences for the actors. We also see widespread rape/sodomy and sexual harassment; kidnapping of children and sending them to places where their parents would never hear of them again; wrongful imprisonments, without due process of the law; and entering into contracts (verbal contracts in some instances are legally binding) or terms which stated a slave was to be free at a certain time, but that time, of course, never coming. The law was only one thing to slaves: the reminder and justification that they were powerless objects or chattel at the complete will of their masters.

Law in *Incidents* served as a proponent for the unnatural and sadistic behaviors of people. In the confederate states, where slavery was legal and on the books, you can almost say that it forced, or being more apt, that it heavily influenced and encouraged people's attitude toward the practice of treating another race or class of persons as sub-human; this therefore oppressed white people by imposing on them a way of thinking which humans are not naturally predisposed to. For instance, maternal feelings generally make a woman sympathetic to children who are being neglected or ill-treated. In *Incidents*,

however, Mrs. Flint not only harassed the child Linda with threats and punishment, but also did very little to prevent the advances of her husband on the young woman. Jacobs shows this when speaking of Mrs. Flint: "she had no compassion for the poor victim of her husband's perfidy. She pitied herself ... but she was incapable of feeling for the condition of shame and misery in which her unfortunate, helpless slave was placed" (37). Also, if we look to the example of Mr. Flint's sons, whom Linda actually was more afraid of than her own master, we see that these young men already had the violent and sexually aggressive characteristics of slave owners, despite their lack of years and experience. Linda also makes mention of white fathers killing and/or aborting the babies of their daughters when the father was a black man, and white fathers selling the children they conceived with slaves as pieces of property or considering them as additions to their stock. These accounts all show how the law oppressed and influenced white persons to behave in perverse ways.

The law in *Incidents* also served as a way to subjugate white people. When everyone seemingly supports a structure, whether through action or inaction, then as Thoreau stated, the will of the majority will be implemented, and the minority is therefore conquered and effectually silenced or rendered powerless. In *Incidents*, despite the fact that we know several slaves were able to escape with the help of and assistance of a few white people, overall there is no real sense in the story of resistance except on the part of Linda, her brother, her uncle, and Fanny, all African Americans. This was because the people against slavery and the laws that protected it were only a small group. They therefore could do very little to change things; realizing this, most kept quiet, or contributed in the safest way they could, whether that meant providing shelter or hiding fugitives in the lowest parts of ships.

Linda's own grandmother falls nicely into the group of persons who was subjugated, and this is apparent in her preference for Linda hiding for the rest of her life, as opposed to risking death in an attempt to earn her freedom. Linda's grandmother understood that the law was against slaves—and blacks more specifically—and recognizing this, she thought it best to follow the law as closely as she could, despite how wrong it was. Even further, with religion more than likely being the real law that the grandmother followed, this contributed to her subjugation, because this made her, and people like her, passive. *Incidents* highlighted the fact that unless resistance was enacted, no other actions would grant equality, or at the very least freedom, despite the very limited nature of freedom at the time.

In *Incidents*, we also see how family and family ideals and morals supported and even represented legal structures. Returning to my opening argument of law serving as a reminder that slaves were merely property, Linda's grandmother exemplifies this. The wise, motherly, and protecting grandmother is viewed and respected as having the most highly respected opinion in the family, revered almost like the law. Like the law in the story, we see the grandmother treating Linda as if she was her property which the grandmother needed to keep safe. Yet by her doing this we see Linda becoming objectified as she is kept in conditions

that were not fit for a human, the way we treat objects, not people. Thus the grandmother, while trying to protect and assist Linda, unknowingly treated Linda the way the law encouraged everyone to treat slaves, and this shows the corrupting influence of law even on those trying to help others. The grandmother also represented how the law can be unforgiving, despite the circumstances of the actor. This was apparent in the grandmother's staunch stance and disapproval of Linda becoming pregnant and bearing children. The grandmother never really forgave Linda, despite knowing the trying circumstances with which the girl was continually faced. This is also apparent in the grandmother's remorseless comment when she says, "I had rather see you dead than to see you as you now are. You are a disgrace to your dead mother" (63).

Another role of law in *Incidents* was to force people to work around the law, as opposed to fighting against it directly. The Fugitive Slave Law (hereafter referred to as FSL) is indicative of this fact. Referring to the earlier idea of law oppressing and subjugating an entire people by making them view slaves as property, the North is construed in this story, and in our text and history books, as the protector of the slaves. The FSL reveals how untrue this was. While the North seemingly enacted the patriarchal role of protection and freedom, the FSL sent many escaped slaves in the North back to the South, back to slavery, and more than likely to an early and painful grave or as a painful reminder of why a slave should not run away.

The FSL also put people from the North who truly wanted to help in a dangerous predicament if they actually did try to aid any fugitives This inability led to circumstances like that of Linda being paid for and then given her freedom. As a result of this method of freeing Linda, Linda herself was still a piece of property. As I think of it now, being a slave, but being bought out of slavery, is still indicative of the fact that you are a thing; people are not bought and sold. Linda was never asked, nor had any power to ask even if she wanted, to be free. That ability to make her own decisions is what would have made her a human being, as opposed to being somebody's charity case, to whom you always owe something. That debt is very reminiscent of being in servitude; the theme of slavery is still present. Unfortunately, the abolitionists who thought they were helping these slaves by buying them or helping runaways to escape detection and/or relocate, really only perpetuated the notion of them as property. Objects and chattels are continually moved about, because they have no feelings or concerns about where they go, yet so are people in Jacobs's account. In *Incidents*, Jacobs does not allude to fighting the law or the need to change it. Instead we see all forms of attempts at working around laws. For instance, Lydia Maria Child, in the introduction of Jacobs's book, asks that "no fugitive from Slavery shall ever be sent back to suffer in that loathsome den of corruption and cruelty" (6). These are sympathetic words, but words were not enough to actually bring about the reform that was needed at that time. The depths of subjugation in the story were so far-reaching that people were concerned with evading the FSL, as opposed to confronting it head on. Confrontation would have brought people together

collectively, as opposed to individual abolitionist groups working without knowledge of each other, albeit with the same goals.

In Incidents in the Life of a Slave Girl, law was used to keep a capitalist system in order. Thus the white abolitionist enjoyed the comforts of cotton that came from the South (trousers, shirts, linens, etc.), while white slave owners realized profit. The abolitionist could have boycotted all products from the South, but legally he was not wrong in buying products from the South. In fact, he could argue his money was investing in his country. If law did not discourage people from benefiting from what was being called an evil system, whether through profiting or purchasing, then it inversely encouraged the very same treatment of slaves that abolitionists wished to end. If the law was ever meant to benefit slaves, then the FSL would have not been passed in the first place. The fact that it was, however, shows a motive and, at the end of it all, money was that motive. Return a slave; produce more with that very same slave; therefore have more to sell; and make more money. While African Americans were rendered unfit to be treated as equal, in *Incidents* there is no account of money ever being turned down on account of race when a slave wanted to buy his freedom, or when Linda's grandmother bought her house. This was because any money was acceptable regardless of the color of the hands that were disbursing it.

Incidents in the Life of a Slave Girl paints the picture of an entire system where money and power were the law. Those who did not have the money had to circumvent the law or choose to be subjected to it with all its horrors. Interesting also, however, is that sympathizers with power and money also had to evade the law in order to help others. The status quo was not ready to assimilate anything new. Therefore, any idea expressed which hinted at change would have been ridiculed and mocked, and the person left with a severely damaged reputation.

This system damaged interracial relations, marital relations (as the wives of slave owners accepted their husbands' infidelities), and familial relations (as families were separated from each other due to running away, being sold, killed, etc., or clashes with opposing views). The short and long term effects of this system spread detrimentally across both racial and economic boundaries, as Jacobs illuminates in *Incidents in the Life of a Slave Girl*.

Reference

Jacobs, Harriet. *Incidents in the Life of a Slave Girl: Written by Herself.* New York: Penguin, 2000.

Natural Disasters

Cyril Austin Greene

For the first few months after Hurricane Katrina hit the shores of the U.S., there was enough controversy to fill all of the rescue boats that were deployed to the residents of the then flooded New Orleans. Oh, wait; there were no rescue boats. Nearly two thousand people lost their lives, and what *should've* been at worst, a natural disaster—a Category 5 hurricane with winds up to 175 mph—became a hotbed of finger-pointing, including a bevy of religious accusations.

I recall a conversation with one of my after-school program students. A teacher told him that Hurricane Katrina hit New Orleans because the people there were sinners and that, because of such wanton hedonism as can be seen in Mardi Gras, God saw fit to flood the land; a twenty-first century story of Noah, if you will; except, there was no ark. I thought about the tsunami of late 2004 that ravaged South Asia, and how many "calmly accepted the tragedy as God's disapproval and a divine examination to test their faith" (Waldman). The idea that natural disasters are a demonstration of God's wrath is nothing new. In fact, this idea may be one of the oldest precepts known to humankind. Even in his satirical novel *Candide*, Voltaire takes the very real events of the famed Lisbon earthquake of 1755 and uses them to illustrate the theodicy of the time. When asked by his philosophy tutor, the ever-optimistic Pangloss, what could be the cause of the Lisbon earthquake, the faithful Candide replies, "The Last Judgment is here" (Voltaire 384).

Armageddon is seen as the final battle between good and evil, the last judgment of which Candide speaks. Yet, if his guess were correct, would we be here today? I mean, how many "last" judgments can there be? Lisbon, 1755. South Asia, 2004. New Orleans, 2005? There are even some that claimed that the terrorist attacks of September 11th, 2001 were acts of God, and not of man. Terrorism, which is a man-made horror if there ever was one, is often seen as the means by which God exercises his will, depending on who's telling the story, of course; one person's terrorist is another person's religious crusader.

Nonetheless, our fascination with concepts of good vs. evil, God vs. the Devil, creation vs. evolution, preoccupies our very existence. Why do the good ones have to die? Why did God not take me, was I not worthy? Why Lisbon, and not El Dorado? We have always asked these questions, trying to uncover the higher meaning of the events that shape, and often take, our lives. For many, it's easy to place everything in the hands of an all-powerful God, one that will punish sinners with plagues and natural disasters. Just appease God with a friendly Auto-da-Fe (Voltaire 386), and all should be taken care of. But the ideas of the Enlightenment brought about a new possibility. Enlightenment philosophers asked, what if God did not have the human characteristics that we want to attribute to him? The fact that we comfortably refer to God as a he speaks to the patriarchal, self-centered worldview that would even allow such a reference. If we really think that God has a gender, and if he does, as the creator of life, wouldn't it make sense for the he to be a she? More importantly, what if God were just a creative force, one that set up the game, made the rules, and then let the pawns play out the game in whatever way they will? Our definition of God doesn't allow for events like the tsunami, or Katrina, or Lisbon. If there is a God, why would he (she, it) let that happen? Certainly every single person in New Orleans couldn't have been a sinner, nor every person in Lisbon a heathen. Ironically, when the earthquake hit Lisbon, "...the good Christians were all in Church. The faithful perished while denizens of the red light district, which was built on strong stone, simply carried on shining" (Ehrenreich 17). How's that for a God that punishes wrong and praises good? Kill the churchgoers and spare the prostitutes. Ah, but wait! The ever-ready theologians responded that God is mysterious, and there's no way to make sense of His reasoning. For all we know, God could've been punishing those who bastardized His word (the churchgoers) while just ignoring the heathens (Neiman 15).

Now, back to this thing called the Enlightenment. The ideas of the Enlightenment in some ways challenge our notion of an all-powerful, allrighteous God. We want to know that someone, or something is in control, that there will be rewards for doing good, and punishment for doing bad. As humans, we've come up with rules that govern our attempts to live in groups, and these rules are based on the reward/punishment system. We base our entire society on these rules, and we assume that whatever creative force is responsible for us here, adheres to the same rules. We'll be rewarded if we praise Him and follow His laws, and we will have a tsunami hit our coast, or our city will be destroyed by an earthquake, if we don't. Our God image is all-powerful, and all-righteous, because he only punishes bad people, right? But this all-powerful, all-righteous notion is a paradox. "If God cares about our puny species, then disasters prove that he is not all-powerful; and if he is all-powerful, then clearly he doesn't give a damn" (Ehrenreich 17). That's a hard pill to swallow for many of us, so our religious leaders confer, and come up with a panacean response to natural disasters and the like. It's a self-validating, axiomatic device if there ever was one, yet it has been at the root of our continued quest for meaning where death seems meaningless. Our God concept is kind of like a loving parent; God can do no wrong; he's always there for us; he listens to us, takes care of us and sometimes even punishes us, but it's always for the best. We only need listen and obey, and everything will be taken care of. Or so we hope, and pray.

And while we're discussing this God concept, let's talk about what happens when different groups of people define God differently. Who gets dibs on how God looks? Do we really know whether God is a Buddhist, a Christian, a Muslim or a Hindu? Do we know if He hangs out in a church or a Mosque? When the tsunami hit Sri Lanka, it was clearly because God was cleansing the land of Muslims, according to some Buddhists (Waldman). Of course, that notion may have to be reevaluated since so many Buddhists perished in the flood as well. Some blamed a Christian that cut into a Buddha shaped cake; some blamed foreign tourists for their indulgent lifestyle, farmers blamed fisherman, vegetarians blamed meat eaters (Waldman), I blamed you, you blamed them, and they... well they felt like the dead were the lucky ones. Clearly, it's the survivors that were being punished. For someone who has all the answers, God has sure made things very confusing for us. Or maybe we've made it very confusing for ourselves.

Earthquakes happen because of a shift in tectonic plates. If those plates are under water, you get a tsunami, complete with tidal waves. None of these things are inherently evil. If an earthquake happens on an uninhabited island, no one calls it evil. It's just when we insignificant humans happen to reside on that island, then all of a sudden there's talk of God and punishment, fire and brimstone, hell and damnation. It's as if events are only bad when they negatively affect humans. When a mudslide happens in the middle of nowhere, who is the all-powerful, all-righteous God punishing? Is He just practicing? Is He trying to find the right amount of water and dirt for that perfect muddy consistency? (By the way, if God were all-powerful then He wouldn't need to warm up before handing out mudslides, would He?) The Enlightenment challenged these types of views by using reason to uncover the laws of nature. If static electricity builds up in the atmosphere, the discharge will occur in the form of lightning. That appealed to the logical senses more so than an angry God who throws down bolts because he was not appeased. For Enlightenment philosophers, "the idea of a catastrophe being a 'natural evil' disappeared; its divorce from the notion of 'moral evil' became part of the meaning of modernity" (Rothstein 9). Humans could now apply the laws of reason to nature. and become more...enlightened, if you will.

Enlightened indeed, were it not for a little thing called emotion, and our desire to find meaning in our lives, and deaths. You see, when natural disasters strike, we are left wondering why so many lives have been taken. We cry, we grieve, we mourn. We're angry, we're jealous and we're scared. We have no answers, none whatsoever. We can't comprehend why innocent people deserve to die. We need to know that there's a reason for their death. Maybe they weren't really innocent, yup, that would make it ok. Or, maybe they were, but God (there He is again) has a plan, one that we don't understand. That would make it okay as well. Our desire not to be alone in the universe and to be

watched over by someone who cares has caused us to stray from the ideas of the Enlightenment. Even though we know scientifically what caused hurricane Katrina, we need to create a metaphysical reason as to *why* it hit where it hit, *why* those people were left stranded, *why* they had to die. Usually we have no answers, but God makes it easier to accept.

In the long run, although the Enlightenment opened up humanity to new views of good and evil and how the laws of reason could be applied to nature, it never really could answer probably the most simple, yet most complicated question that may never be answered, at least not to our satisfaction. My mother once told me that the most important question that I could ever ask was "why." It seems not even God has the answer to that one.

References

- Ehrenreich, Barbara. "God Owes Us an Apology." *The Progressive* Mar. 2005: 16-17
- Neiman, Susan. "The Moral Cataclysm." *New York Times Magazine* 16 Jan. 2005: 15-16.
- Rothstein, Edward. "Defining Evil in the Wake of 9/11." *New York Times* 5 Oct. 2002, sec. B: 7, 9.
- Voltaire. *Candide. The Norton Anthology of Western Literature*. Ed. Sarah Lawall et al. 8th ed. New York: Norton, 2006. 377-438.
- Waldman, Amy. "Faith Divides the Survivors and It Unites Them, Too." *New York Times* 12 Jan. 2005, sec. A: 8.

9/11/2001

Joachim Kleinmann

September 11th 2001, 7:45 a.m. As my eyes opened and I took my first breath of the day, I could see that there was no light shining through the gap at the bottom of my door. Mom was already gone. After zombie walking to the kitchen for my typical Cheerios with chopped bananas, I see there's no milk to be had. Slamming the fridge door in disgust, I hear a glass bottle, probably from the condiment shelf, fly and break against the back wall of the refrigerator. Still zombie walking, I think how Moo (mom) is going to give me hell for not cleaning up my mess in my drunken drowsy state, but she never got around to it.

I was in my second period English class as Principal Seleznick greeted everyone on the intercom with a deep and pungent, "Good morning, you young future of America." I've always hated that. He carried on about the weather and our upcoming school events that no one would attend and then signed off with his typical "Sooo-long!" Another twenty or so minutes went by and as I was throwing my hood over my head, a familiar voice spoke to us, "Excuse me..." it was Mr. Seleznick, but he sounded different than he had previously that day. There was silence in my class. "Some, something's happened," (Seleznick never stuttered). I'm not sure how to explain this, but my silent class got quieter. Our principal continued to tell all of us that two airplanes, in what seemed to be a terrorist attack on our city, had hit both of the Twin Towers. The hairs on my neck stood up and I took my hood off.

My teacher, still looking at the intercom, had a lost look on her face. When someone you're supposed to be taking guidance from has that look on his or her face, you too will feel lost. She looked at us and we at her. With a trembling voice she told us to be calm and stay seated. Soon enough the cell phones started going off and the perfect silence was broken and would not be back until I sat on my roof with Moo later that night. But my phone never went off. The tranquility of being scared quickly turned to the chaos of thirty people talking at once and with a beep of the intercom the silence returned. This silence was different. I can't tell you who said this, but it fit seamlessly: "the silence was deafening." No words came.

Then my friend Mia's phone went off and after a moment she pleaded, "Don't, it's not worth it." A long pause and then," Ok... be careful...I love you." Her father was a cameraman for Channel 7 News and he was being sent downtown to report on the happenings. For the next minutes I don't remember feeling or thinking anything until Seleznick's voice was back. In pattern with the

rest of the day, his voice was different once again; it was solid and rooted, calming. "The Towers have fallen," he told us and the chaos started again but what caught my eye was Mia. She slowly stood up and walked out of the room; I followed her. She was just sitting outside the door and she began to cry silently. You could see the pure terror in her eyes; I sat next to her with my arm wrapped around her small body. I felt heavy and burdened, not knowing how to act, but was about to be blindsided with what was about to happen.

This is the moment that visually will stay with me for the rest of my life. A door down the hall swung open hitting the wall it was hinged to. A kid, some poor kid, ran out yelling, crying that his father "works on the top floor." As he careened out of the class he collapsed where the wall met the floor across from his classroom. His teacher came running out after him, closed the door and brought him into her bosom. Even writing it is making my heart beat faster.

That day I remember feeling loss, sadness, confusion, anger, helplessness, but most of all I remember feeling the sense of mortality.

Leonardo da Vinci and Radiology

Patricia Magdalena

When I hear the name Leonardo da Vinci, I think of his famous *Mona Lisa* and *The Last Supper*. I would've never thought about the field of radiology. But my professor mentioned that Leonardo was not just a master at painting, but also a genius—a polymath—one who does everything he or she works at extremely well. When I say everything, I really mean everything! He was good at math, science, music, engineering, inventing, sculpting, architecting, and writing.

Leonardo was born in Italy. His name means Leonardo of the town of Vinci. Leonardo came from a poor family, but his ambitions and creativity made him legendary. While he was young he apprenticed with a prominent artist named Verrocchio. He learned a lot from Verrocchio and he left many masterpieces for us to admire. Leonardo was a self-taught man and a teacher. He wrote many journals and he gave us his knowledge of science, art, and engineering. Some of his journals discuss linearity, color, and shadow. These topics all relate to my major, which is Radiologic Technology and Medical Imaging.

In the first section of his journal, "Why When an Object Is Placed Close to the Eye Its Edges Are Indistinct," he compares the eye with light. They are similar because if you bring an object very close to the eye, you won't be able to see its edges clearly. Also, when you put an object close to a source of light, the shadows that are cast are not sharp, but instead large and faint. In the radiology field, if I tried to take an x-ray of a person's hand and I placed the person's hand very close to the source of the x-ray beam and far away from the image receptor, the image produced would be blurry and magnified. Again comparing the eye with the light, "in all cases of linear perspective, the eye acts in the same way as the light... the eye has one leading line (of vision) which dilates with distance and embraces with true discernment large objects at a distance as well as small ones that are close." Our eyes dilate when we look at objects that are far away and contract when we are looking at an object that is close by. Vision works like light and the x-ray beam. They both give a large divergent beam when directed to a farther distance and a smaller beam when directed to a closer distance. Leonardo also pointed out that the center of the eye has a greater power of differentiating edges than the peripherals do. In radiology, this is the same as with an x-ray beam. The center of the beam has a higher power that is able to penetrate the body and provide more information recorded on the film. The beam's center has better penetration because it has more photons. The peripheral beams are less penetrating and therefore give less information and sharpness.

In the second section of his journal, "Painter," he talks about the mind of a painter. He says a painter should always know the color of an object, and how to draw what nature has given us and how to select the best examples. He points out that even though a painter is not working, he or she cannot relax, because everything around them reminds them of objects to paint. They get so tired that when they finally see someone they know, they don't realize that they are there, and instead perceive them as objects to paint. In the radiology field, it is kind of similar. We must know how the image should come out before we x-ray the patient. If we can't get all the images picture-perfect because of the patient's medical condition, we have to find a way to get the projections that will provide the most useful information so the doctors can diagnose the patient's problem. Like painters, sometimes we get so caught up when a patient walks in, we only see them as a body part to radiograph and not a whole person.

In another journal, Leonardo emphasizes how important it is to pick the right shade of color to correspond to the specific light or shade. He explains how we can pick the right shade of color for a painting based on the painting's position relative to the light. We might need a darker shade if something is located in the back or if something is in front of it; or a lighter shade if it is located in the front and nothing is in front of it. He explains that you can use your finger, putting it in front of the painting and then bringing it closer or farther away to see if the shade is correct. In radiography, we too must make sure that the shade and color of the image are correct, in other words, that the density and contrast are right. Without the proper density and contrast, the image will be useless for the radiologist to read.

Finally, Leonardo teaches us that the shadows must be smooth according to the shape of the object. Each object must have at least two shadows, the one that it casts behind it and a shadow that is cast on it from the object in front of it. The concept is a little different in radiology. When an object is in front of another object, the shadow that is cast on the radiograph is a lighter shadow because more photons are absorbed by the object. Also images that are farther away from the image receptor cast a more magnified shadow.

Leonardo is much more than an artist; he is a teacher. He shares his knowledge of linear perspective, color, and shade. His journals inspired me to draw because I was so astonished when I read about how to make shades and color. It is amazing how eyes, light, and x-ray beams are all similar. Furthermore, it's interesting how painters and radiographers think alike. We both must take into consideration distance, color, shade, and linear perspective.

AJAX World Expo

Shadman Samad

On March 21, 2007, I had the pleasure of attending the AJAX World Expo held at the Roosevelt Hotel. AJAX is shorthand for "Asynchronous JavaScript and XML." In layman's terms, the goal for AJAX is to make your web experience similar to your desktop software experience. An example would be real-time updates of data and the interface without having to "reload" the entire webpage. AJAX itself is not a new technology; it's a combination of existing technologies to bring efficiency and ease of use to web tools. The technologies used are primarily XML and JavaScript, along with a few others, depending on the type of web tool involved. My generation is the largest demographic amongst web users, and most of us use AJAX diving services and online tools unknowingly, for example, Gmail, Google Maps, Youtube, del.icio.us, digg, flickr, deviantart.

The Expo was a rare opportunity for students both as consumers and young developers. The conference is geared to business professionals and developers; however even a non-tech-savvy young individual has much to learn there. That being said, I went prepared with the basic understanding of the so-called "web 2.0" JavaScript and XML. There were many vendors such as Google, Microsoft, Adobe, Cynergy, Nexaweb, Openspot, Laszlo. The list of vendors can be daunting but to simplify it, let's divide it into three categories: vendors providing tools for consumers, tools for developers, or tools for businesses.

Adobe, along with a few other vendors, focused on their tools and technologies for developers by featuring their RIA (Rich Internet Application) framework software for developers. For instance, Adobe Flex is an RIA framework that will simplify the technique for building simple widgets and web apps for developers. On the other hand, Google, Microsoft, and Openspot featured their consumer-based RIA such as Google's Gmail, Maps, and Docs, Microsoft's Virtual Earth and live services, and Openspot's mash-ups. The remaining vendors such as Cynergy and Nexaweb showcased their tools and services for business applications.

I spoke to a lot of people there; one remark that stood out was made by Dave Carabetta from Cynergy. He said that within the next five years the RIA industry will grow to 14 billion dollars from its current 1.4 billion, an amazing 1000 percent growth. Naturally this is an important consideration for young students or developers-to-be. My eyes lit up and I am seriously considering becoming an RIA developer.

I think we are moving away from the old philosophy of "content revolving around software" to "software revolving around content." What I mean is, in a not too distant future, we won't have to worry about compatibility of data; the software will adjust itself to our data. We will be able to import and export just about any digital content from one framework to another, and translations of digital data will be standardized.

I had a great time at the AJAX Expo. I only wish it had been a much larger consumer event at a larger venue such as the Jacob Javits Convention Center.

Fiber Optics: An Introduction

David Hamilton

Communications has evolved tremendously over the last century due to the advancement of the media used as well as their efficiency to connect more quickly and reliably. During the past few decades, the challenges in the communications field have shifted from the mere connection establishment to improving the connection quality and optimizing speed and accuracy. Today the physical and telecommunications connections, which include the Internet and teleconferencing, have reached a level of maturity to the point where, as is well known, many American companies rely on branches located in developing countries.

Fiber optics is replacing copper and other metallic-based transmission lines. Fiber optics is made of glass and allows the transmission of data using light signals at very fast speeds. These signals are so fast that they are received almost at the same time they are sent out.

A basic setup of fiber optics would consist of a transmitter, receiver, and, of course, the thin fiber (Kolimbiris, 2004, pp. 101-107). The transmitter sends light signals which pass very rapidly through the thin glass fiber and are received. Interconnecting networks can both send and receive these light signals.

Many phone companies and internet providers such as Verizon and Cox Communications have started to use fiber optics locally in an effort to improve their services and decrease their expenses. Repairing damage in the fiber optics is not very costly except if the damage is located undersea; those repairs can be expensive.

Although telecommunications is the main area of use of fiber optics, it can also be used in other fields. In the medical field, for example, it is used for laparoscopic surgery. Fiber optics is so flexible and thin that it can travel through joints, the stomach, and even blood vessels!

Since fiber optics can endure harsh weather conditions, it makes it very convenient for military use. Undersea, in high elevations, or even underground, fiber optics can be a better and faster means of communication than any other medium in use today. Tapping into fiber optics is very difficult, but once achieved it is not detectable. This can be either a strength or a fault depending on its purpose and whom it is benefiting.

The American Heritage Dictionary, 4th ed., defines telecommunications as: "the transmission of encoded sound, pictures, or data over significant distances, using radio signals or electrical or optical lines." Therefore, the main objective of fiber optics is to allow the transmission of data from one end to another; and fiber optics meets this objective with a higher performance and lower cost than other alternatives such as copper wires.

As noted by Kolimbiris, "Fiber optics cables have a much greater bandwidth than metal cable." Fiber optics higher bandwidth makes it all the more efficient and reliable.

While copper wire uses electric pulses to transmit data, optical fiber uses light pulses. Therefore, fiber optics is less prone to interference than copper wires since it is not affected by the radiation in the environment. This observation implies that fiber optics is more secure and has a better chance of preserving data during transmission. Other advantages of fiber optics consist of its smaller size, lower power consumption, and the capability of digital data transmission (Kolimbiris, 2004, pp. 1-12).

The 1960s witnessed the invention of the laser, and many engineers believed that the laser could be used to transmit data through the air. However, while long wavelength radio waves could travel through all sorts of rainy, foggy, or clear weather, short wavelength light got blocked by rain and small particles in the air.

The main challenge was to transmit light long distances. Optical fibers offered the best approach for that purpose. The idea of using fiber optics for transmitting light pulses was introduced in 1966. Finally, during the early 1980s, fiber optics was proven to be the most efficient way of data transmission.

The first commercial use of optical fibers was in Chicago in 1976; today all long-distance telecommunications rely on fiber optics.

A single optical fiber can carry more communications signals over long distances than a bundle of copper (Kolimbiris, 2004, pp. 1-12). Meanwhile, the cost of transmitting a conversation over optical fiber is only a fraction of that used by copper.

A good way to understand how optical fibers work is to imagine a tube that is miles long. Person A is standing at one end of this long tube while person B is at the other end. Now, imagine that we covered the inside of the tube with a perfect mirror. If person A points a flashlight from his/her side, then, because of the inside mirror, light would travel to exit from the person B end. When person A starts turning the flashlight on and off, then person B could interpret the light from his/her side as a code or message. It is important to note that whether the cable (the tube) is straight or bent, the light would still exit in spite of some loss of power. This principle indicated by Kolimbiris is called "total internal reflection."

An optical fiber consists of three parts: a core, a cladding and a buffer coating (Kolimbiris, 2004, pp. 125-130). The core is in the center of the fiber and

serves as the axis through which the light travels. The cladding surrounding the core plays the role of the perfect mirror to reflect the light back into the core. Finally, the buffer coating is made of plastic and is used to protect the optical fiber from damage and moisture. The result is an optical fiber that is flexible and has a diameter of a thin hair through which light is transmitted. Because it is made of glass, the light is almost never degraded and can therefore travel long distances.

Manufacturing this fiber has proved to be one of the greatest challenges due to its complex structure. Precision is important and every centimeter of the fiber is tested to insure its required capacity. There exist two types of optical fibers, a multimode and a single mode type. The multimode optical fiber allows for inexpensive light sources. It is usually used for local networks. The single mode optical fiber, on the other hand, is used for long distances but requires a certain type of laser that is more costly than that needed for the multimode fiber.

In telecommunications, fiber optics was initially envisioned to replace copper wires and target the telephone industry. During the early 1990s, and with the prevalent use of the Internet, fiber optics was considered the major digital data transmitter, and since then, thousands of miles of optical fiber have been installed around the world.

Currently fiber optics is used in many other areas. In other applications, fiber optic cables are good light conductors that can replace regular light bulbs. One of the many advantages of fiber optics over light bulbs is their low consumption of electricity and the non-emission of heat. Fiber optics speed is beyond that of any other form of technology used today and it is not affected by atmospheric conditions or electromagnetic waves. This makes it a very secure medium.

In the field of medicine, surgeries on some organs do not require cutting through skin. Optical fibers can be used in medical instruments to transmit internal images of the human body. The outcome is a clear image of inaccessible organs displayed on a monitor (www.sff.net/people/Jeff.Hecht/history.html). Optical fibers can also carry high power laser beams for cutting and drilling. This technology is improving many surgical procedures.

Fiber optics can also be used in sensing devices to register parameters like pressure, heat, and motion. At the same time, it does not require electrical powering and hence is relatively simple to implement.

References

Kolimbiris, H. (2004). *Fiber optics communications*. Upper Saddle River, NJ: Prentice Hall. www.fiber-optics.info/

A Lecture by Professor Leo Chosid

Ethan Pettit

Professor Chosid's lecture on September 20, 2007, could have been called "The Birth of Money: From Embezzlement to Betterment." When you make a loan to someone, said Chosid, and the loan is backed by gold on deposit from yet another person, technically, it is embezzlement.

Yet this is how the modern banking system began. Chosid explained how it is that value is conferred on currency precisely by credit and debt. He described how the practice of issuing redeemable notes in lieu of coin and precious metals, began in ancient China and in medieval Europe as a practical matter of transportation and security, and yet this practice endured to become the foundation of the world's fiscal system.

Chosid used the geometric series to illustrate how a bank makes money. The bank has \$100,000 on deposit. It lends you \$90,000, for which it gives you a "promissory note." "And what do you do with the note? Put it right back in the same damn bank!" The bank now has \$90,000 more with which to write another loan. Hence:

 $100,000 + 100,000(0.9) + 100,000(0.9)^2 + 100,000(0.9)^3 \dots = 100,000/1-0.9 = 1,000,000.$

He explained how the Federal Reserve banking system works, pointed out that cash is not the only currency in circulation, but that many transactions occur with no cash or coin trading hands, so to speak.

Chosid addressed the present sub-prime mortgage crisis. Mortgage banks went bankrupt because they ran out of money with which to make more loans. This happened because the banks had been selling low-grade debt to third parties, by packaging this debt into investment products called derivatives. In essence they liquefied debt and made it a commodity. When it became evident that some of the "ingredients" of these derivates were based on low-grade loans (so-called "sub-prime" mortgages), investment managers got cold feet, the market for derivates collapsed, and mortgage banks lost an important, and dubious, source of revenue.

"You run out of people willing to supply you with money," said Chosid.

"And so who gives value to a dollar!" He asked, holding up a dollar bill for all to see. And in the silence of a room full of confounded students, he gave us the answer:

"You do."

The Story of an Outcast Aunt

Zainab Adiro

In "No Name Woman," the first chapter of Maxine Hong Kingston's memoir, *The Woman Warrior: Memoirs of a Girlhood Among Ghosts*, Kingston tells us about how her mother told her about her father's sister who committed suicide because she had a baby out of wedlock and was deemed an outcast. Mothers are the most precious figures in every child's life and they want the best for their children. Many mothers try to scare their kids from committing illegal activities and having babies at an early age by telling them stories that end in tragedies. But in Kingston's case, her mother's warnings have unexpected effects. When Kingston hears this story, she feels obligated to find out more about her aunt because the aunt was never asked about what happened to her and how she got pregnant. In this chapter, Kingston explains her culture and creates a few theories about what might actually have happened to her lost aunt.

As an adult looking back on her childhood, Kingston thinks about times when her parents used to talk about life back in China. Kingston tells us how her parents obsessively talked about outcasts and "settling business." She remembers how her parents discussed her aunt as an outcast, like someone who had never been born:

On nights when my mother and father talked about their life back home, sometimes they mentioned an "outcast table" whose business they still seemed to be settling, their voices tight. In a commensal tradition, where food is precious, the powerful older people made wrongdoers eat alone. Instead of letting them start separate new lives like the Japanese, who could become samurais and geishas, the Chinese family, faces averted but eyes glowering sideways, hung on to the offenders and fed them leftovers. (344-345)

In this quote, Kingston describes how the villagers practiced a "commensal" tradition, in which an association of people eat together as one. Kingston's aunt wouldn't be allowed to practice this tradition anymore in her home since she broke the rules. In Chinese culture, whenever someone crosses the limit set by the rules, they are automatically outcasts, talked about with anger and

disappointment; and the villagers would even make them eat leftover food alone. Her parents tried to sort things out, but they just couldn't seem to let go of her aunt's business; they could not stand the fact that a sister disobeyed the rules of their culture which was so precious to them that it was worth losing a sister over. This story about Kingston's aunt intrigues her so much that she thinks up a couple of ways that her aunt might have gotten pregnant.

Kingston tries to figure out how her aunt met whoever got her pregnant. She can not ask her parents for more information because her mother has told her all she felt Kingston needed to know, and her father is not to hear about his sister ever again.

Kingston suggests how her aunt might have met her lover: Perhaps she encountered him in the fields or on the mountain where the daughter-in-laws collected fuel, or perhaps he first noticed her in the marketplace. He was not a stranger because the village housed no strangers. She had to have dealings with him other than sex. Perhaps he worked an adjoining field, or he sold her cloth for the dress she sewed and wore. His demand must have surprised, then terrified her. She obeyed him; she always did as she was told. (344)

In this quote, Kingston mentions that her aunt might have met the man while collecting fuel—or maybe he saw her at the market. She imagines that this man could not have been a stranger to her aunt or anyone else because it was a community that knew all its people well. Kingston tries her best to use logic including what she knows about Chinese culture to find out what happened to her aunt. She considers the hard times the villagers were going through which made them raid her aunt's house.

The villagers showed Kingston's aunt that she could not get away with breaking the rules of the community. They raided her house on the night that she was to have her baby. They killed all the animals on the farm, smeared blood on the doors and walls, ripped up her clothes, broke her combs and tore apart the family house. On that night, Kingston's aunt had her baby and the next day she committed suicide by jumping into a well, taking her baby with her. Kingston's aunt might have escaped such punishment if she had not gotten pregnant at a hard time: "But the men—hungry, greedy, tired of planting in dry soil, cuckolded had had to leave the village in order to send food-money home. There were ghost plagues, bandit plagues, wars with the Japanese, and floods. My Chinese brother and sister had died of an unknown sickness. Adultery, perhaps only a mistake during good times, became a crime when the village needed food" (349). In short, Kingston indicates that the villagers acted in a violent manner towards her aunt because things were hard for them at the time. They had dangerous, deadly plagues, no money, and dry soil which meant that they couldn't grow food. They were also at war with the Japanese and they suffered floods and monsoons. The villagers took out their anger about these hardships on Kingston's aunt.

Out of all the stories Kingston's mother told her, this particular story about her suicidal aunt appealed to her most. Because Kingston could not ask her

parents about this, she was anxious to find out what happened to her aunt. She comes up with a few theories and possibilities but she doesn't come to a conclusion on the issue. Considering the fact that the villagers acted the way that they did, Kingston looks into the current events of the time and comes up with her own explanation of why the villagers did what they did. I feel Kingston was feeling a lot of guilt when she wrote this book, guilt about the way her parents turned their backs on a sister who needed their help, and guilt about her own participation in her parents' silence in the situation. I know that it is because Kingston's parents are feeling guilty that they would not let go of the subject of outcasts, and it is because Kingston is feeling guilty that she writes the book to begin with.

Reference

Kingston, Maxine Hong. *The Woman Warrior: Memoirs of a Girlhood Among Ghosts.* New York, Vintage, 1975.

"No Name Woman"

Annabelle P. Guerrero

"No Name Woman," the first chapter of Maxine Hong Kingston's book, *The Woman Warrior: Memoirs of a Girlhood among Ghosts*, describes a family tragedy in which a family sets one family member apart. Kingston is curious to figure out what might have happened to her aunt, so she tells a family secret that should not have been told. The mother, on the other hand, exaggerates the story despite the fact that it is true, but at the same time scares her daughter, and makes her swear to secrecy that she shall not tell her father that this story was ever told to her.

Kingston's mother warns her about a family secret. Revealing this secret, the mother changes Kingston's life entirely. When daughters reach a certain age, many mothers out there begin to discuss personal issues that not all teenagers are thinking about. In Kingston's case she is about thirteen or fourteen years of age when her mom tells her this story.

The mother explains to young Kingston the shocking story about the non-existing aunt she never knew. Kingston's mother says, "Don't let your father know that I told you. He denies her. Now that you have started to menstruate, what happened to her can happen to you. Don't humiliate us. You wouldn't like to be forgotten as if you had never been born. The villagers are watchful" (343). Even though they now live in America, her mother still addresses the villagers' presence, using them as decoys to make sure young Kingston gets the message. The mother is being as strict as possible, scaring the daylights out of her. The mother uses her father's reaction so the daughter does not bring family issues to light. There is a lot of anger against the aunt, so much so that the daughter, who is coming of age, has to keep this in mind very carefully.

In many ways, Kingston is a storyteller just like her mother. Kingston's speculation about her aunt is one example:

After the villagers left, the lanterns now scattering in various directions toward home, the family broke their silence and cursed her, "Aiaa, we're going to die. Death is coming. Death is coming. Look what you've done. You've killed us. Ghost! Dead ghost! Ghost! You've never been born." She ran out in the fields, far enough from the house so that she could no longer hear their voices. (349)

The adult Kingston is speculating about what she thinks happened on the night their home was raided by the villagers, the aftermath when finally the family confronts the aunt, and the humiliation they now face. She wonders how

the family name and traditions were damaged, and how the adultery brought scandal to the respectable family.

Kingston addresses her fellow Chinese-Americans in this book because she believes they are in the same position she is. They do not get to learn Chinese styles or traditions, only the Western way, the customs in America. The fact is that they don't learn about poverty, the insanities of their families, and mothers' telling them stories like Kingston's mother told her. Kingston says, "Those in the emigrant generations who could not reassert brute survival died young and far from home. Those of us in the first American generations have had to figure out how the invisible world the emigrants built around our childhoods fit in solid America" (343). Kingston is addressing Chinese-Americans like herself struggling to understand their cultural backgrounds.

Kingston's story teaches great valuable lessons about family secrets, what things are meant to be told, how you say them, and what you put out there. If anyone out there has doubts about a member of a family, it is okay to speculate. If you still feel that some information is not enough, always get the facts straight first, then say whatever you need to say. This way it is easier, and everyone understands your story.

Reference

Kingston, Maxine Hong. *The Woman Warrior: Memoirs of a Girlhood Among Ghosts*. New York: Vintage, 1975.

In Search of Perfection

Margaret Donahue

In Edgar Allan Poe's story, "Ligeia," there is no doubt that the relationship between Ligeia and the narrator is unusual. However, I believe that the relationship goes further than strange and into a territory of mental illness, drug use, hallucination, and ultimately murder. I will discuss several reasons why I believe that Ligeia was never alive at all, except within the twisted mind of the narrator, and how that fact ultimately leads to the death of the Lady Rowena.

In the opening of Poe's story, I was astonished to find that while reflecting on his love, the narrator cannot recall the details of his first interaction with Ligeia. "I cannot, for my soul, remember how, when, or even precisely where, I first became acquainted with the lady Ligeia" (907). He then describes how this woman is the most important person in his life and he cannot remember her maiden name. "And now, while I write, a recollection flashes upon me that I have never known the paternal name of her who was my friend and my betrothed, and who became the partner of my studies, and finally the wife of my bosom" (907). A stranger revelation is made when he states that she would come and go without his knowledge: "She came and departed as a shadow. I was never made aware of her entrance into my closed study save by the dear music of her low sweet voice, as she placed her marble hand upon my shoulder" (908).

When describing his relationship with Ligeia he states, "Of all the women whom I have ever known, she, the outwardly calm, the ever-placid Ligeia, was the most violently a prey to the tumultuous vultures of stern passion" (910). When illustrating Ligeia's beauty, he refers to it as "the radiance of an opium-dream" (908). Her most astounding physical feature is her onyx eyes; "the hue of the orbs was the most brilliant of black, and, far over them, hung jetty lashes of great length" (909). Several places in the story make mention of the narrator's use of opium, which is a highly addictive drug that requires the user to smoke more and more of the substance to achieve a high. Being an opiate, it dilates the user's pupils, making them appear black. With this information, I feel that the narrator has conjured up an illusion of the most perfect woman possible for him. She is beautiful, but not conventionally, she is calm and well mannered, but a source of fiery passion. He is addicted to opium, and when he uses it, his eyes will be similar to the most mesmerizing pair he has ever seen.

Not only is Ligeia full of beauty and passion, she is incredibly intelligent: "I said her knowledge was such as I have never known in woman"

(910). The narrator then reveals that her intelligence exceeds his own and that he is nothing without her intellectually. "How poignant, then, must have been the grief with which, after some years, I beheld my well-grounded expectations take wings to themselves and fly away! Without Ligeia I was but as a child groping benighted" (910-911). It is directly after the narrator makes this statement, that Ligeia becomes ill and the stage for her death is set. If she is a figment of his imagination, she has become too powerful and too perfect, so he must be rid of her. The narrator claims that Ligeia wrote a poem for him to read on the day she dies, but when he reads it, her reaction is full of horror and surprise. "'O God!' half shrieked Ligeia, leaping to her feet and extending her arms aloft with a spasmodic movement, as I made an end of those lines—'O God! O Divine Father!—shall these things be undeviatingly so" (912-913). This does not appear to be the normal reaction from an author hearing her own work. I believe the poem was written by the narrator, in a self-created moment of mourning for his beloved fictional Ligeia.

Ligeia then "dies," and the narrator makes no mention of the burial for the extraordinary love of his life. I find it very peculiar that within one paragraph, Ligeia is dead, he purchases an abbey, and at "a moment of mental alienation, I led from the altar as my bride—as the successor of the unforgotten Ligeia—the fair-haired and blue-eyed lady Rowena Travanion of Tremaine" (913). I feel that the narrator here is making another feeble attempt at happiness. If the perfection of Ligeia was overwhelming to him, he has found a woman who is the opposite, a blonde, blue-eyed young lady who would not be an intellectual match for him. This marriage also backfires at the narrator immediately,

the unhallowed hours of the first month of our marriage—I passed them with but little disquietude. That my wife dreaded the fierce moodiness of my temper—that she shunned me and loved me but little—I could not help perceiving; but it gave me rather pleasure than otherwise. I loathed her with a hatred belonging more to demon than to man. (914-915)

The narrator hates this woman, and thinks longingly of his Ligeia. So now it is time for him to dispose of this wife, but unfortunately for Rowena, her life is not an illusion.

"About the commencement of the second month of the marriage, the Lady Rowena was attacked with sudden illness, from which her recovery was slow" (915). I have a hard time believing this is a coincidence, that directly after he declares he hates her, she falls ill. Within the abbey with its "phantasmagoric effect" (914), Rowena begins to see and hear things that greatly disturb her. "She spoke again, and now more frequently and pertinaciously, of the sounds—of the slight sounds—and of the unusual motions among the tapestries, to which she had formerly alluded" (915). I believe Rowena's suffering is being inflicted by the narrator, and whatever he has done to make her ill, perhaps even using opium, has taken hold of her senses.

Finally, when he decides to give her wine to calm her, poison is dropped into her glass, and he says nothing to warn Rowena about what she is drinking.

Though the reader is led to believe that it was the ghost of Ligeia that administered the poison, I think it was the narrator himself cowardly hiding behind the fantasy of his first wife trying to return to him. The narrator's guilt shines through here for just a moment when he admits that "I cannot conceal it from my own perception that, immediately subsequent to the fall of the rubydrops, a rapid change for the worse took place in the disorder of my wife" (916). While Rowena struggles with life, dipping in and out of consciousness, the narrator is having vivid dreams of his Ligeia. When at last poor Rowena has expired, there is now room again in the narrator's life for his true love. She steps out of Rowena's death bed to reveal her return into his world. "Can I never—can I never be mistaken—these are the full, and the black, and the wild eyes—of my lost love—of the lady—of the LADY LIGEIA" (918).

In conclusion, I believe that the Lady Ligeia was a combination of fantasy, mental illness, and extensive drug use by the narrator. I have illustrated several examples to show that Ligeia may have never been human at all, just a conjured idea of female perfection. When the perfection became overwhelming to his ego, the image was no longer desirable, and was replaced with an ordinary fair young maiden. Ordinary proved to backfire, and in the case of Rowena, her spilled blood was far from fantasy. There was only room for one woman in the narrator's life, and the only happiness he ever found was with the woman he created and sacrificed in his imagination, his Lady Ligeia.

Reference

Poe, Edgar Allan. "Ligeia." *The Anthology of American Literature*. Ed. James S. Leonard et al. 9th ed. Vol. 1. New York: Pearson, 2007. 907-918.

The Plot Is the Star

Jeffrey Martinez

When one thinks of a play, the Aristotelian elements of character, spectacle, thought, plot, diction, and music or song come to mind. A play combines these elements. Most would argue that thought or theme is the star of a play, but I will explain why actually plot is the star. It is not enough to say that the plot of a play is the most important element. Plot is nothing without spectacle and character. To me spectacle and character are like supporting actors, while thought, diction and music or song are what the film industry calls extras.

With the understanding that a play is a combination of elements, where does a play's core or essence come from? For me, the answer to this question is plot. The plot of a play provides all of the action needed to present the dilemma. Without a dilemma or conflict, there can be no plot which means there can be no play and if there is no play there are no actors to play characters, no technicians to create spectacle and no playwright to even begin a thought about thought, diction, or song. Plot is the star of every play because without it, we have nothing. Whether one is dissecting a character's actions, the spectacle described, the thought of the playwright, the diction spoken or songs sung, the plot is key. One can discuss the other elements with reference to the time of the plot or the date of the play's creation, but doing so will still require one to take a second look at the plot and draw a conclusion.

The "extras"—thought, diction, and music or song—provide support to a play in ways that seem secondary to the play's meaning. For the purposes of this argument, thought is simple, either what the reader wants it to be or what the reader understands from the play. This being said, what Aristotle called thought is not the element which Aristotle defines as essential. What happens to thought, the "extra"? What if the reader's idea of thought is not what the writer intended it to be? Many students may argue that thought is plot but, as we will soon find out, it cannot be. Thought is actually the playwright's reason or meaning behind a play. The thought of a play could be summed up in a paragraph or less, but one cannot know definitively what the writer's intent is without the writer's stating it.

One may argue that diction is the star of the Aristotelian elements and I must say that without diction, how could anyone understand a play at all? The "hook line and sinker" to diction is in the audience of the play. That is to say, the target audience weighs greatly on the language format of the play. Let us take *Hamlet* as an example. It is well known that *Hamlet* has been translated and rewritten a remarkable number of times, but every translation and adaptation still

manages to touch on the essence of the play. It does not matter if the play was written in dialect or verse; the essence of the play is still understood.

I have worked on about fifteen productions of *Hamlet* within the past six years, two of which were at the Hudson Guild Theater in New York City. One of the Hudson Guild productions was very striking. It was set in the modern day with street gangs, contemporary dress and speech. These productions, though different in diction from Shakespeare's *Hamlet*, have the same plot. That is to say that even if *Hamlet* has been modernized more than one may like, we can still recognize that the play is *Hamlet*.

Although there was no music or song in these productions, those were the predominant forms of communication to audiences for more than fifteen hundred years. It is true that without communication how could one understand the essence of a play? But let us take away an illiterate and uneducated 500 B.C. audience and replace it with ourselves. For many, understanding the chorus in *Antigone* is a daunting chore, but for others, it's fun. Dissecting Sophocles' chorus is something that is done all over the world. The meaning behind Sophocles' songs and chants is part of a bigger picture. Knowing that a "bigger picture" exists is reason enough to call thought, diction, and music or song "extras" in the world of a play.

One may now ask, what makes spectacle and character "supporting actors"? A response could be simply that supporting actors are needed in a play—or that spectacle and character help provide meaning for a play. For more years than any ten humans can cumulatively live, spectacle has been produced in one way or another. Whether it be with lighting, sound, carpentry, rigging or costumes, playwrights from all points in history have used some type of spectacle to appeal to audiences and to enhance and convey the meaning of their plays.

Yes, in our modern day we may have taken the use of spectacle to an extreme, for example in Broadway productions, but the use of character has not been taken to an extreme. Every character in a play has a role and whether the playwright intended it or not, every character provides meaning. Some characters are obvious in their importance, for instance, the protagonist, or antagonist. Sometimes, however, it is the characters that we do not pay much attention to that may have the richest meaning. For example, the messenger in *Antigone* does not want to be killed for delivering his message. However, with this character we learn that messengers were in fact killed for delivering unfavorable messages.

Whether one focuses on the star, a supporting actor, or an extra, a play cannot function without all of its parts working synergistically. That is to say, only when these six Aristotelian elements are combined can we the readers or audience benefit from a play.

Research Delivers Comprehension

Mahendra Seepersaud

In many works of literature, authors often use references to people, places, and events to support the main ideas of their works. However, if readers are unfamiliar with the people and places, these references may make the works of literature more difficult to understand. One essay that reflects this dilemma is E. B. White's "Here Is New York." When I first read it, I noticed that many of White's references were to people and places that I had never heard of. This made the essay difficult; however, after researching the references, understanding the essay became quite easy.

For example, a place that I was at first unfamiliar with was Turtle Bay, an area of New York which White portrayed as a peaceful landmark of the city's culture. At first, I did not even know where Turtle Bay was, but after I researched it, I was able to understand why E.B. White used it to express his view of New York.

I learned that Turtle Bay is an area in Manhattan with many buildings—tenements, luxury condos, and modern glass office buildings, but also famous architectural marvels such as the Chrysler Building at 43rd Street and Lexington and the Beekman Hotel, a 1928 art deco building at 49th St. ("Turtle Bay: A Touch of Class"). A famous place in Turtle Bay is the Turtle Bay Gardens, on East 49th Street. It is this very garden that I believe E. B. White was referring to when he reminisced about a particular willow tree in his essay. White stated that in an interior garden there "…was a battered tree, long suffering and much climbed, held together by strands of wire but beloved by those who knew it" (41).

I was better able to understand White's essay when I realized that these gardens were in fact located right in the heart of New York City. This was why White chose to refer to Turtle Bay. The willow tree in Turtle Bay was a perfect representation of life in the big city. The battered tree symbolizes city life under difficulties, these difficulties being the many people who have climbed the tree over and over in turn wearing it down, while the wire strands holding the tree up symbolize how the tree is still standing against all the odds that it suffered. In other words, life in the city can be very tough but if you work very hard, then by some means you will always be able to stand tall just like the willow tree in the garden.

In many works of literature, authors use references to elaborate upon their main ideas. This is often a good writing technique; however, the use of these references can confuse readers. If you are able to research the references you are unfamiliar with, in the end you will be better able to understand the author's writing.

References

White, E. B. "Here Is New York." *The Place Where We Dwell: Reading and Writing About New York City*. Ed. Juanita But and Mark Noonan. 2nd ed. Dubuque, IA: Kendall/Hunt, 2007. 34-42.

"Turtle Bay: A Touch of Class." New York Architecture Images. http://www.nyc-architecture.com/MID/MID018.htm.

Socrates

Manuel A. Zoquier

Socrates was the man who revolutionized philosophy. His defense in "The Apology" was one of high morals and self-respect. It consisted of irony, common sense, and honesty. He could not have defended himself in a nobler, better way.

In "The Apology," Socrates was being brought in front of the Court of Justice to defend himself against old outstanding claims that he did not believe in the gods, and new claims that he was a clever speaker and a corrupter of youth. Socrates felt that it was harder to defend himself against Anytus and his associates because they had persuaded the citizens of Athens that Socrates was "a wise man, who speculates about the heavens, who investigates things that are beneath the earth and who can make the worse argument appear the stronger" (p. 34). Socrates stated that people had spread rumors that those like him "never believe in the gods." Socrates felt that these accusations were unjust because most of the people who had heard these things were influenced at a very young age to believe them. Additionally, Socrates did not know who his accusers were, thus making it difficult to defend himself. Socrates reacted first to the charges which were brought against him by simply admitting that he knew nothing of such matters.

During his defense, Socrates countered the charges of being wise and not believing in the gods by using irony, pleading ignorance, and referring to the gods many times. Socrates addressed the charges of his being "wise" as pure prejudice. He exclaimed that any man who claimed that he, Socrates, had wisdom which was greater than human wisdom "lies and speaks to arouse prejudice against me" (p. 35). Socrates affirmed that a man named Chaerephon ventured into Delphi and asked an oracle if there was anyone wiser than Socrates, and the oracle answered "no one." Socrates then reluctantly decided not to try to

make the oracle seem like a liar for the oracle gets his knowledge from a god, and the gods are not capable of lying. But Socrates would try to prove that the oracle was mistaken.

The first example Socrates gave of his attempt to prove the oracle was mistaken was when he went to someone who was thought of as very wise, a politician, to prove that he was wiser than himself. Socrates stated that when he cross-examined the man, he realized that the politician was not wise and only thought that he was wise. Socrates recalled thinking to himself, "I am wiser than this man: neither of us knows anything that is really worth knowing, but he thinks that he has knowledge when he has not, while I, having no knowledge, do not think that I have. I seem, at any rate, to be a little wiser than he is on this point: I do not think that I know what I do not know" (p. 36).

Socrates continued to give examples of his quest to prove that he was not wise. Socrates then saw, after many trials, that he indeed was wise, not for the sake of being wise, but, because he was aware of his own ignorance. Socrates then went on to say, "I found that men whose reputation for wisdom stood highest were nearly the most lacking in it, while others who were looked down on as common people were much more intelligent" (p. 36).

Socrates used these methods to demonstrate that he was not an atheist. He was trying to prove that he indeed was closer to the gods than people could imagine. Socrates used more examples describing the outcome of his examining of poets, prophets, and soothsayers. Socrates' common sense was that "It is better for me to remain as I was." Humble Socrates would deny claims of bystanders calling him a wise man, saying, "I believe that the god is really wise, and that by this oracle he meant that human wisdom is worth little or nothing" (p. 36).

Socrates went on to tell the people in the Court of Justice why it was that he cross-examined people who thought they were wise; Socrates said it was to point out, on the gods' behalf, that he was not wise. Socrates took pride in what he did and it was for that reason that he was in poverty, as the direct result of his service to the gods. This was proof that Socrates was a believer in the gods, and it is true that people would deny that claim out of pure ignorance. Socrates even took the luxury of explaining to the audience why people assumed these things about him; when so-called wise men were cross-examined and proven to be unwise, they got angry with Socrates instead of with themselves. They said that Socrates was an abomination and corrupted the young. People would then ask questions, "Why, what does he do? What does he teach?" Instead of people confessing the truth which was that they were "ignorant pretenders to knowledge that they do not possess," they spread hatred of Socrates and said that he and all philosophers were teaching people to "disbelieve in the gods" (p. 37).

Socrates continued his defense when he cross-examined one of his accusers, Meletus. Socrates subsequently proved to the people that the "prejudice and resentment of the multitude…have been the destruction of many good men before me, and I think will be so again. There is no prospect that I shall be the last victim" (p. 39).

Ending his defense, Socrates openly and bravely told the people in a simple way, this is my argument: I have given you every bit of truth I can offer. I have done nothing wrong nor have I committed any of the crimes you have accused me of. Even if I were offered to be set free but to stop doing what I am doing, I would not stop, for it is my duty as a philosopher and my debt to the gods. I am a gift to you, the people, from the gods.

Socrates did not bring any of his family in to plead for him to be set free. Nor did he beg to be set free. Socrates' defense was telling the truth. He offered the people another chance. Socrates proved in many ways that he was not guilty of anything he was accused of, for if he were really a corrupter of the youth or had given the youth bad advice, they would have taken their revenge. Socrates was also not afraid of death because he did not know what was waiting for him. Socrates stated only a fool would be afraid of what they do not know.

Evaluating Socrates, I would say that Socrates was successful in his defense. He stayed consistent in his whole argument and I believe that his defense proved everything he ever thought as a philosopher. That is: Human wisdom is worth little or nothing. Most people do not even possess it. Most people are filled with ignorance and are blinded by their anger toward someone pointing out their ignorance to them.

If Socrates had given in to what the people wanted he would not be known in history. We have never heard in a positive way of any coward who saved his own life by pleading and begging. Everything that Socrates thought he stuck with to the end.

As I have stated, Socrates could not have died in a nobler way. Socrates was a gift to the people. Everything Socrates stood for was valid and gave birth to a new way of philosophical thinking. That was worth dying for because all he did was not in vain. Most people today can now read about Socrates. His work will always be remembered. The things he said back then are still as valid today as they were then.

Had Socrates defended himself in another way, say, begging for his life or going into exile, I doubt his work would have meant anything. His consistency and bravery, not just to be contrary, but to stand up for his truth and what he loved, is a trait that makes great people. Socrates gave examples of consistency in "The Apology" when he discussed the only time he ever affiliated himself with politics, when he was a councilor and defended justice when everyone else went contrary to it. He stated, "but I thought that I ought to face the danger, with law and justice on my side, rather than join with you in your unjust proposal, from fear of imprisonment or death" (p. 42). Indeed he did, including the very last time he ever needed to defend himself.

Through my first lessons in philosophy, I now know that the only way you can really know anything is by first understanding that you really know nothing. Once you understand that you know nothing, your mind will open and you will be able to learn more than what you would have been able to learn with the other approach.

Had Socrates defended himself in another way, would we even know of his existence? If Socrates hadn't defended himself the way he did and refused to give up philosophy when other people demanded he do so, it is possible that the world would never have learned Socrates' important lesson, and we would know nothing of what we know now.

Reference

Plato. The apology. In L.P. Pojman (Ed.) (2003). *Classics of philosophy* (2nd ed. pp. 33-47). New York: Oxford University Press.

Epiphany Speech

Ron'e Neil

Cold, reclusive and a loner—most people don't believe me when I give them that description of me just a few years ago, when I tell them that I was a wreck who spent three years of my life in a downward spiral of corruption, self- hatred, and addiction.

Shana and I were unlikely friends. I was a bookish tomboy, who didn't mind weekend homework. I was shy, extremely awkward and, due to my large frame, very noticeable. She was my "Bizarro"—Superman's Other. She was pretty, outgoing, charming and had nice hair, too. She was adored and envied at the same time and, petite as she was, she had the presence and ego to match my size.

My change was obvious. Shana and my new friends were all gangsters. They basically did anything they wanted to do. I was just starting to get out of the house. I was beginning my freshman year of high school. I only had one friend in that school and, judging by my dorkiness, I wouldn't have any more. Her goal was to fix me. She would give me tips on being more laid back and she would always direct me to smile less. She also tried to teach me to flirt with boys, but I was still one of the guys and I was fat, so that didn't work out too well.

In school I was involved with everything the teachers asked me to be in. Every day I led my school's activities. I was the one in charge of raising money, decorating, and supporting everything creative. At home, though, my role was the opposite. I was a sidekick slash bodyguard. Shana liked to fight though, so I didn't have to do that much. She caused me to feel mixed emotions. I wasn't sure if I was intimidated or just intrigued by her brash, rude attitude. I didn't understand her appeal, but then again, I too was caught up in her power. I wanted to fight with her, be around her and, most importantly, be accepted by her.

That was the first stage of change. Next came the hanging out and running the streets. We were two fourteen-year-old girls on a first name basis with drug dealers, who were also the gang bangers and part-time pedophiles. My weekends went from homework to drinking contests. They would show me how

to talk with razors in my mouth and then teach me how to roll joints. They would compliment us on how mature we were. Yes, she would always get too drunk and I would have to hold her hair as she barfed. That was very grown up and sexy. They would give us unlimited amounts of booze and all the marijuana we wanted. Fortunately my cell phone would serve as an over-the-limit warning signal. Before I would make any more mistakes, the phone would ring and I knew it was time to head home. Thank God for Verizon. I was losing an innocence that I never cared for and didn't realize till much later how necessary it was to have.

I was a bit luckier than Shana. She had no one she really cared about. No one mattered more to her than herself. Where she had all but given up on the world, I still had my father. I knew that the truth about me would break his heart. I would always give him stupid reasons to trust me. "Hey dad, I've never been arrested! I love the cops!" Or "Do you know how many girls my age are having babies? I don't even like kids!" As foolish as I was becoming, I still aimed to please him. I had to impress him with my intelligence. I loved how much the teachers would brag to him about me, even when I didn't deserve it. My nights were filled with premature debauchery; yet I kept my days dedicated to academic success. My honors classes, Jazz Band, charity work, sports and other activities weren't for my own happiness. I did everything for him. I could have sworn I was in control of my life, but I was losing the ability to keep it all together. My other life, who I thought I wanted to be, began to interfere with who I had to be.

By my sophomore year, my inner demons had evolved. My sanctity was demolished and I felt no reason to hold myself back any longer. I was removed from one of my honors classes and started to socialize with older, wilder kids. My mouth was disgusting, worse than it is now. My experiences gave me an acceptance with the other degenerates. They could see that I was tainted. Either that or they could smell the alcohol on my breath and wanted some from my stash. I was losing the ability to maintain the façade. Most of the school day, I was either in the lunchroom rapping, or outside playing handball. I would dodge my classes and if I had to go, I would have to cover that stench with body spray and prayed that it removed every trace of marijuana and whatever flavor liquor I sweated out while playing handball.

The influences made me too carefree and nonchalant. I wasn't a trouble maker, I just didn't care. That is when the teachers finally began to notice. I thought it would be a bigger issue, but apparently as long as I continued to participate in the activities it didn't matter. They knew that I was in a tight spot and just piled more on me. I felt like a character in an Italian gangster movie. I did the dirty work, the work no one else wanted to do, and then all of my other deeds would be ignored. I was slipping with their permission.

Regardless of all the fun I could have sworn I was having, I became very depressed. My smile was now completely gone. Everything I did was just me swinging it. I had no passion. Towards the end of the semester, we were having a discussion in my religion class. My teacher asked us "What do we live for?" and my peers gave the typical responses. The majority replied that they lived for

their family, friends and for success. I tried to shrink into the side of my seat and avoid the question. But when you're 5'10" with a bright red afro, you learn that you always need to have an answer.

I was going to lie and give him a sob story. I was planning one out, but as always I was too far inebriated and didn't feel like coming up with cover stories. I just told the truth. I answered that I had no reason to live. I also said that if I weren't such a coward I would kill myself. That remark ended our class. Mr. Trainor, my homeroom and religion teacher, gave me a look and pointed to his desk. He asked me the mandatory questions, "Have you tried to commit suicide?", "Is something going on at home?" No and No. I explained to him that there was something lacking in my heart. I remember telling him something along the lines of "I have so many around me but I still have nothing. These people in school are only four- year associates and those at my home are helping me to destroy myself. I am too dumb and too addicted to stop. You thought I was a leader, but I follow around idiots."

I continued to tell him how every day was killing me. I was fully aware of the damage I was inflicting upon myself, but I would still try and numb myself to it. My attempts were unsuccessful. He just looked at me. After a moment of awkward silence, he asked me about my plans for the summer. We had a few weeks left in school. I had already planned out my summer three months before. I told him "Sex, drugs, and reggae parties." I smirked, but he wasn't entertained. It was funny when I said it to my friends. He gave me a pamphlet for a camp called Avotar. He explained that the camp was for adults and children who had "Special Needs." I've worked with kids like that in school before, but never for a whole week. It was just for a period or two. It didn't involve a major commitment like this. Plus, why would I want to volunteer during the summer? And it was scheduled for the second week of July too? I planned to celebrate the Fourth for two weeks straight. I was a bit turned off by the idea and he noticed that. He told me to think about the life that I was wasting and how so many others wish they had my chances and abilities. We walked out of the room. I had a whole day to think about the camp and my general feeling was "blah."

It was 6 p.m. that same day and his camp was three more gulps from being erased from my mind. This was going to be our summer. We would spend it sitting on a random porch with friends. We would be making fun of those who walked by, play-fighting and "getting bent." That night, one of the older guys dared Shana to kick a little boy off his Big Wheels. She quickly jumped down the steps, ran up to the kid and kicked him off his bike. We were sitting there laughing and one of the guys said to Shana that she is "retarded and needs help."

As they continued to laugh at the crying child, what he said began to go through my mind. I am sitting here twisted and somewhat enjoying the misfortune of a child. There are those who would use my fully-functioning brain more productively. Now I am having some sort of paranoia-induced mind freak. I keep hearing the words special and retarded over and over. What if I had a special need? I thought about not being about to enjoy my games fully, my music, my writing or my loved ones. I couldn't focus on anything else. When

the boy's mother came up to fight Shana, I was too much in a daze to get her out of that situation. The next day I brought my camp papers to Mr. Trainor.

(Flash ahead) It's the first day of camp and I'm a bit relieved to see some familiar faces waiting for the bus. They weren't close friends, but they were better than nothing. I needed a break from the jerks around me. The night before, my street friends were calling me a million times and begging me to spend my camp money and throw a small party. I kept declining, painfully, and kept getting cursed out.

The first two days were terrible. I could have sworn that I was suffering from withdrawal. I needed the block. I needed Shana. I kept wondering what they were doing and how much I was missing. The morning of the third day, I received two voicemails from my father. His voice was low and I could barely hear him. He seemed upset. He tells me that a seventeen-year old boy was shot the night before. I'm getting ticked off because he's talking too low and isn't giving me any reason why I should care. It sounds like the phone cuts off and that was the end of the first message. I play the next and he continues to inform me that three suspects were arrested, G, Shawn, and Shana, and that the police were looking for another female suspect. Some of my neighbors, knowing how tight Shana and I were and not knowing that I was out of town, gave some hints that I was the second girl. My father ends the voicemail with "Thank God you went to that camp." I played the messages over ten times. I knew by the third time I had heard him clearly, but I was still facing the shock and denial. Later that day, Shana's mother told me that she spoke to some people and the four culprits are looking at twenty years to life. I hung up the phone and couldn't stop repeating, "Twenty years to life."

The head counselor gave me the day off so I could handle the news. I kept thinking about Shana. How she took away two lives, hers and that nameless kid, for less than ten dollars and bought Chinese food. Was I becoming that person? What am I doing with myself? I have this life that I barely want and my campers have lives that they want to make the most of. I was in a half nap/half thoughtful mind state. I spent the last two years turning into an unhappy addict. I had to leave that room.

I headed outside to where the campers were eating. After dinner they usually had dance activities. Like the other nights, they would play a random mix of terrible boy band and pop crap. Britney Spears, N Sync, Backstreet Boys and a flashback group. New Kids on the Block. The last thirty minutes were usually dedicated to re-enacting the entire Grease Soundtrack. I noticed one camper was sitting alone crying. None of the other counselors saw her walk away and I had already decided that I wouldn't go to her, but I did keep a watchful eye. She would not stop crying and everyone else was occupied with other campers. I had to disregard my own issues in order to frigidly ask her why she was crying. She mumbled that no one wanted to dance with her. I looked over and saw all the other campers having a ball. I bent down, took her hand and told her I would dance with her until she found someone else. We got up and

danced. At first she was a bit reluctant. I wasn't moving much and she wasn't much excited either. I was too laid back from Shana's training. I wouldn't smile or do too much to make myself appear foolish. Shana had trained me well. But look where that got her. I started to do all those cheesy dances that I remembered from the movie. After three minutes of my hopping around the yard, she started to laugh. We danced around for the remainder and at the end she hugged me, told me she loved me and thanked me.

It was the campers' bedtime and she held onto me and wouldn't let anyone else take her to her bunk. I told her goodnight and that I would see her in the morning. She hugged me again and kissed my cheek. I heard a mumbled "goodnight" as I walked away. I felt something, something that at that moment I could not describe, but now I can tell you what it was: Fulfillment. Everything I had done previously had had no resemblance to how I felt at that moment. I was sober, lucid and smiling.

I realized that, each day, someone is under an influence. Some people are strong and can walk away. Then there are those, like me, who were misguided in their search for something more. I lost someone I thought was special to me, but I found something that I know has brought back my reason for living. So frequently I see people dedicating their lives to those who care nothing about them or anyone else. I am not sure that I have any words of wisdom to offer, but I can tell you that in order to find where you need to be, you should look at where others around you are, and where they are going. And also, never follow a blind guide walking on the edge of a cliff.