

FORUM



1993

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FORUM

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TABLE OF CONTENTS

ESSAYS

Conversation with the Artist

Kirsten Sundell

Together We Stand: Divided We Fall

Kristen Roberts

A Borderless Land

Allison Kelly

Math = Art

Matt Davis

Armed and Dangerous

Andrea Jayne Sabaliavskas

Journey into History

Thomas P. Golembeski

The Fountain of Knowledge

Mika Uematsu

Revelation Through Tears

Gina Marie Kelly

Who are We, Why are We, What Will We Be?

Phillip Hurley

What Every Girl Needs to Know

Carlene Bauer

No Virginia, There isn't a Santa Claus:

The Dangers of Feeling You Must Say No

Jonathan Ogas

Busking

William Desmond

Modern Computer Technology:

Have We Rediscovered Fire or Are We Still in the Dark?

Lee Gordon

It's Not Easy Being Green

Tavia A. Kowalchuk

ARTWORK BY:

Doug Davidson	76
Tom Gibbons	54
Laura Graziano	34, 53, 67
Pawn Nitichan.....	6, 18, 28, 33, 48, 80
Gabe Ossi.....	62
Billy Pierro.....	40
Andrea Poggi.....	12, 22, 39, 90
Dave Thomas	11, 27, 89

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A Note from the Editor

As I sit and type onto a brightly lit computer screen the words of my final editor's note, I am overcome with a sense of oppressive finality, a feeling of being stranded in a neutral state—longing to move forward, yet fearful of abandoning what has become comfortable, secure. I read once that John Wayne has been quoted as saying, "Tomorrow is perfect when it arrives and puts itself in our hands. It hopes we've remembered and learned something from yesterday." When tomorrow comes and this whole Forum experience is far behind me, what it is that I will remember? Surely, the hours of painstaking proofreading, the difficulty of the decision making, the frustration of deadlines which sneak up from behind will become blurred with a pair of those rosy glasses and hidden behind forgotten memories of long ago. What I will take with me, however, is the feeling of pride I've experienced from being able to glorify the incredible talent and promise of this college's writers and artists, to spotlight their accomplishments for all of the Loyola community to see and admire.

During these past three years, I've received much support in my endeavors as editor, and this year I'd like to express my deepest gratitude to two people in particular. A heartfelt thank you goes to Renee for all her patient assistance which she's given in a moment's notice and without complaint, and to Dr. McGuiness, who coerced a shy and unwilling first year student into taking responsibility of putting together a literary magazine, giving her the challenge and the opportunity to "widen her horizons," the confidence and encouragement to stick with it, and the gift of a very special friendship she will always remember and treasure. Thank you both so much.

To all the readers of Forum, I hope you enjoy what's contained in these pages; once again, I'm sure you will gain a renewed respect for our authors and artists. And to Amy, with next year's edition, I wish you luck...much of it goes into creating a literary magazine, I've learned (along with so much more!).

Maureen C. Marron



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*"True art selects and paraphrases, but seldom gives
a verbatim translation."*

Thomas Bailey Aldrich

Conversation with the Artist

by Kirsten Sundell

No one else can know how my paintings happen," wrote Georgia O'Keeffe about her works. I am trying to comprehend this, reading excerpts from her biography, repeating aloud her own words, making smudgy pencil sketches from one of the oversized books in my collection. Drawing and redrawing the curved and rhythmic lines, I try to understand her style, letting the charcoal flow from my hand like it might have flowed from hers.

O'Keeffe's paintings are infused with intense color and light, rendered in elegantly simple curves and lines. "Shapes and colors are more exact to me than words," she said. Her first and strongest memories were of brightness and light, the white and red sweep of a quilt used in her infant years. When she was eleven years old, she and her four sisters received their first art lessons from the instructor boarding in their Sun Prairie home; Georgia showed surprising talent. In eighth grade her future appeared magically before her: she would become an artist. She approached her career with sensibility and eagerness, harboring no foolish notions about the life of a painter—she would earn a living by her labors. As a student, she was eager to please her instructors, resolutely drawing her lines big and light after her teacher criticized her work as being dark and cramped. After studying at a convent and a private school in Virginia and after teaching at the University of Virginia, O'Keeffe found herself in New York, at Columbia Teacher's College. She suddenly realized that all of the skills that she had mimicked were of no use to her, that it was in the manipulation of her materials that she had strength. "But what had I to say with them? I had been taught to work like others, and after careful thinking I decided that I wasn't going to spend my life doing what had already been done. I decided to start anew—to strip away what I had been taught—to accept as true my own thinking."

Pencil in hand, staring at the bare white wall before me, I too wonder, "What have I to say?" My own style is slowly emerging as I attempt to reproduce the works of the great painters. Today I choose my favorite, Georgia O'Keeffe. I have decided to make the wall outside my door my canvas. It is painted a creamy white, and the way it feels and glistens under the fluorescent lights tells me that I will be working on latex. Oil paints don't take well to latex painted surfaces, so I have supplied myself with a styrofoam plate daubed with ribbons of thick watercolors, a sharpened pencil, a ruler, a color plate of "Calla Lilies-1923" The hallways outside the door of my dorm room are truly ugly: the previous residents have covered them in garish preschool paintings that instantly assault and offend the eye. There is a great wide patch of open space by my door, however, and I long to add something lovely to its crackled creaminess. "An idea that seemed to me to be of use to everyone—whether you

think about it consciously or not—[is] the idea of filling a space in a beautiful way," said O'Keeffe of the impetus behind her work. I keep this in mind, mentally repeating it, as I apply pencil to surface.

In New York, O'Keeffe was introduced to Alfred Steiglitz, a photographer many years her elder, quite famous, the owner of "291," a small gallery where O'Keeffe often came to view current works by contemporary artists. A mutual friend gave Steiglitz some of O'Keeffe's work—he was so taken with her charcoals and paintings that he hung them directly on the wall. They began a correspondence; each excited by the other's talent and determination, theirs was a meeting of artistic minds. He photographed her in hundreds of poses; they became lovers. She lived in his orange and yellow studio and painted alone, often in the nude, unfettered by clothing or distraction, creating large and brilliantly colored canvases. It was a fertile period for her, both emotionally and creatively. Shapes and colors came easily: "They are shapes that were clearly in my mind—so I put them down," she wrote of her many abstractions. She continued to paint enormous panels of vibrant flowers, determined to make "even busy New Yorkers" see the same beauty that she saw in flowers. "I'll paint it big and they will be surprised into taking time to look at it."

I have attempted to sketch my painting of the calla lilies on the wall to the same scale that O'Keeffe used. It is a slender painting, pushing upward in a vertical plane. Three white and abstract lilies dominate the center of the piece, with rich green curling stems swirling gracefully downward, uniting the delicate lilies with the deep brown and black background. Above the lilies is a cool arching greyness, tinted with white and alizarin crimson. Applying paint becomes a different sort of process, requires greater concentration and accuracy of perception. I use my paints full strength, not diluted with water or softened with titanium white. O'Keeffe's colors are intense, placed on canvas with confidence, straight from the tube. Even the delicate lilies are painted with stark, forceful colors—bright white, vivid green, vibrant yellow and yellow ocher. The background is abstract, done in extremely dark browns and blacks, its graceful swirls reminiscent of the folds of cloth or the sweep of a vase. Achieving the same harmony of brightness and shadow in the cups of the lilies is difficult. I smooth on bold strokes of grey and green, then, seeing the disparity between her colors and mine, I reapply a thick white to lighten the shadows. Methodically adding layers of paint to correct the excess, I think about the first time I saw an O'Keeffe exhibition. It was in 1988, at the National Gallery. I was already familiar with her paintings, had seen many films about her, and had already begun my collection of catalogs of her work. Nothing could have prepared me for the astonishing and overwhelming beauty of the actual paintings. They filled the expansive white walls of the east annex with the most

CONVERSATION WITH THE ARTIST

gorgeous color I had ever seen; they put the drab Dutch masters to shame. They filled room after room. I wandered among them awestruck, mute with fascination and pure joy, a pilgrim in a holy shrine. I collected every brochure available, every pamphlet of commentary and criticism. I still have them, tucked inside the cover of her biography.

O'Keeffe herself did not care about the opinions of her critics. She worked to please herself, although she admitted that the one person she wanted to approve of her paintings was Steiglitz. Before an exhibition, she would hang her works on the wall and give a show for herself, making up her mind whether they were good or not. After that, "the critics can write what they please. I have already settled it for myself so flattery and criticism can go down the same drain and I am free." After Steiglitz died, she moved permanently out west, living at Ghost Ranch, painting the red hills, bleached bones, the starkness of her patio. Noticing the similarity between a painting of black hills and the shape of the shingles she had roofed the house with, she said, "I find that I have painted my life—things happening in my life—without knowing." Her works do reflect her life, her periods of lush creativity seen in her flowers, her attraction to the city in her "New York from the Shelton" series, periods of strife in the torn autumn leaves, her peace and freedom in the enormous "Sky Above Clouds" canvases.

My own painting is finished. It has taken a total of four hours to sketch and paint the 10" x 24" rectangular likeness on the wall. I am satisfied by its similarity to the original work; yet the painting before me seems wholly my own. My lines, though reminiscent of her curving planes, seem to originate from a different place, seem driven by a different energy. The lilies are serene, slightly less abstract, the depth of shadow in their smooth whorls and cups more pronounced. The scale is different, wider, the flowers broader, dominating a greater portion of the painting. I shellac over the top portion of the painting to protect it from moisture and vandalism, and overnight, the sealants render translucent the opaque white that I applied in an attempt to hide the dark grey and green shadows I had painted in the lilies. The painting seemed to know what was best, needing only a catalyst to free the bolder lines and colors beneath. I am pleased by the reemergence of my own style, by the heightened clarity of color that the shellac brings out in the flowers. The painting is more complex than O'Keeffe's, the colors brighter and applied with painstakingly delicate strokes. My interpretation communicates a desire for loveliness and perfection that seems almost agonizing in its rendering; my brush strokes strive toward a balance and harmony in form and color, an expression of simply being. Stepping back, scrutinizing it from all angles, I am struck by its foreignness: next to the glaring primitive paintings nearby, it resembles a portal, a door-shaped opening into a different world.

F O R U M

Content, I sit on the floor beneath it, studying the picture of Georgia O'Keeffe in front of "Painting No. 21 (Palo Duro Canyon)" taken by Steiglitz in 1918. She is young and self-confident in this photo, head in slight profile, chin high, possessing the kind of beauty that knows no narcissism. As while I painted the calla lilies, her words speak out to me, encouraging. "Accept as true your own thinking," her serene face seems to say. "Take the shapes that are in your mind and put them down on canvas or paper." Looking back up to the finished piece on the wall, I hope that she would be pleased. My own painting has come through.



*"Equity consists in the same treatment
of similar persons."*

Aristotle



Together We Stand: Divided We Fall

by Kristen Roberts

"Lately, I've been in a life like limbo, lookin' out of a smudged up window.
We're not sure where our lives are going, friends, it's summer outside but
yet we're snowed in."

-Arrested Development, "Give a Man a Fish"

As the country celebrates, or protests, the quin-centennial anniversary of Christopher Columbus's discovery of America, it is important for America to keep its problems in perspective and not to lose sight of the real issues. The 1990's seem to be the age of the politically correct. As we enter the 21st century, we are all aware that it will not be long before the majority of our country will be non-white. Perhaps this is what has given rise to the politically correct education philosophy of multiculturalism. Americans have jumped on the bandwagon of the multiculturally minded, the politically correct.

What is multicultural education? Multicultural education is putting little African-American and Asian-American faces on the school bulletin boards instead of just Caucasian ones. It is making an extra special effort to find books about girls named Lakeisha and Hey Yong. Multicultural education is teaching that Columbus is not a hero but a villain. Multicultural education attempts to include all ethnic groups and races and to present lessons from their view points. The philosophy behind multiculturalism is correct and fair and should have been institutionalized into our American lifestyle and school curriculum long ago. It causes us to re-examine our beliefs and our view of history and the world around us. Many educators believe that multicultural education will instill self-esteem in students and foster respect for different lifestyles and choices. They also believe this surge of self-esteem will push previously unsuccessful students to work harder in school and thus place in the work force. But will it really do all that?

The increasing diversity of our country, and the problems of dealing with it, have led America towards adopting the philosophy of multicultural education. However, multicultural education alone will not solve our problems. It is merely a drop in the bucket. Once multicultural education has been implemented it may look as though something significant has changed, but little will. America loves "quick fixes," or what appear to be quick fixes, to long term problems. I fear that America will adopt multicultural education as the panacea to a myriad of national problems, such as racial and economic stratification.

If implemented alone, multicultural education will serve merely as cosmetic surgery, making America look happy and united on the outside while corruption and inequality rot away its infrastructure. Smiling faces of every nationality will

F O R U M

hang on the elementary school bulletin boards greeting one as he or she enters the building and talk of Native American heritage and the philosophies of Marcus Garvey, an African-American forerunner of the "back to Africa" movement, will fill the high school hallways. However, many children, predominantly those of the lower class and minorities, will still be educated in overcrowded classrooms in decrepit buildings. Urban students will still test nationally behind other students because of the lack of money allocated to early intervention and childhood development programs. Education moneys will still be distributed on the basis of property tax, meaning the average urban youth will receive a \$5,000 education while a suburban child receives twice that amount. College admissions will still base acceptance on the SATs which have proven to be discriminatory towards minorities and the bilingual and students of a lower socioeconomic status.

These are the true problems, the real issues. They are what is holding back certain communities. Multicultural education may assure equal cultural content in the curriculum, but it does not assure the much needed equal education. This can only be achieved through monetary means. Supporters of multicultural education argue that it will foster respect and increase tolerance towards social differences among America's youth, thus relieving racial tensions and reducing prejudice. They also argue that multicultural education will heighten the interest level of minority "at risk" students, thus encouraging them to stay in school, graduate higher in their classes and ultimately increase the rate of minorities going on to higher education. The supporters believe that ultimately this would enable minorities to compete in the work force as equals. However, these are extremely high expectations. It is silly to think that the one step of implementing multicultural education will obliterate the myriad educational inequities caused by a conglomeration of serious causes.

Although the philosophy behind multiculturalism is commendable, flaws still remain in the plan itself. Yes, it is important to have an understanding of one's own culture and others', but it is also important to remember that one is American first. I am not advocating the "melting pot" philosophy because I believe that it is our differences that make America so great and colorful and creative. I advocate, rather, the "salad bowl" philosophy described in Frances FitzGerald's essay, "America Revised," a little bit of everything you have in the house that tastes good together. Marianna de Marco Torgovnick is a fine example of a well-adjusted citizen. She writes in "On Being White, Female, and Born in Bensonhurst": "I'm still, deep down, Italian-American Bensonhurst, though by this time I'm a lot of other things as well." She warns us not to allow ourselves to take our differences to such an extreme that we begin to feel that we have little in common. It is important to appreciate our differences. It is

TOGETHER WE STAND: DIVIDED WE FALL

equally important to stress our similarities. America is a family and just like any family we have more in common than not. As Americans, we have more in common with Americans of another ethnic group than we do with our own ancestral counterparts.

Multicultural education, similar to our present philosophy concerning the education of history, does not acknowledge that all people are human and have flaws. In history books people are either good or bad, heroes or villains. Multicultural education does not attempt to study issues from multi-perspective. Previously, history was studied predominantly from the viewpoint of the winner, and now it is studied predominantly from the view point of the underdog. At one time, Christopher Columbus was viewed as a hero; today he is beginning to be viewed as a criminal. "Captain John Smith, Daniel Boone, and Wild Bill Hickock--the great self-promoters of history--have all but disappeared, taking with them a good deal of the romance of the American frontier. General Custer had given way to Chief Crazy Horse, General Eisenhower no longer liberated Europe single-handedly" wrote FitzGerald in "America Revised." Where we once stood in the shoes of the winner, we now stand in the shoes of the victim. Neither are accurate evaluations. Neither form of education attempts to teach students to analyze the issues in the context of history.

There is a great number of problems incorporated in multicultural education if it is not administered nationwide. In order to develop respect and increase tolerance of different lifestyles as a nation, multicultural education would need to be introduced in all public schools, not just the predominantly minority institutions. Presently, the minority populations are pushing for multicultural education in their school systems, but few people are pushing for it nationwide. We must learn, as a nation, to appreciate and tolerate differences. Everyone must learn of the great contributions made by each ethnic group, not just students in a classroom predominantly of a specific background. Only through nationwide implementation of multicultural education will we learn to respect each other as well as ourselves.

Another complication of multicultural education, if not standardized as a curriculum requirement nationwide, is that the schools that adopt the multicultural philosophy, predominantly the urban schools, will cover new and different materials. We, as a nation, must accept the new curriculum as a legitimate and equally adequate perspective of education. Unfortunately, society is often reluctant to change. Uninformed citizens might criticize the new curriculum as being "watered-down" simply because it is not what they were taught in school. This narrow perspective and unwillingness to accept change would hold our nation's progress back. It is especially vital that colleges and employers view the new curriculum as important and relevant since they are the institutions that provide

F O R U M

the needed opportunities and resources for success in our society. This is likely to happen only if the mentality of our nation accepts and adjusts to the curriculum change and if the policy is adopted on a large scale.

As a society, we must acknowledge the fact that we cannot undo what has already been done. We cannot restore the past or give back time already past, but we can give a future to violated groups. Presently, many minority communities are almost completely dependent on the "white man's" economic system. They sleep in buildings built and owned by white people and shop in stores owned and managed by white people. Many are employed by the white business owners. Because the minority communities are predominantly dependent on Caucasians for their source of income and survival, they are not free. Whenever a particular person or group controls the sustenance technology, and thus the profit made from it, they also control the people dependent on the system. An example of this on the small-scale is the relationship between a board of directors to its employees, and on the larger-scale, the relationship industrialized countries have over nonindustrialized countries. These situations are analogous to the relationship of white communities to minority communities in America. In 1965, the great African-American orator, Malcolm X, stated: "We can never win freedom and justice and equality until we are doing something for ourselves!"

Through the creation of education and job opportunities, we give people the opportunity to decide their own destiny. If we create jobs and prepare the targeted students (lowerclass, minority) with the necessary skills to perform these tasks, then all communities would have an opportunity for advancement. We would see a rise in the economic independence, and thus the disintegration of the economic and social alienation of the African-American and other minority communities. The pride taken in providing for one's family and improving one's community is much greater than the pride derived from the accomplishments and contributions of ancestors who walked the earth hundreds of years ago. When a person cannot put adequate food on one's table, the farthest thing from one's mind is whether one's great-great-great grandfather was king of Spain or emperor of China.

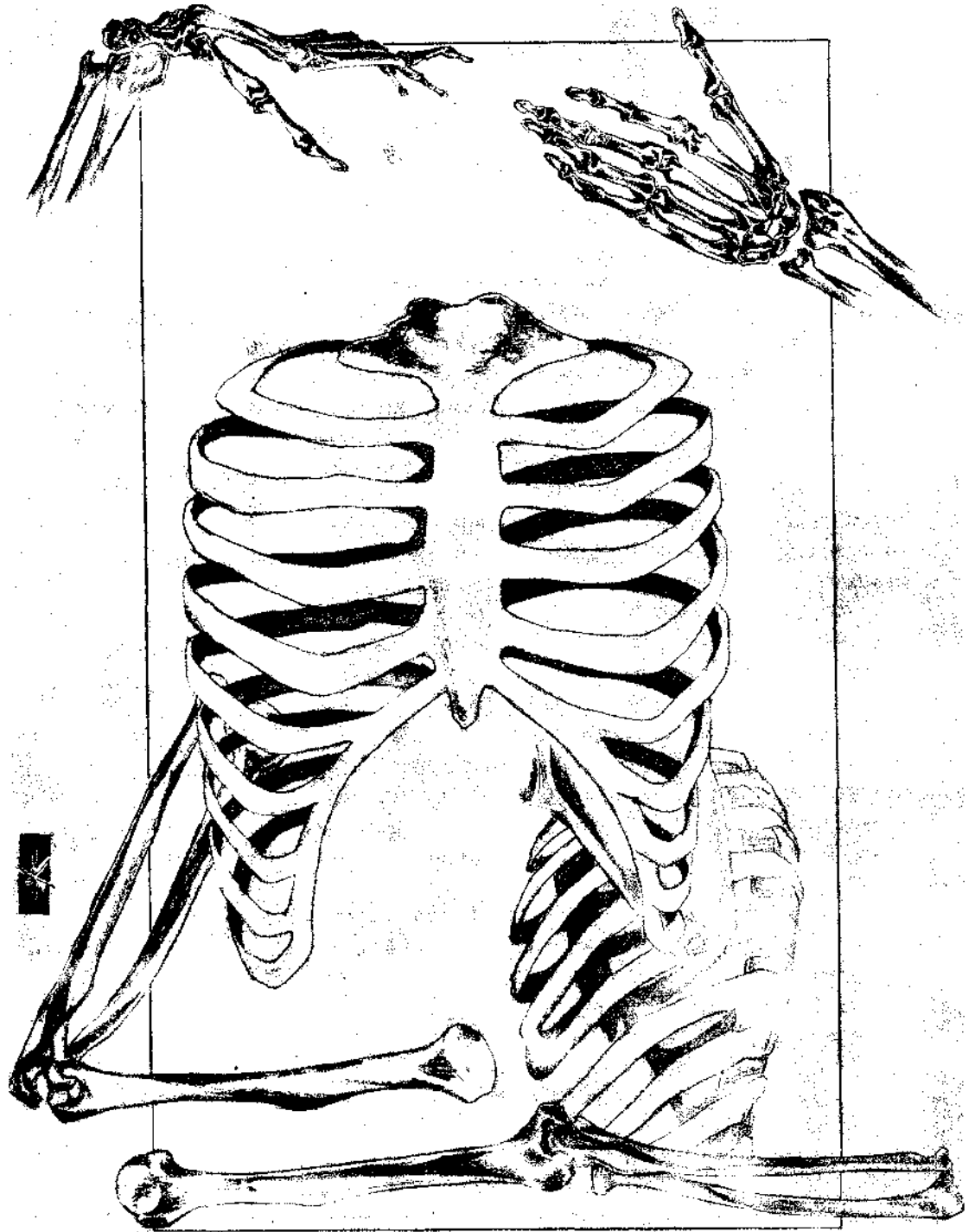
Education experts argue that multicultural education will foster self-esteem in minority students, and to a small extent, this is probably true. However, nothing fosters self-esteem like equality. Multicultural education is more fair and culturally encompassing than previous philosophies of education; however, it is not the same as an equal education. Inner-city students are not ignorant of their surrounding world. When they visit other schools for sporting events they realize that it is only the ghetto schools where the rain falls through the roof when it rains, where the heater has been piping out a consistent 80 degrees for

TOGETHER WE STAND: DIVIDED WE FALL

the past seven years.

These are the true problems, the real issues. This is what is holding back certain communities. Besides being morally correct, remedying these issues decide the future of America as we know it today. America, as a democracy, is dependent on an equally educated populace. Unequal education creates economic stratification and uninformed voters. This creates a nation with little incentive. It also creates a nation that has lost faith in its government institutions and in itself. We cannot allow our students, America's future, to lose hope before they graduate from high school. More money and attention must be given to education in the future. Our nation must change its "nearsighted" outlook on life and look at the big picture. It is a "pay now or more later" situation. In the long run, it costs much less to teach a child a trade or send him to college than it does to support him on welfare or in jail. As the ancient proverb states: "Give a man a fish and he'll eat for a day; teach a man to fish and he'll eat forever."

Multiculturalism may be the first step towards equal education and a less stratified society; however, it cannot be the last. Like an undressed wound, we have let America's racial and economic problems fester for too long and now our nation has a serious infection. Multicultural education is merely the band aid. We must be sure to clean out and treat the wound. Minorities in America, concerned citizens, beware! Monitor the wound carefully. We must be aware that multiculturalism is no miracle "cure-all." We must not settle for merely multicultural education—"the white man's educational table scraps"—Demand what has long been due to us—equality, not only in education, but in every facet of our lives.



*"Animals are not brethren, they are not underlings;
they are other nations, caught with ourselves in the
net of life and time. "*

Henry Beston

A Borderless Land

by Allison Kelly

An invisible line separates the human world from the realm of the animal. At times it widens into a chasm, vast and frightening, and the lions and great black bears roam on the other side in some far off savage and natural country. Other times the line is thin but sharply defined, when one stares into the large brown eyes of a monkey or the intelligent, alert eyes of a wolf, restless in their zoo cages, behind the rough edges of humanity. And sometimes the line is so narrow and shaky its presence can hardly be felt; one feels only the sloppy kisses of the puppy or the soft, vibrating body of the purring cat. Through their pets, people almost cross that strong, transparent barrier. But the obstacles won't go away; man won't let them go away. Although scientifically classified as animals, humans label themselves superior and automatically and unconsciously reinforce the line. We will never be able to cross over...

It was dark. A fold of black velvet covered the landscape. A chorus of crickets, its monotonous song like the slow, steady heartbeat of the stillness, was in harmony with the peaceful night. Clouds stretched across the sky. Every now and then, the moon peaked through and cast a glow, like the soft spill of light from an open doorway, here and there on the freshly mown grass. A slight breeze sent a whisper through the trees as they leaned towards each other as though eager for gossip. A car horn sounded in the distance, its discordant note of impatience intruding on the quiet hour. A shadow moved out from the ebony backdrop and shuffled across the ground—a raccoon on his nocturnal rounds.

The scraping of the screen being raised earned the flick of an ear, but the murmurings of a human voice did not disturb the evening's observer. After a minute, the window came down with a bang and the curtains were pulled with a swish, shutting out the blackness. The person went back to bed. But the cat stayed on its perch, watching, listening, and sharing with the night.

"Here, pussycat! Would you like some milk? Here, pussy." Pause. "Oh, never mind. Cats are too independent. Look at it! All it's doing is sitting there."

The insect was brown with an oblong body and impressive pincer-shaped feelers attached to its head. It moved slowly, stopping continuously to swivel its sensors and look for anything worth finding. It was only a few inches from the cat's paw but showed no fear as there was no movement from the feline giant. The insect went about its business, unconcerned with the cat's scrutiny. Eventually, it crawled out of sight. The cat contemplated the tiny path the bug had taken through the grass, then curled up and went to sleep.

Sounds. They came in slowly, growing louder as they pushed through the layers of sleep. The cat's ear twitched, but it kept its nose cozily tucked under its paw. The clatter of dishes in the sink caused one eye to open, then the other.

The room was dim, the last light of day sneaking across the rug towards the door. One carnivorous yawn. The cat pulled itself into a sitting position and licked its side thoughtfully. People entered the room and sat down in a lot of the cat's favorite sleeping places. Noise blared from the screen across the room and shapes flickered into existence. The cat heard a much more pleasant sound—the electric can opener's whir. The strong smell of processed fish and chicken wafted into the room. The cat stretched, first the front legs, then the back, oozing the last vestiges of sleep from its body. It jumped down from the sofa and sauntered into the kitchen.

"Well, good evening, sleepyhead. I'm amazed you could drag yourself away from your day-long nap. You really have the life, you know that? Sleep sixteen hours a day, eat, lie around looking pretty, just waiting to be petted, and you don't even have to work for a living!"

The cat could smell the intruder before it saw him. The odor of challenge, past battles, and dangers preceded the stranger before he turned the corner of the house. Black and evil-looking, the evidence of his fighting history was clear in his muscular body that was so covered with scars he looked like a walking punching bag. He walked slowly, power in his every step, crunching through the layer of fallen leaves, as his head moved from side to side, sniffing out this new territory. If he was aware of his stray status, he did not look as though he cared. Coming within a few feet of the resident cat, he stopped dead and glared. The appointed defender of the property returned the stare and felt its hair stand to attention along its back. A growl started deep in its throat. There was a chill in the air that had nothing to do with the time of year. The vagrant gave a deep rumble of his own. Then the air was split by the eerie sirens of the two cats preparing for their duel...

"Hey, cats!" A person came running outside, scattering the combatants. "Why do you stupid cats have to fight all the time? I swear, I've never seen a more aggressive animal." Pause. "Oh, will you look at that! Okay, who was supposed to clean up the porch? Someone in this family had better get out here NOW or heads will roll!" The screen door slammed shut.

"You don't want to go out. It's snowing." The person finished putting on his boots and was done with the lengthy process of getting ready to go outside. "I know what you'll do. You'll huddle on the porch and look miserable. You just don't appreciate the beauty of nature." Sigh. "But, if you really want to go out, okay. But I'm not letting you in again for awhile. It won't hurt you to get some fresh air." The bundle of knitted and well-padded clothing rose to its feet and opened the door.

The cat sat on the porch and watched the snow fall. Each unique, tiny flake spiralled down from the sky on its own special path. The cold air was sprinkled

A B O R D E R L E S S L A N D

with the scent of pine, emanating from the tree sprawled on its side in the snow, waiting to be taken in for Christmas. Wrapping its tail around its body, the cat sought its own warmth to combat the sharp, icicle-tinged air. A harsh, scraping sound overpowered the quiet of the falling powder; the sidewalk had almost been cleared, the snow discarded in a blackened pile by the driveway.

"Ah, doesn't the fire feel nice? It makes the room so cozy. Look at the cat. She sits in front of the fire for hours and just stares. What does she see in those flames? Oh, I guess nothing. She's probably half-asleep, basking in the warmth of her own personal sauna."

The cat stared deeply into the flames, watching the reds and yellows writhe in the ecstasy of battle, then fuse together in brilliant color. Hissing and crackling, the wood split apart and melted into ash as the heat reached out and gently massaged the cat's old joints. She closed her eyes. The smell of burning wood was powerful but natural, soothing the senses.

The fireflies switched on, off, on, off like tiny sparks of creation being reborn. The air was moist and heavy. There was no breeze, and the night hung still and silent under a canopy of stars. The air was soaked with the scent of blooming flowers and the fresh fragrance of cut grass. Towering shadows, the trees stretched their twisted arms, silhouetted against the moonlit sky. The sounds of television and the whirring of fans at top speed filtered through the screen window.

The cat was at its usual place on the windowsill, inside this time, watching and seeing each movement, no matter how small, how insignificant in the grand scheme of things. The cat was thinking of nothing and feeling everything.

The television was turned off and a hush fell over the house. A presence drew near behind the cat. A human hand came down to stroke the cat slowly, thoughtfully.

"Why are you always sitting here at this window? What do you see out there?" Pause. "Oh, look at the moon! There's a firefly! Isn't it pretty? You know, you have a really good spot here. Do you mind if I share it with you for a minute?" Together, they watched and became part of the night. And all thoughts, feeling, labels, and lines faded into blackness.

"Here, where we reach the sphere of mathematics, we are among processes which seem to some most in-human of all activities, the most remote from poetry. Yet, it is here that the artist has fullest scope of his imagination."

Havelok Ellis

Math = Art

by Matt Davis

Helen Gardner, in her essay "Art in Everyday Life," refutes the general idea that art is "a luxury, quite inessential to and divorced from one's daily activities." On the contrary, she states that art can be found in such everyday activities as furnishing a room or getting dressed. The work of an artist is a product of the principles and values held by the artist living in a particular culture. For this reason, I think one of the most scientific studies present in education today, the study of mathematics, is actually one of the truest forms of art. To understand this, we must first look at our society today and its values. Our society is based on order and logic and on the principle of upward progression. Mathematicians see the significance of these two guidelines, logical order and steady progression, as they work on solving difficult problems.

Math, like society itself, is based on the same values. Solving any type of math problem requires an organized approach and a logical step-by-step solution. Mathematicians must obey all laws of math to succeed in their attempts to solve a problem. This does not mean that they cannot be creative in looking for possible solutions, for all forms of art demand that the artist be creative to some degree. A mathematician may travel down several "wrong" paths before finding a viable solution, but often it is this creative experimentation which brings about the finished product, the solution.

In ancient Greece, for example, mathematicians spent years trying to figure out the significance of a circle. What was the relationship between its diameter and its circumference? With no previously established method for trying to discover this quantity, the Greeks relied almost exclusively on trial and error. Finally, it came to be proven that there was a constant expression that related the diameter and the circumference of a particular circle. Of course this quantity has since been known by the Greek letter "pi." But this relationship would inevitably have been discovered at some point in time. What is important about the Greeks' discovery is that it demonstrates their ability to persist in a search for the correct answer to a difficult problem. In discovering the quantity pi, they knew that they would come up with many incorrect answers before they finally discovered the true answer. This, however, did not upset them or frustrate them enough to quit their search; they realized that their initial failures were important steps toward an ultimate solution.

Unlike many other art forms, such as painting or sculpture where the art comes out in the finished product, the mathematician's final product, the solution, does not adequately reflect his or her art. In math, the art is in the solving of the problem, not in the solution itself. This is why all mathematicians can be artists. If all mathematicians were given the same problem, one would hope they

would all arrive at the same answer; this is what makes them good mathematicians. What would make them all good artists, however, is if each one was able to show something unique about how he or she went about solving the problem. That is where the creativity becomes important and where the uniqueness of each mathematician is demonstrated.

Just as important as its stress on observation of specific rules, though, is the concept that math, like many other art forms, emphasizes a general upward progression. When a person begins to study any form of art, for instance painting, he or she must start out at the bottom of the ladder, learning about the basic elements of the art of painting, such as the importance of color, shape, and texture. Then the student learns about different kinds of media: oil, water colors, etc. The students do not forget about what they first learned, they merely build on that knowledge and expand it into a new direction. This is easily visible when observing the development of a writer. A person interested in a particular style of writing does not immediately put together a masterpiece. Very early the person learns to read and spell words. Then the student begins to grasp the concept of phonics, translating a sound into a letter or group of letters. Then he or she begins writing personal thoughts down in words grouped together as sentences. When this idea is grasped, the ladder is climbed higher to developing sentences into paragraphs and paragraphs into essays or whatever other form the writer chooses to write in, always building on what he or she has learned previously.

Development in the art of mathematics requires the same progression. Students first learn about the tools used in math, the numbers themselves. They then begin to use the numbers for very basic purposes like counting. They will later move to addition and subtraction, which will lead them to multiplication and division. Once the basic operations of arithmetic have been mastered, the student cannot just toss them aside and proclaim, "O.K., now I would like to study algebra." To utter such a statement is illogical because algebra is not a new science. It is just arithmetic being expanded in a new direction. The knowledge previously acquired through study in arithmetic is still necessary to study algebra. The pattern holds for geometry, calculus, and all higher levels of mathematical studies.

Problem solving in math offers a good model for working out difficulties in everyday life. In math there is nearly always more than one way to solve a given problem. This is usually helpful because often one way to solve a problem is significantly easier than other ways. For example, a basic equation like $10x^2 + 30x - 19 = 0$ can be solved several different ways, but the easiest way to solve it is by using the quadratic formula. While other ways to solve this problem exist, this formula was developed to provide solutions to these types of equa-

MATH = ART

tions with greater speed. The same situation is evident in other areas of life. In law for instance, when there is a civil dispute, one way to settle it is through a trial. Other options, such as prearranged out-of-court settlements, are usually available for those who are interested in settling their cases quickly. These out-of-court settlements, like the quadratic formula, were developed, one would hope, as options to speed up the solution process.

Another important connection between art and math is that it is the artists' responsibility to use all their tools to give their works the maximum value to their audience. The director of a play already has the basic elements of the particular play at hand: the script, the characters, the plot, and the setting. It is the director's job to utilize his or her artistic ability to combine all these elements in such a way that the audience will take back a meaningful message. Mathematicians are in the same situation. They have already been given the problem to solve. They must rely on their knowledge of any applicable theorems or laws of mathematics to solve the problem in the clearest and most logical way so that their audience, whoever that may be, is able to extract something meaningful from the solution.

The mathematician's audience is very difficult to pinpoint. At times, it may just be the mathematician alone. He or she solves one problem, steps back, and is able to see something in the solution that will be helpful in another problem. Perhaps the audience could be fellow mathematicians, who, by looking at the way one particular mathematician solved a problem, are able to see new forms and ideas that will help them in solving different types of problems. For instance, Brook Taylor, an English mathematician who lived in the 18th century, acquired most of his mathematical knowledge from studying the results of the work of Sir Isaac Newton. Taylor went on to develop a series of rules and theorems dealing with the mathematical topic of infinite series. A mathematician's audience, however, is not required to contain even one other mathematician. It is possible for a mathematician to have a significant impact on a group in which no member has any knowledge of math at all beyond $2 \times 2 = 4$.

A mathematician can show anyone in society the value of his work by stressing the methods he used to solve his own problems. By emphasizing math as an art form which imitates life and by stressing the value that math places on logical order and progression, he can show how these values will inevitably help anyone solve any type of problem. Newton is an excellent example of this type of mathematician. A world renowned genius, he spent the years 1666 and 1667 at his home in Woolsthorpe, England, discovering calculus while every other English citizen was worried about the Plague. He used his newly discovered mathematical concepts to describe natural phenomena that could not previously be described at all, such as planetary motion and gravity. While some advanced

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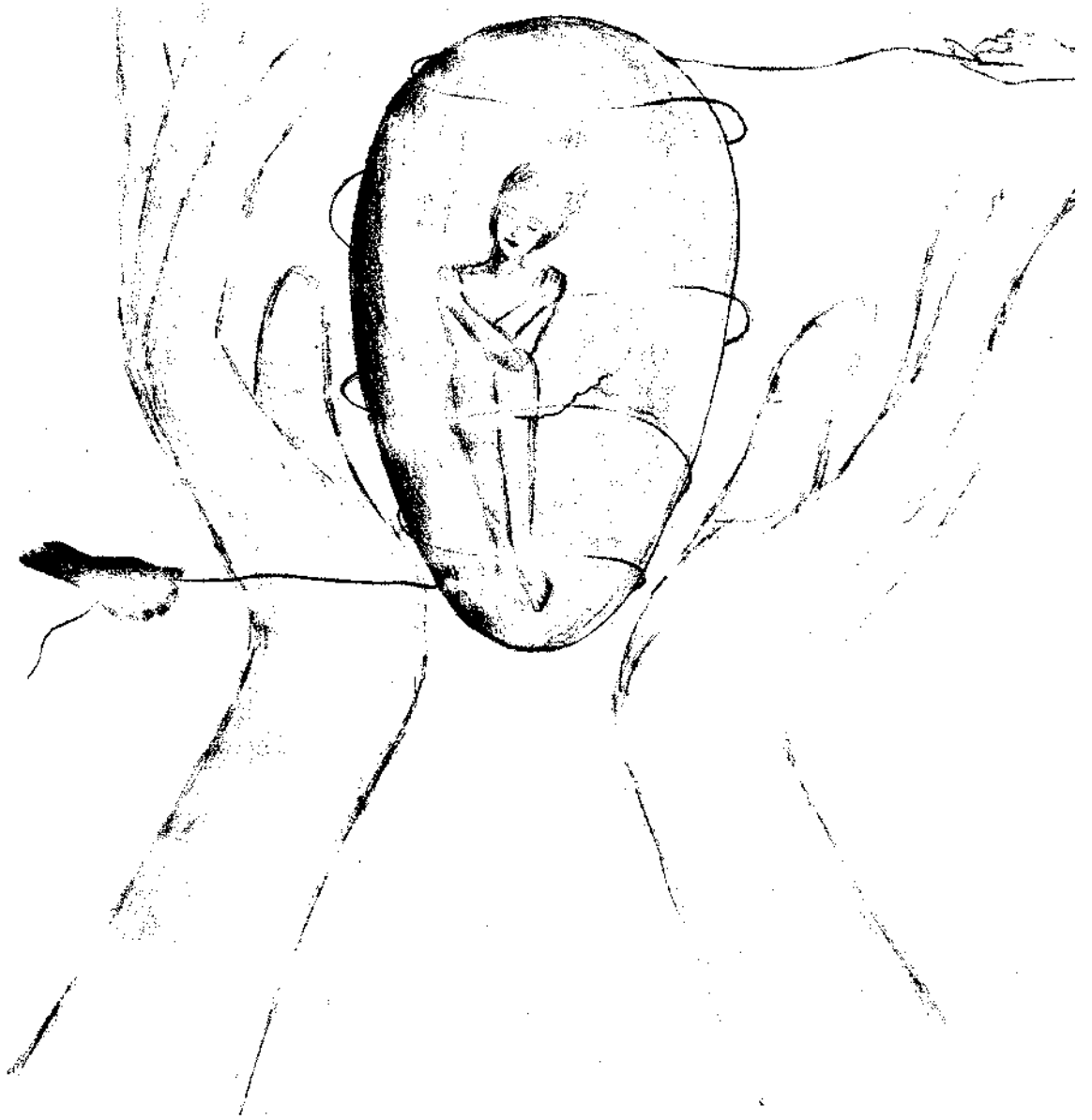
mathematicians took his discoveries to higher levels to develop new theorems in various fields of math and science, his discoveries were felt by the rest of the world as well. Everyone who lived during his time and even people who live today are now able to have a better understanding of why certain things that we observe every day happen the way that they do, such as an apple falling from a tree.

Art is not only important for those who observe it, but can also offer valuable insights into those who have created the art. Susan K. Langer said in her essay, "The Cultural Importance of Art," that "art is... the truest record of insight and feeling." In terms of math, these records take the form of solutions to problems. Math requires a high level of thought and forces the mathematician to put his or her thoughts down on paper for all to see. Through examination of the step-by-step process gone through by a mathematician, the observer is able to judge how smoothly the logic in the solution follows. This is an important part of any art form. Math does not allow any room to dress up personal thoughts and feelings and make them "more presentable." In math, there is only room for the problem at hand and the solution process thought out by the mathematician.

Another benefit for the creator of this art, the mathematician, is that math, like any other art form, stimulates the intellect. Just as a provocative painting by a famous painter will force a viewer to think about what the artist is describing, a math problem can force the mathematician to draw upon all of his or her mathematical knowledge to solve the particular problem. But when a mathematician is constantly thinking in this manner, his or her general level of thought rises to a higher plane. Mathematicians thinking this way are often able to express themselves more clearly because of the critical thought process that is going on in their minds. Utilizing their critical thinking skills helps them to communicate both inside and outside the mathematical world.

Art imitates life. No matter what form it takes, it is in some way an imitation of a part of our culture. Math is a way of explaining our cultural need for logic, reason, and balance. The ancient Greeks had this same basic need. Their mathematical discoveries helped to explain that this order and balance was already present in nature. As the Pythagorean Theorem and the constant pi showed for triangles and circles, nature is inherently balanced, and in order to coexist peacefully with nature, it was in the people's best interest to abide by these laws of balance and reason. Nature, of course, affects many more worlds than just the mathematical, but the math may be the most helpful in explaining this complex phenomena.





'A weapon is an enemy even to its owner.'

—Turkish proverb

Armed and Dangerous

by Andrea Jayne Sabaliavskas

My sister Cindy and I needed a gun. Oh, not anything big. We weren't aiming for bazookas or uzis or anything that serious. In fact, we would have settled for a nice, heavy crowbar or a little crossbow or the more accessible bottle of mace. We just needed anything that looked...lethal.

"Did you hear about the Zalewskis?" she asked nervously one morning at breakfast.

I shoved Apple Jacks into my mouth and buried myself more deeply into the comics section of the *Courier Times*. "Nope."

"They were robbed. Last night."

"Gimme a break." I mumbled through a mouthful of sugared crunchies.

"They were, Andrea!" For emphasis she added, "You can even ask Mom!"

Cindy frequently has been known to exaggerate. I took her suggestion and called Mom at work. She confirmed my sister's statement. The Zalewskis' house was presently in shambles and their television sets, jewelry, and Nintendo Entertainment System were gone.

Paranoia immediately set in.

Holland—little suburban, zero-crime rate Holland, Pennsylvania—had a robbery tacked on to its name? And it had happened only two doors down from us? Holland is not the ghetto; Holland is suburbia. It was built especially for nice people who have barbecues in the backyard and hang laundry outside and keep their windows open at night to get some fresh air. Think *The 'Burbs* and you've pretty much conjured up an image of Holland. It's never known crime. The papers might call this an "incident," but my sister and I, seated at the polished oak table in our "country-ducky" designed kitchen, called it a disaster. We needed a game strategy. Hell, we needed plans for battle. Did we have a burglar alarm? Did all of our locks work? Could you open our windows easily from the outside? We were gripped by hysterical fear.

Breakfast was now forgotten. "I wish Dad was a cop," Cindy groaned. "At least we'd have a gun in the house. I'd feel so much safer if we had some kind of weapon."

Later I told my parents what my sister said and they were shocked. What a belligerent child, driven to such violent tendencies; can't believe she's ready to blow the guy's head off. More likely, though, she was just afraid. Cindy was a couch potato—even worse, a *Rescue 911* couch potato. She had seen the overstressed businessman shoot the taxi driver, the family that was run off the road by a neurotic woman in a Mac truck, the burglar prowling the house to get rid of the hidden child who had spotted him. In her mind, criminals were around every corner and guns were in everyone's hands. Her plans for

protection were thwarted, however, and despite her begging and pleading, my parents thought she was taking the entire thing way too seriously and would not even think of buying a gun. As for me, I never watched *Rescue 911* or read Christopher Pike's teen thrillers; I, the fantasy lover, was beginning to look at the situation as if it was a grand adventure.

You have to understand, I was brought up watching movies like *Star Wars*, *Robin Hood*, and *Raiders of the Lost Ark*. My idea of Utopia is the Renaissance Faire, where everyone dresses like warriors and wenches and have the right to bear arms. I looked at weapons in a romantic fashion. They were there to help you out of a tough spot, something with which to threaten and overcome your enemy. When I think "gun," I don't associate it with Clint Eastwood, brandishing his six-shooter before his quivering victim and sneering "Make my day," but rather with Harrison Ford as Indiana Jones. (There's that awesome scene in *Raiders of the Lost Ark* where the ninja shows off his fancy swordplay while Indy plugs a bullet into him before the ninja can even take a swipe at him with that saber). I am not eager to see violence, just that delicious conflict that keeps us rooted to the edge of our seats.

Therefore, I was all for Cindy's solution. And I had the means of making it possible. "Cindy," said I, "I'm going to get us a weapon."

Later that week, my friends, Lisa and Kevin, and I went to the Renaissance Faire. I dressed up in my wench costume (it's two bucks off the admission price and a lot more fun when you go in costume) and estimated how much I would need to buy a decent sized sword. I was already starting to slip out of reality and I felt wonderful. Look at me, I'm a regular Maid Marian, an independent, don't mess-with-me Maid Marian! I am the guardian of Holland, armed with longsword and crossbow, cloaked in midnight black. I am the terror that flaps in the night, devouring arrows and evildoers.

"You are the moron who belongs in a mental asylum," said Cindy—but she looked at me hopefully all the same. "Can you really get a sword at the Renaissance Faire?"

"Well..." I adjusted my crown of flowers and waited for Lisa's Camaro at the front door. "Kevin can. I'm underage."

Once we arrived at the merry shire of Mount Hope (a.k.a. Mount Hope, PA), paid our respects to the Queen, and flirted with a few young warriors and wizards (not Kevin—he preferred the ladies of the court), we headed toward the weapons booth. I was fascinated by their authenticity, baffled by the number of choices I had. How about a battleax? A longbow, quiver of thirty-six arrows included? A beautiful, very feminine warriorlooking silver dagger?

"If ye are not of age, lass, kindly unhand the merchandise." The "merchant" looked down at me accusingly and I let go of the dagger. When I noticed the

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prices, I was so disappointed that I forgot to speak to him in Old English.

"Oh, sorry. Is that battleax really..."

"Eighty pounds, lass."

I looked up at Kevin hopefully, then back at the beautiful silver dagger. He opened his drawstring purse to show me that it was empty. I sighed and picked up the five dollar boot knife. Swords apparently weren't in my budget range. Kevin bought it and gave it to me. I wasn't wearing sandals, so I tucked it into my belt.

It really wasn't such a bad deal, I realized as we were on our way home. I got the chance to really look at it in the car. It felt real. The wooden handle fit into my hand as if it was carved just for me; the blade was polished and sharp. The sheath was of toughened leather, with a metal clip to attach it, subtly, to the top of a boot. My first weapon. I sheathed and unsheathed the thing over and over again on our way home. I am Andrea, armed and dangerous—thieves beware.

I got it home and unwrapped it behind the closed door of my room. Cindy and I gazed at it, fascinated, as if it was a carefully smuggled atomic bomb instead of a dagger. I still couldn't believe that I actually had a weapon. Breaking out of my reverie, I grinned at her. "Well?"

"It's great!" She pulled it out of its sheath, somewhat nervously. "Where are you going to keep it?"

"In my desk drawer. I can open envelopes with it." Her face fell. "But what if we're asleep and a thief gets in and finds it?"

This hadn't occurred to me. Nonetheless, not a problem. "I'll keep it under my pillow."

"What if he starts strangling you while you're asleep and you can't reach the dagger and he finds it and kills you with it?"

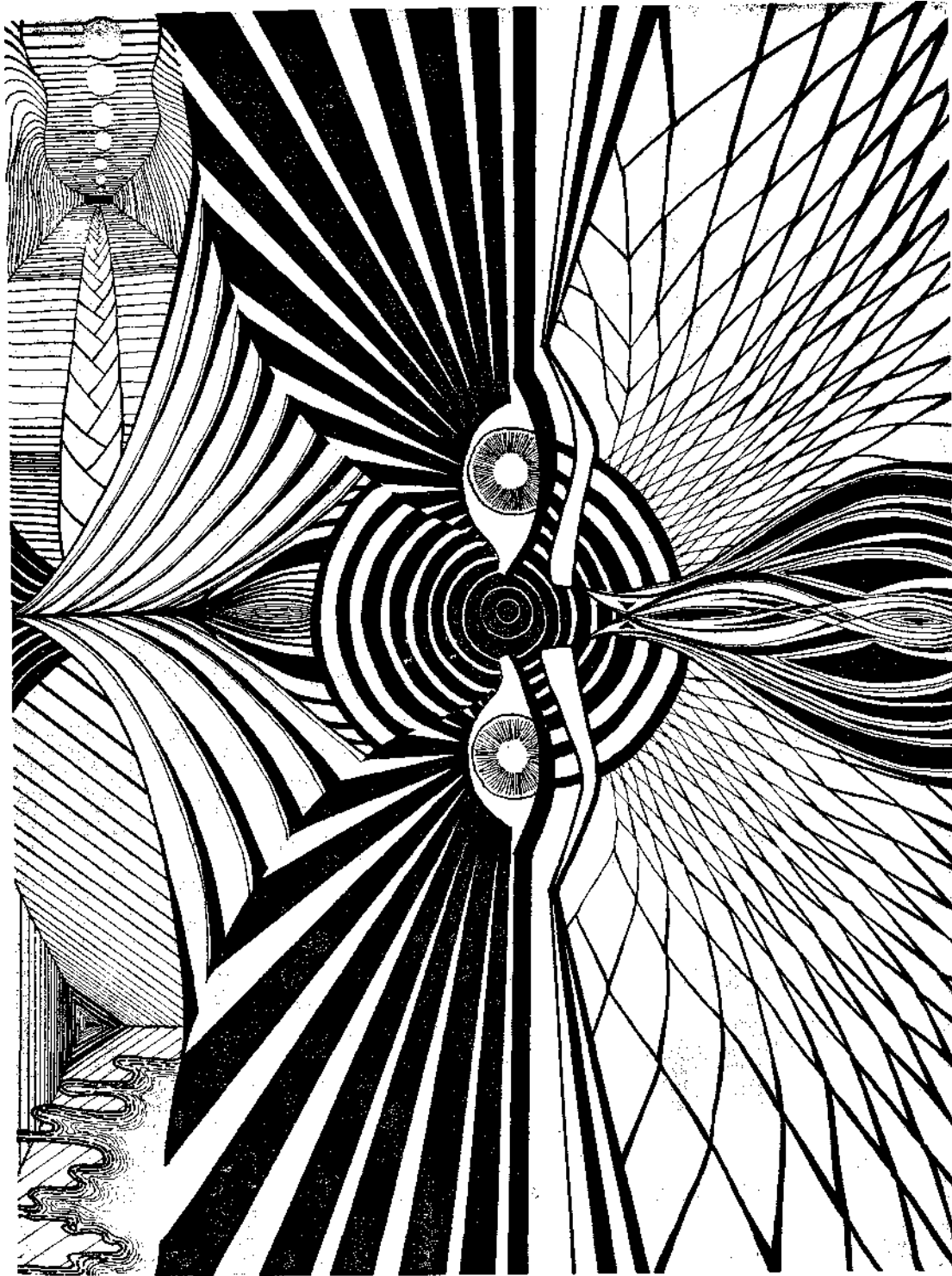
"CINDY!"

"Don't you ever read Christopher Pike? It happens!" I was beginning to feel uncomfortable as the owner of this knife. "Listen, nothing is going to happen. I have complete control over this dagger. Chances are, this will scare a thief off before he even thinks of strangling me. Okay?" I could see it wasn't, but we let the matter drop. Later that night I sat in the living room, turning the bootknife over and over in my hands. How simple it looks for Peter Pan, how easy it is in Narnia and Sherwood Forest! The heroes are good and capable, the villains wholly evil and predictable. But realistic criminals never say "Ha ha, I have you now" before they draw their weapons and honorably wait for you to produce yours. Reality is a cutthroat world; we are made up of uncertain, unreliable heroes and psychotic villains with gruesome killing tactics. No thief will cringe when I threaten him with a five dollar dagger. I, like Indy's ninja, will be crushed before I can even take a swipe. That's not what's supposed to happen...

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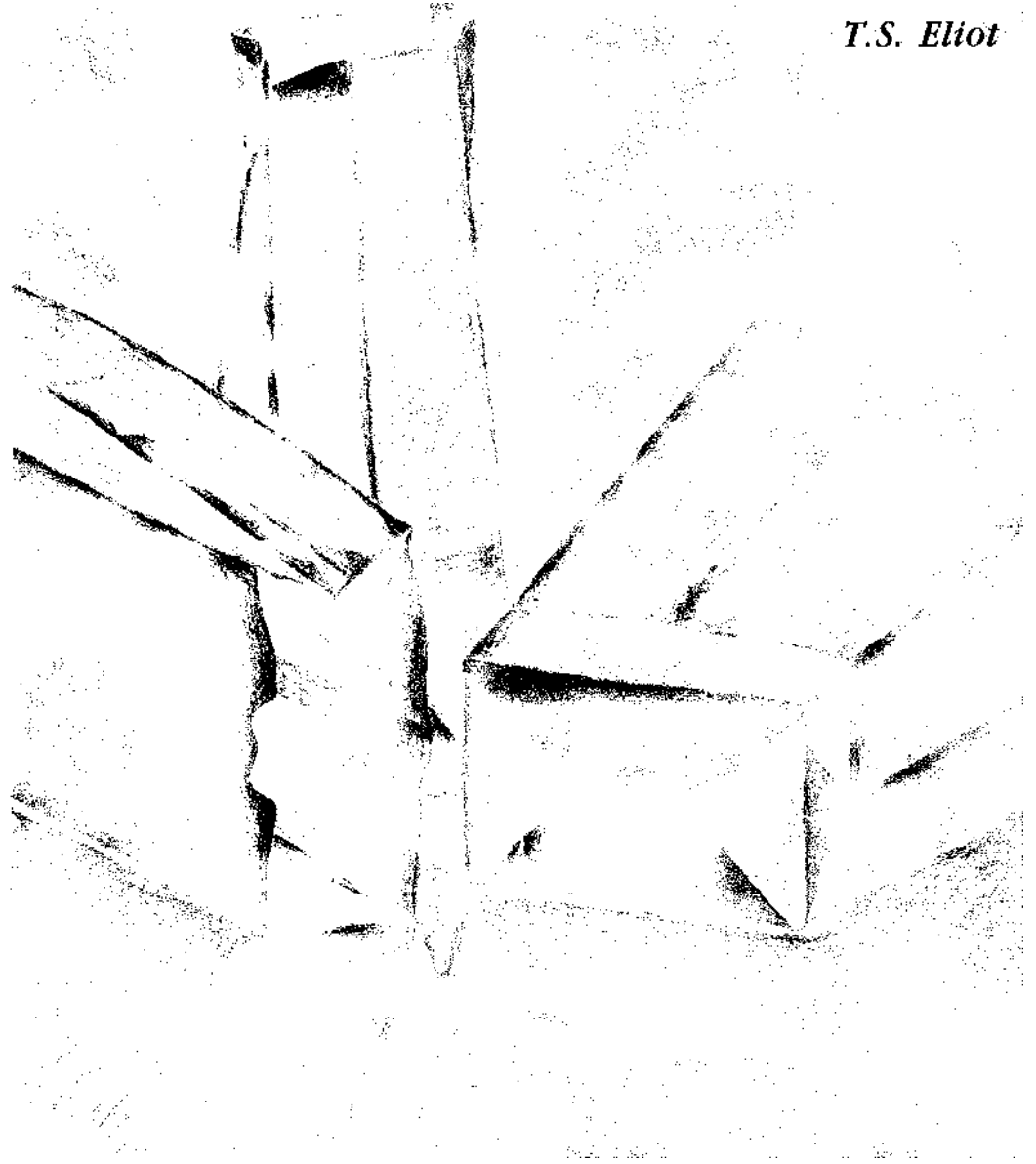
But it will happen. I am not Maid Marian. I am not Andrea Swordswoman. I will face the evil and I will be creamed.

I go to the trash can, dump its contents on the floor, place the dagger at the very bottom of it. I put the papers and moldy food back on top of it by hand, packing it down as if that will make it harder to get to. Yep, no thief will find this now. I run back to the TV as if this entire dagger incident has never occurred, pop a tape in the VCR, and let Indiana Jones take care of the bad guys.



*"The historical sense involves a perception, not only
of the pastness of the past, but of it's presence."*

T.S. Eliot



Journey Into History

by Thomas P. Golembeski

The air was damp and chilly; it ached within my bones. I could almost see the water droplets floating in my breath. I thought of the Mayflower and of a cold winter in a Puritan village. This wasn't a Puritan village in winter, however, but a summer in the vast Alaskan wilderness. When I stepped inside the cabin it was as though a history textbook opened up within my brain. The cabin and scenery set the backdrop perfectly. I felt a history lesson swelling inside my body.

The job I volunteered for provided a unique opportunity to take a leap back in space and time. Alaska was the ideal place because it is history. The region of Alaska in which I was living had not yet felt, and still has yet to feel, the full brunt of man's technology. Afognak Island is relatively the same as it was during the age of exploration. I could drink from the streams and breathe deeply without choking on thick pollution. I could smell sap dripping from the trees, not carbon monoxide. I could hear bear around the bend in the trail, not some ringing telephone. I could see forest for as far as the eye can see, not buildings or telephone poles. The air was clear; the sun didn't have to cut through a dingy haze in order to shine. That part of Alaska was a piece of the past inside a world striving for the future.

The cabin I stayed in was one hundred and fifty miles from the nearest trace of civilization. It sat, old and decrepit, on the top of a steep slope. Cottonwoods sealed the cabin in an envelope of darkness even during midday. Lush, green with life and dense as stone, the underbrush formed a seemingly impenetrable wall. It stood like one of the granite walls of Neuschwanstein. There was no path to the top; one had to go through it. Through the prickly, needle-like plants was the only way. The Devil's Club was the worst. The leaves, tough and leathery, were twelve inches in diameter with spiny protrusions jutting from the stems and bottoms. Pain, torture, and agony were part of the trek from the lake shore to the cabin.

The cabin reminded me of the one Abe Lincoln grew up in. The rickety wooden structure creaked with every step. The walls were barely thicker than parchment paper. It was built in the days before insulation. Broken windows with faulty seals allowed the cold northern air to rush in. The whole cabin shook as the wind howled through the valley. With every gust, I thought the cabin would take off in flight. The tiny, one room dwelling was dominated by a rusted out, black iron potbelly stove.

The stage was set, and images of Lewis and Clark were echoing within my brain. What would an average guy like me be doing to keep himself busy during the age of exploration? Politics? Writing? Certainly not. Fur trapping? Gold

F O R U M

mining? Yes, that's much better. I could live off the land and earn a fairly steady wage trapping beavers. With so few expenses, it would be a piece of cake. Panning for gold on some river, waiting for Lady Luck to come along and help me find the "mother lode" seems a bit far-fetched.

I awoke at dawn to the sound of rustling in the bushes outside my window. It was five o'clock in the morning and I had a long day of work ahead of me. This week's traps needed to be collected. I pulled on my worn clothes and loaded my tattered rucksack with food for the day. With my coonskin cap and loaded musket ready, I was on my way.

The trail I took meandered down my mountain and then slithered alongside the river. It ran through tall grasses, dense alder groves where you couldn't see five feet in front of you and majestic cottonwoods that towered over everything except the mountains. The river teemed with five types of salmon—king, coho, sockeye, chum and pink—and various types of trout, the most abundant being rainbow. All you had to do was drop a line and you were almost assured a catch. The water was cool and clear; you could see the bottom of a twenty-foot pool without straining a bit. On those rare summer days when the temperature hits seventy-five degrees, the water made for a most refreshing drink, cold and pure.

I sang to the mountains while I hiked; this way the strange noises scared the bears away. It didn't always work, and I came nose to snout with quite a few monsters. Those were the biggest bears in the world; some were over ten-feet long and weighed over twelve hundred pounds. They had no natural enemies, which is why I carried my musket. I never had to shoot one, but had the time come, I was ready. Other animals like fox, eagle and deer thrived there. I hunted deer often because I couldn't always make it into town to get supplies, and fox were frequent visitors to my camp.

Beaver pelts were in high demand that year, and I intended to cash in on them. I hauled in my traps from the week before and landed a good six animals. At \$5 a pelt the long days trapping beaver were well worth all the trouble.

The first line of iron jaws was bare, but there were still two more out on the trail. I didn't get them right away—it was lunchtime. I ate some of the deer jerky I prepared myself using Boone's recipe in the smoke house I had behind my cabin and some salmonberries that I picked on the trail while hiking. The berries are colorful, ranging from a light pink to a deep red. They look like raspberries but aren't as sweet. It's a mild sweet that doesn't make your face pucker when you eat them. If you pick a good one they're delicious to eat fresh off the branch and are fantastic for making jam.

The last two lines trapped a total of four animals. One beaver was still alive so I had to finish him off with my knife. For the most part the animals were young, so the pelts were extra soft and brought a nice price when I sold them.

J O U R N E Y I N T O H I S T O R Y

Back at the cabin, I cooked dinner. It was beaver soup that I made from the post-skinning remains. The meat has the consistency of tender beef but tastes like chicken. After dinner I decided that a bath was in order, especially since I hadn't taken one in about five days. The stream was very chilly; it sent shivers up and down my skinny body. I couldn't feel my toes—they were so numb. It felt like they were smashed with a hammer to deaden the nerves. I used the soap I bought last time I was in town to wash my hair. My hair was so greasy that it took four tries to get the soap to lather. With the wind blowing in a rage, that bath was not one of my most enjoyable. After my bath I recorded the day's events in my journal and went to bed.

The next time I woke up it wasn't to the sound of rustling bushes, but to the alarm on a digital watch. I went outside and watched the sun rise over the mountains, shining its glory on the lake, stream and me. I was myself again. It was my summer vacation and I was working as a volunteer for the Alaska Department of Fish & Game. Once again I knew where I was but not where I was going.

The trip was the catalyst that made the fantasy real. I always read my history assignments, but there was always something missing. The books were just words; they lacked substance. I found what was missing in Alaska; the puzzle pieces finally fit together. The accounts of history met reality.

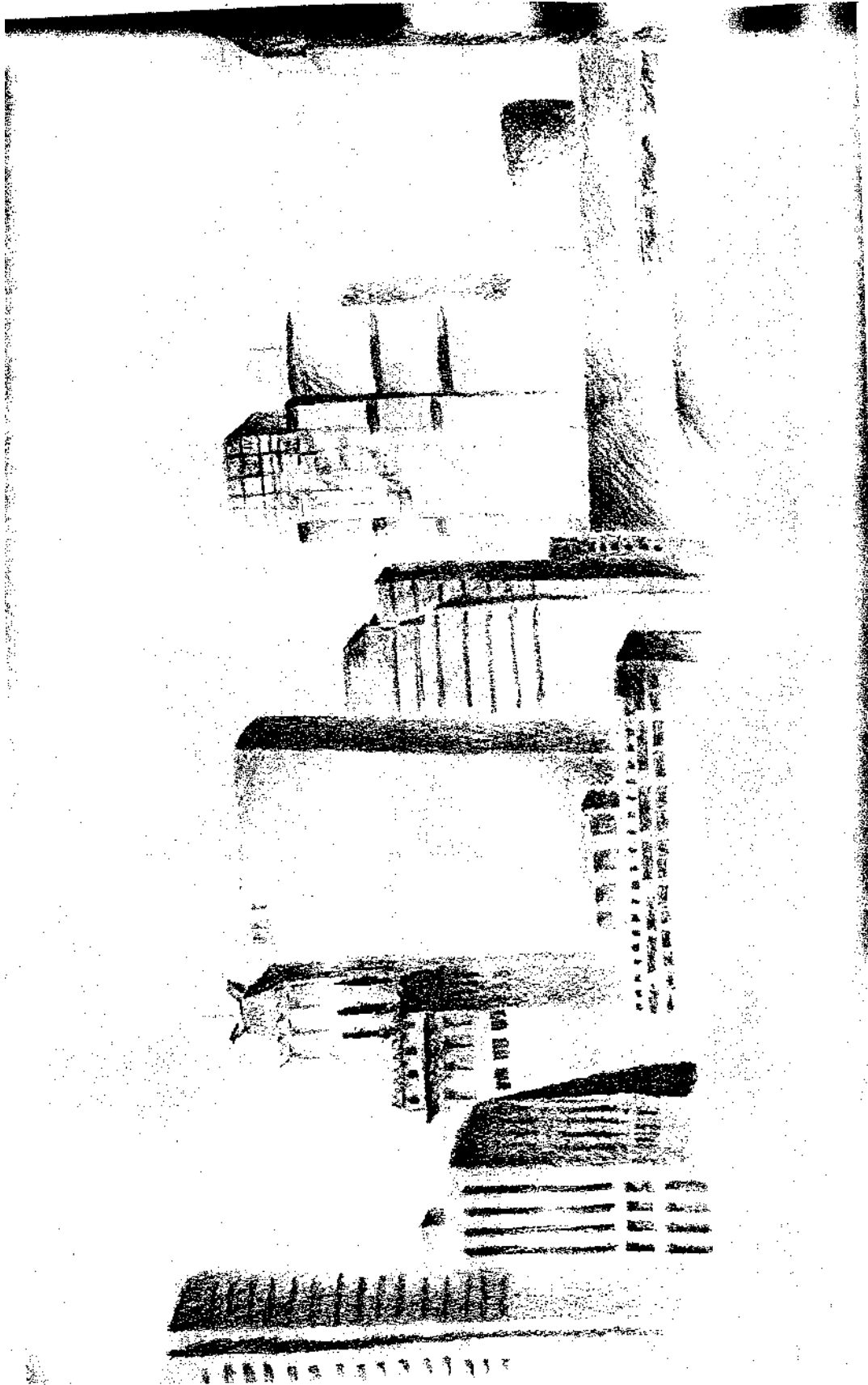
The books always said that the pioneer life was a tough one. I believed it, but it never affected me in a real way. The frontier family didn't have central heating coming from an oil burner in the basement. It was hard work that kept them warm. They chopped the wood and fire provided the heat. There was no time for games, either. For the explorer's wife, there was no leisure time. She often spent it making clothes for the family by candlelight. Even when the clothes were made, they had no good way to keep them clean. The explorers didn't have a laundry room with washers and dryers. It finally took a trip to Alaska for me to fully realize what this meant. It was my sweat that kept me warm. I cut the wood just like the frontiersman. I had what they had—an old, worn out wood stove that spewed smoke with even the tiniest flame. I too didn't have leisure time. It was occupied with hours of sewing. While I didn't have to make my clothes, I did repair them. With new holes everyday and unseasonably cold weather, I learned to sew while on my trip. I wasn't the greatest tailor, but I got the job done. My clothes were almost as good as new. They kept me warm. That was all that mattered. I also didn't have time to think about frivolous things like my appearance; it was survival and that's all. Now I see clean clothing as a luxury. Without washers and dryers, I had to adapt. The muscles in my arms were made strong from using the "bucket & stick" method. First I put a little soap in a bucket of water (cold water naturally), then I added

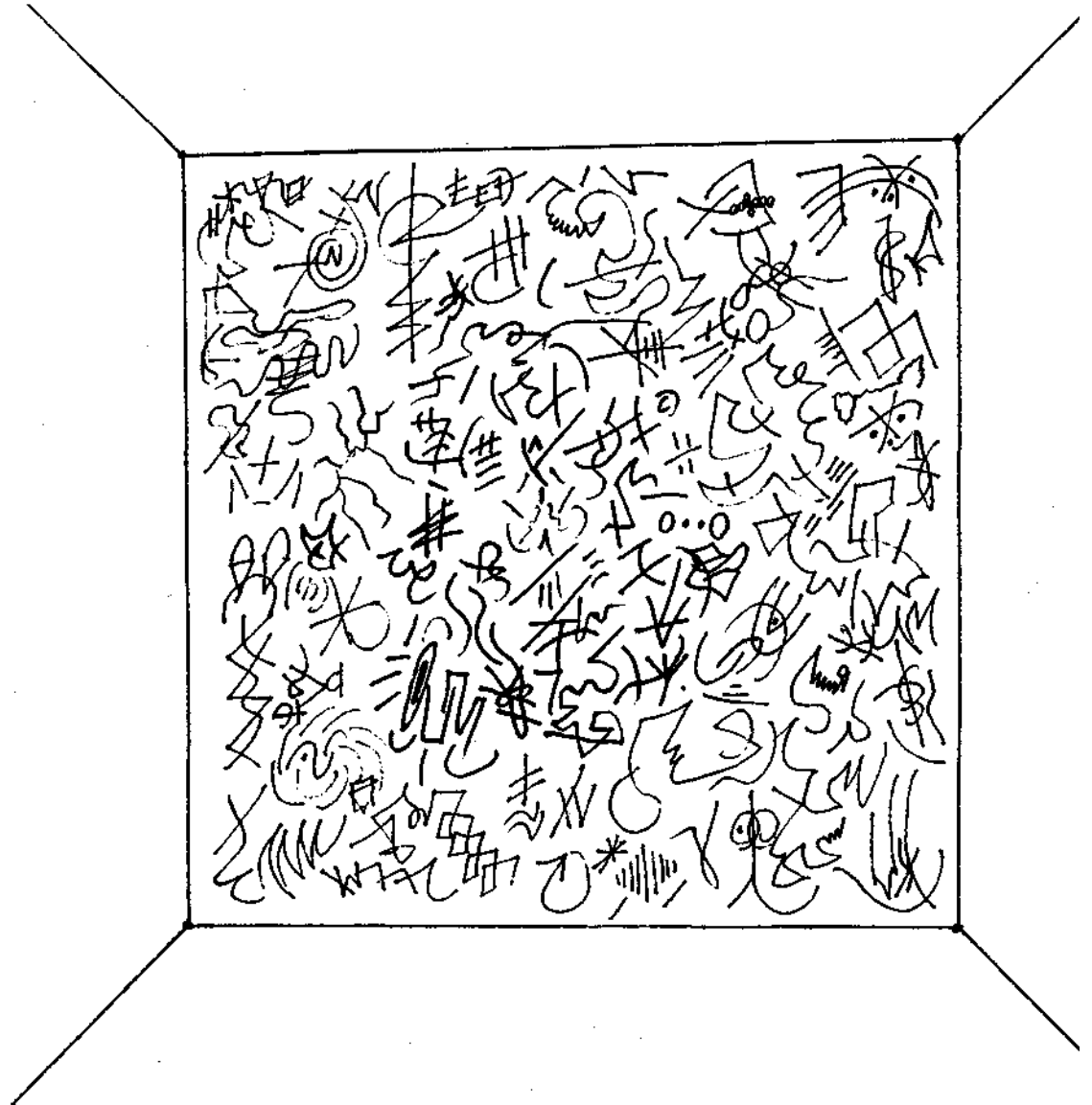
my dirty clothing. The stick had to be a strong, thick one because it was used with both the wash and spin cycles. I hung the wet, thoroughly beaten clothes from a tree to dry and, if the weather held out, in a few hours I would have not-so-clean clothes. They weren't clean, but they were cleaner than they had been at the start.

The study of history led me to realize that I was living history. By reading my history books, I knew that the explorers had a tough life without modern conveniences. Now I really understood this because that part of Alaska was, and still is, so far behind the rest of the world. I didn't have the modern tools either. I was experiencing the way people lived in the past. You can never get the "true" experience because you can't just jump into a time machine, but I got about as close as you can get.

It worked another way, too. Alaska helped me to understand history better because then, not only did I have a written account, but also a personal, physical experience to match the text. Now, when history books say that people lived without modern luxuries like heating, plumbing and appliances, I can't just simply dismiss it as a dull, lifeless story. I know how they felt. I have lived it. When I read about how the explorers lived, I used to ask myself, "I wonder what they were thinking?" The thoughts they had are no longer a mystery because I had those same thoughts, too. I thought of my children and how I want them to have a better life than the one I'm living. Maybe some person will invent a machine to make the daily chores less tedious. My life then was on that mountain, but where was it going? You see, the people then weren't much different than we are now. They were real and so are we.

The trip was a history lesson. It tied the pristine wilderness to the stacks of textbooks. History isn't just words in a book, but a place, too. There are places that remind us of history and there are books that tell us about history, but when the two meet in a real human experience, it is history. Some people believe that the past is gone forever, but I believe otherwise. I found the past in Alaska.





"Focused Confusion"

By: Billy Pierro
2/15/93

"He that increaseth knowledge increaseth sorrow."

Ecclesiastes, 1:18

The Fountain of Knowledge

by Mika Uematsu

Leuven, Belgium. A small Catholic town containing one of the oldest European colleges. The Gothic Town Hall and central library placed Leuven in the Let's Go Europe travel guide, though not all maps recognize nor denote the town with even a tiny dot. Twenty-three thousand students made up the bulk of the population. Without the young intellects, the town seemed empty and hollow, the damp streets abandoned, the bars empty, the whole town blanketed in a peacefulness. A silence.

At the base of the fifteenth century Town Hall, a statue stood on an oval island set in between opposing car lanes—the Fongske. The metal figure resembled a giddy old man, perched on one thin leg, like a flamingo. In the left palm, he balanced a book, parted in the middle. Clapsed in his right hand, raised high above his head, a cup eternally poured water into his hollowed, yawning skull. Sometimes university students squirted soap in the fountain, bubbling up the water, saying it was "bier." Either way, feed your head.

A short distance away, beyond cafes and boutiques, was the town park, lined with wrought-iron benches. In an oval pen with a dried out pond stood flamingos and red-topped roosters pecking the earth. People sprawled out in the rare presence of grass, while others slumped on benches, staring into the distant, perpetually gray horizon. At dusk, tall spiked gates closed with a creak and were locked for the night.

In the evening, when only the soft hum of lights were heard, the "straats" would be empty, except for the long shadows cast by tall and cramped houses. Metal shades covered shop windows. Music filtered out of bars. The sidewalks were clean, being scrubbed down at the end of each day.

The first half of a year long visit in Belgium give memories of a quaint and cobbled town, where the moon sometimes managed to break through a thick gray coat of clouds. Leuven was a maze of houses packed tight, squeezing up against each other, tall and cold, forming rigid walls. Occasionally, a wooden doorway, left ajar, gave a glimpse of what lay beyond those gray walls. Sometimes, a thin gravel trail slithered to the back, where a tree or two stood, yearning for more sun. Most trees in Leuven were cripples, with arthritic and gnarled branches, bulging at the joints. Photosynthesis, essential for animals, plants and humans, was a rarity.

Did the lack of radiant vitamin C account for the wrinkled grimaces Belgians cast on the street? The stiff backs? The dull, but persistent, stares? Or was it that nationalistic hackles had been raised for some time? In 1968, after years of tension, the university in Leuven severed itself in two. Flemish speaking people felt lecture halls were contaminated by classes taught in French. The pollutants had

F O R U M

been leaking before the 1930's. A huge dispute erupted, and the French-tongued natives packed bags and migrated south, setting up the Universite Catholique de Louvain at Ottignies, located in the Walloons. The Dutch speakers remained in the Flemish homeland. To appease both sides' bitter hearts, all library books were split into odd and even Dewey Decimals. Louvain, of course, received the odds.

Or possibly the recent meeting in Maastricht added to the grim tension that natives passed on to foreigners. Top officials discussed guidelines for the upcoming Community, awakening slumbering fears. The Neo-Nazis could be heard chanting in Germany; hate bombs could be felt. The continent shuddered.

The fascists' central headquarters located in Antwerp, Belgium, were about two hours by train from Leuven and a little over an hour away from the Brussel's European Economic Community. Recently, thirty-percent of Antwerp voted for the nationalistic party, voicing that immigrants were unwelcomed.

The first five months in Belgium went smoothly and I recall being draped in a deep peace. Things went without incident, except for missing trains, falling into the lingual gap, and the steady lowering of the U.S. dollar against the Franc. Occasionally, bank tellers snickered as they thumbed out money, noting the rate.

Everything was calm, until the "Vlams Blok," the fascist movement, came marching in heavy boots through Catholic Leuven.

Warning: All Foreigners Advised To Stay Inside.

It was a gray day in February, around three in the afternoon. The fascists came in five bus loads, and just as many came by car or train. Barbed wire stretched across certain streets to control the route of marches. The mounted police came clopping across the cobblestone.

In the town square, large tanks armed and aimed strong water guns at the crowd. Ground police were masked with helmets and shields, brandishing clubs and tossing M-80's. The peace crowd waved signs saying, "Zonder Rascime Schol" (School Without Racism) and "No Fascisme." Bodies marched, tightly packed. Along the street, spectators hung out the windows. Some pointed cameras; others lifted a beer, blessing the peace demonstration with a toast, while a few whipped fruit and stale bread into the crowd.

The peace march moved quickly and with much noise, coming behind the central library, opposite the park entrance, and the philosophy faculty room where Husserl's manuscripts were translated and studied. The shouts grew feverish, banners flapped madly and the sound of footsteps resonated against the stone.

THE FOUNTAIN OF KNOWLEDGE

It was then that the M-80's were thrown.

People suddenly rushed passed, mouths agape, arms flailing. It was like being a minnow inundated by a rush of white and boiling rapids.

I lost my shoe in the tides of peace. Bodies passed, blurred. I darted to the Fongske, who remained perching calmly in the chaos. I leapt on the fountain's ledge, grabbing the Fongske's arm for support. The crowd surged by below. M-80's popped in the air. Horses, with glaring whites of eyes, danced and twisted, forming a wall between Fascists and the Freedom Fighters. A man zig-zagged by, nose cracked open. Water guns zoned in on targets. An M-80 blasted nearby. Someone crashed into my legs. I went tumbling backwards and was fully baptized by the Fongske.

Though the buses did leave town, a few booted stragglers remained, with shaved hair and red armbands. And they haunted the town as the grayness did the sky. Walking the streets late at night was no longer peaceful; those soft shadows loomed sinister, hanging heavy, veiling corners.

Three weeks after the demonstration, I sat in a fast food restaurant with my English friend, Marian. It was close to 4:00 a.m. as we slouched over the counter eating greasy pitas. Two Moroccan cooks rushed back and forth, whipping up sandwiches, soups, and "frites." Belgians were very possessive of the "frite," complaining to any foreigner that it was not, by any means, the French's fry.

Munching slowly, Marian and I spoke of the usual enigmatic things, feeling the shifting tectonic plates of the future pressing in, and thinking we had better figure out something soon. Over a pita, Marian advised the art of transcendence, the art of seeing the whole. Shaking my head, I disagreed, explaining life was all about keeping one's feet on the ground.

Next to Marian a Belgian with mustache curled at the ends leaned over the counter. He muttered something inaudible behind the thick hair hanging over and hiding his mouth.

I leaned gently forward and asked, "Pardon?" Unblinkingly, he demanded, "Go home! Go home, Asian!"

I stared, unmoving, trying to distill the last shreds of diminishing rationality, trying to sustain the self despite the blow.

Clinging.

The Belgian's blue eyes pierced out beneath a cap. He jabbed a finger to the door, then grabbed a stool.

I dodged out of the way, right before my pita and plate were smashed. The whole place fell silent, with heavy stares witnessing the commotion. Marian tugged on my belt loop, whispering something in my ear. But there was only numbness and a clogged throat, as if my very being was swelling...thinning ...threatening to pop.

I backed up, led by Marian's persistent pull. In the threshold I heard myself say, "Tot Zien" ("good day"), and waved the "birdie," bye-bye.

A few days later, Angelina, a twenty-year-old Philippino, was walking in the Old Market around 9:00 p.m. She munched on some "frites" when a Belgian man approached, adorned in a blonde wig and with holster buckled around his waist.

Drunk and laughing, the native said in broken English, "It's a loooooong way to China." He slid a blank gun from the holster. "I help you get there."

The blank burst in a short blast, ricocheting within the tall stone buildings enclosing the market. The Philippino jumped, spilling "frites" onto the cobbled ground. The man skipped away, gold locks flying, laughter echoing, waving a fist into the drizzling night.

Verbal remarks, stool wielding, and blank bullets were not the only forms of assault. Stereotypes about Asian women ruled many Belgians' perspectives. This "breed" tended to work in red lit windows poisoning in scant underwear and spiked heels. Most Asian women were associated and framed in a neon red string of light. At clubs, it was not unusual to find all types of cultures: Belgians, Moroccans, and Africans, whispering into Asian ears, offering money, tugging and pinching tender skin, desiring to "slip outside."

During one particular evening, Angelina entered the Belgian Congo, an all-night dance club. A wheel of lights spun on the ceiling, shooting and swirling out flares of colors. A forty-foot wooden bar supported beers, slouching bodies, and a few customers dancing, as if on stage. A lanky waitress, with cropped blonde hair, delivered drinks to people on the dance floor. Pounding "techno-pop" made the walls tremble. A short flight of stairs led to the dance floor, where the Philippino whirled, hair mottled by the incessant pinwheel of light.

A Moroccan, clad in unbuttoned shirt and tight slacks, sashayed towards Angelina. He mumbled beneath the music, mustache scratching her ear. A wad of francs flashed. Nervously, Angelina shook her head, pointing to a man slumped on a bench. "Sorry. But that's my boyfriend," she lied. The Moroccan pushed towards the inebriated Belgian and tapped him on the shoulder. Angelina slipped deeply into the crowd.

Suddenly a mustache crept up her neck and a wad of bills was tucked inside her snug blouse. Angelina shoved the Moroccan, spilling beer on his exposed chest and polished shoes.

With eyebrows raised, he retorted, "But the man over there says it's okay."

Calmly she replied, shifting weight to the other hip, "He ain't my boyfriend. He ain't my pimp. He ain't even my friend. But you're an asshole. You gotta buy everything?" she laughed, slipping the thick bills from her shirt. "You're just as bad as an American."

THE FOUNTAIN OF KNOWLEDGE

The Moroccan's chest swelled with indignation. He reached out for the money, but missed and the bills went fluttering to the floor. His brown eyes grew wide as 5,000 Francs, or about \$150 U.S. dollars, were trodden beneath dancing feet.

Those scattered rifts of racism form calluses on being. Quills were raised, ready to take defense. An anger rose deep inside the deflated soul, blowing up spirit with a new bitterness. It's a soul forever stabbed by strangers' stares. Despite the calm rationale, despite Marian advising transcendence from the depths of Plato's cave, the anger weighed down the soul, holding it to the ground. Tectonic plates of the self slid beneath one another, tearing and forming fissures that must later be bridged. "Being" was under attack. "Being" had been prodded and poked, taunted and abused. Internal earthquakes trembled the foundation of the self.

Hats soon became essential articles of clothing, nicknamed "lids," for they capped or contained one's fragmenting self. Hats were necessary protection against the incessant rain, the chilled air, the accusing eyes. The brims acted as awnings, shadowing almond Asian eyes.

Nowhere was tread without the protection of the lid. On days when racial tensions were more prominent than the sun, the lid was pulled down low, decapitating passerbys' heads from sight. Piercing stares would go unseen. Grim, tight mouths would go unnoticed. Biting words would merely fly and bounce off shielding brims. You were lidded, packed tight.

Preserved.

That is, until I left the philosophy department one rare and sunny afternoon in April. My mind pondered and whirled through a hundred philosophical investigations. I made a left on Maria-Theresestraat, when a man under five-foot appeared beneath my cap's awning. He looked up and smiled, flapping eyebrows like wings, brown eyes squinting. He moved along.

But at the next street corner, the short man leaned casually against the Apoteek, where prescription drugs were sold. As I passed, head down and jaw tight, the man muttered low in Flemish.

I tried losing the stranger at two other intersections. But he always came up briskly from behind, murmuring. I was nearing the house. I couldn't let him follow me home. "What do you want?" I asked, bored, lighting a cigarette. Cars and bikes rushed by on the street.

"Ohh, you speak English. Well, I've seen you in town. I'd like to take you out." He smiled, raising eyebrows, all seen beneath the brim of my cap. I cringed.

"So maybe you give me your number and I can take you around this lovely town." He opened his arms, offering.

F O R U M

"I don't know the number," I said, which was the truth.

"That's okay," he commented, lips twitching. "It's 1421232."

My back stiffened. "Could be." I shrugged. "I wouldn't know."

He waved me a good day, smiling the entire time. I watched the man waddle away with short steps until he disappeared around the corner.

I rushed home, looking over my shoulder the whole way. I pushed open the house's heavy wooden door, ran up the steps, and turned into the phone room.

I checked the number. The stranger was right.

On that same, strange day, I was nearly arrested at a local grocery store. I stood in line, holding my tiny basket of goods, pulling down a pack of cigarettes from a rack. I paid four hundred francs and stuffed the items in a knapsack.

"Goede Dag," I said, starting for the door, digging in pockets for the key to my bike lock. That's when a man, in shirt and trousers, took hold of my arm and pulled me into a small room.

"Do you have something in your pocket?" The man asked, sitting down behind a desk. The cubicle was so small, I could barely turn around.

I hesitated, wondering what point this Belgian wanted to get across. "Who are you?"

"The security for this store." He tapped a thumb nervously on the desk.

"Empty your pockets."

Shaking a head, I pulled out keys, a pen, a note pad, coins, lipstick, and a pack of unopened cigarettes. He snatched up the smokes, sighing.

I lifted my hands, eyebrows raised in question. "You stole this from the store?" I smiled, relieved. Digging into the knapsack, I pulled out the receipt and cigarettes. "You misunderstand; I bought these cigarettes here, the other I bought at the train station a few days ago. See...check the bill."

Glancing at the piece of paper, he shrugged. "You must pay a fine."

"What?"

"Or I call the police."

"Look at the receipt, I bought that pack of smokes, and that's the only one I purchased at this store."

"But the other is not listed as paid for." He let the receipt flutter to the desk.

"Of course it's not." My hands slapped against my thighs. "I didn't buy them here."

"Do you have town I.D.?" he asked, bored, leaning back in the chair.

I felt through my pockets, but found them empty. My identification lay on my cluttered desk at home. If the security guard called the police they'd surely ask to see my papers. The penalty was possibly jail or a 1500 Franc fine.

"I call the police or you pay the fine."

"How much?" I asked, angry, hands clenched.

T H E F O U N T A I N O F K N O W L E D G E

He smiled at my submission. "Ohhh, I'll be nice. Six hundred francs." He folded arms across his belly.

"Well, what is the normal fine?"

"It could be more if you push me." He grinned, slowly. My being welled into the eyes and shed through teardrops. Bits of being dripped down my cheeks. I shoved the cap down and slapped the money on the desk. He jumped in the seat. I grabbed the pack of smokes from his white hands and fled.

I walked outside and slid in step with fast-paced pedestrians. The sun was now overwhelmed by clouds. Church bells floated though the gray air, re-sounding between narrow and curved streets. Town Hall stood solemn and wise, with ornate spires stretching for the sky.

And there stood the Fongske, with leg cocked, face grinning, eyes hollowed holes. Crystal clear water flowed into his gaping head. In the winter, the water congealed in coldness, covering the little man in a cocoon of ice.

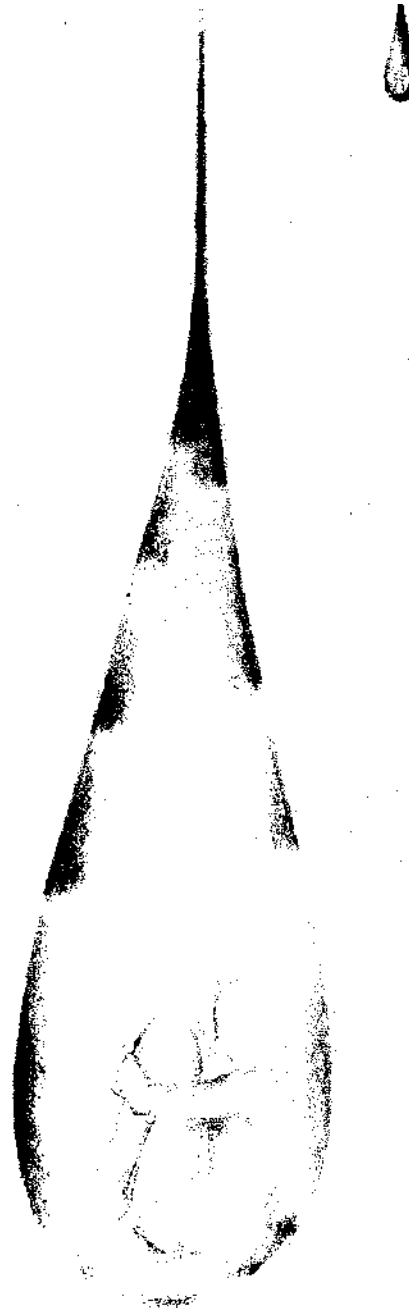
But the book remained open.

He waited on one leg...until the sun's rays pressed feebly through clouds and water droplets started to drip. The icy mask dissolved.

And the Fonske smiled on.

*"Let tears flow of their own accord: their flowing is
not inconsistent with inward peace and harmony."*

Seneca



Revelation Through Tears

by Gina Marie Kelly

The salty water flowed slowly at first. Tiny rivulets making distinct paths down my cheeks. Tears of sadness? No, not really. Tears of joy? Perhaps in a sense, for those tears would be the source of much future happiness. They were tears of comfort alleviating the loneliness, tears of power overcoming the fear, tears of understanding obliterating the confusion, tears of calmness diffusing the frustration.

To understand the tears, you must look far into my past, perhaps even to the night I was conceived. French foreign exchange student at UVA meets American "frat boy" at a party, has "a little bit too much to drink," and nine months later my screams echo throughout the Fairfax Hospital delivery room.

The obstetrician who delivered me has said that my biological mother seriously considered having an abortion. Eighteen years later, I still thank my mother for putting me up for adoption. Sometimes I wish, however, that she had left me access to her medical records. Perhaps they could have prevented, or at least shortened, the seven year struggle that ended in those tears.

The medical background of my biological family became relevant to my everyday life on Christmas Day when I was in fifth grade. Mass was about to commence. The choir was practicing the opening hymn when an echo resounded off the walls of the church—the echo of a child's head smacking against the floor.

Over the next seven years, my head would strike the floor eighty-seven more times. Some of the faintings and seizures I remember vividly, as if they occurred only minutes ago, while others are only vague recollections. I can, however, recall in great detail how it felt each time my skull came into contact with linoleum or wood or grass or whatever else happened to be beneath my feet.

I don't think it would have been as difficult to cope with being a ten year old epileptic had I been diagnosed as such. Instead, however, I went through seven years of EEG's, cardiograms, CAT-scans, glucose tests, and more poking and probing needles than I care to remember. Various specialists determined that I was borderline hypoglycemic, partially diabetic, squeamish, and my personal favorite, "undiagnosable due to lack of family history."

It must have been difficult for my parents, for it seemed as if they were forever justifying to doctors why they knew nothing about my medical background. It finally reached the point where they were embarrassed by the entire situation. Nowhere in the adoption papers did it say, "This child comes with epilepsy. Cure not included." Their frustrations were magnified by the fact that I didn't mind the seizures all that much.

At ten, it was kind of cool to be the kid the doctors couldn't cure. I admit

F O R U M

that I was always one who loved to call attention to herself. I could do something really bizarre, something no one else in my class could do, and perverse as it may sound, that made me feel special. For a while. But as my seizures became more and more frequent, the originally difficult physical battle became easy, in comparison to the emotional turmoil I was experiencing. In school, I was labeled the "class freak." And on the day of any given test, I was sure to be offered anywhere from one to twenty dollars to "faint."

I'm proud to say that I have never faked a seizure. And there were times, during the more lonely parts of my life, when that was tempting, if only to get some attention. Because I could not control my body physically, throughout my adolescence I craved a supplementary type of control: control over my emotions. I "built up a wall" around myself that no friend or relative, psychologist or minister could break through. I became a compulsive liar in my words and actions, always wearing a smile whether or not I was happy and telling people I felt fine when I really wanted to scream, "Why is God doing this to me? What have I ever done to deserve this? I'm a 'straight A' honors student, I try hard to be everything my parents ever wanted me to be, I don't smoke, drink socially, do drugs or steal. I pray every day and obey all of the Commandments. Why is this happening to me?"

If thirteen years of Catholic school taught me anything about God, it is that He is all powerful and can do anything. I believe this with my whole heart. Every night before I fell asleep I would hope and pray that He would make me better. Every morning I woke up to the fact that I wasn't.

On April 17, 1991, Mark Stein, the guy every girl would die for, asked me to go to a movie. Afterwards in McDonald's, I had a seizure. I stopped praying that day. In retrospect, I recognize that if Mark had been the great guy I thought he was, he wouldn't have stopped calling me after that date. At the time, however, it was "the straw that broke the camel's back." I was tired of being "the sick kid," tired of being out of control, tired of not understanding why I was the way I was, and so tired of being afraid that praying wouldn't do a damned thing about it. So I blamed God, the one person in my life who couldn't defend Himself to me. And I stopped praying.

They told us in Catholic school that Hell was the place where "bad" people went when they died. They were wrong. Living with untreated epilepsy was living in hell. There is no way to minimize it. But if I hadn't lived the life of an epileptic, I quite possibly would never have experienced the tears that have shaped me into the person I am today. There's an old adage that says without sadness there can be no true joy. Through the tears, I have learned that without hell there can be no true heaven.

On September 19, 1991, the wall that I had built around my heart crumbled.

R E V E L A T I O N T H R O U G H T E A R S

I had my last seizure. My neurologist refers to it as my latest seizure, but I know that it was the last, for that was the day the tears fell.

At 2:40 that day, classes were dismissed, as they were on every other day. At 2:45 that day, I went to my locker as I did every other day. At 2:47 that day, I experienced a grand mal seizure as I had on several other days, and at 2:55, an ambulance corps came and released me in the care of my high school principal as it had on several other days. At 3:15 that day, Mr. James Thomas Anderson, my theology teacher, invited me to come to a charismatic prayer meeting. That had not happened on any other day.

A charismatic prayer meeting. I hadn't been to church or said a prayer in five months, much less gone to any prayer meetings. I had learned about charismatic prayer, or "praying in tongues" as the Bible calls it, in theology class. Your tongue is immersed in the Holy Spirit and you lose control over what you think and speak. To lose control was my ultimate phobia. Yet for reasons that I couldn't really understand, I was not afraid.

There were candles lit in the Sacred Heart of Jesus Chapel. Due to the violent shaking I had just experienced, the rug felt comforting as I sat in the circle with seven other girls and James. The others glanced at me questioningly until James whispered quietly, "Gina is going to pray with us today."

James motioned me to the center of the circle. I was not afraid. He dimmed the lights. I was not afraid. He placed his hands on my forehead. I was not afraid. He asked me to begin the Hail Mary. I was not afraid. He began praying in tongues. I was not afraid. I began praying in tongues. My tongue sloshed back and forth. The tears poured down my cheeks and began to choke me. I was losing control of my body, and, for the first time since that Christmas morning seven years earlier, I was not afraid that I was not in control. The tears were falling, and I was not afraid of the power that they or any other being or presence had over my emotions. I was not afraid to lay myself open, vulnerable, and defenseless, even before almighty God Himself. And with the tears that soothed all of the pain and confusion of my adolescence came the knowledge that what had healed me spiritually had also healed me physically.

I haven't ingested a Tegretol since that morning. My brain waves were recorded as irregular on every EEG performed over the next eleven months. According to all of the specialists I have seen, I should have been fainting on a regular basis. But I hadn't, still haven't. I have no medical explanation for this. I'm not sure that I'd ever want one. I believe, that through James Thomas Anderson and charismatic prayer, God has graced me with the gift of peace over my body.

That doesn't mean that I don't start to feel lightheaded occasionally. However, for seven years, whenever I felt lightheaded, I fainted. Now when I feel lightheaded, I pray. It works every time, because I have complete, uncondi-

tional trust in God that it will. As a child, when I prayed, I hoped. Now, when I pray, I believe. Faith has bridged the gap from the sophomoric prayer of my adolescence to the more mature prayer of my early adulthood.

I'd like to be able to say that my transformation from one who prays to God to one who prays in union with the Spirit has made me the perfect Catholic, but it hasn't. I'd like to be able to say that I go to Mass every Sunday, but I don't. I'd like to be able to say that I am always proud to be the person I am, but I'm not.

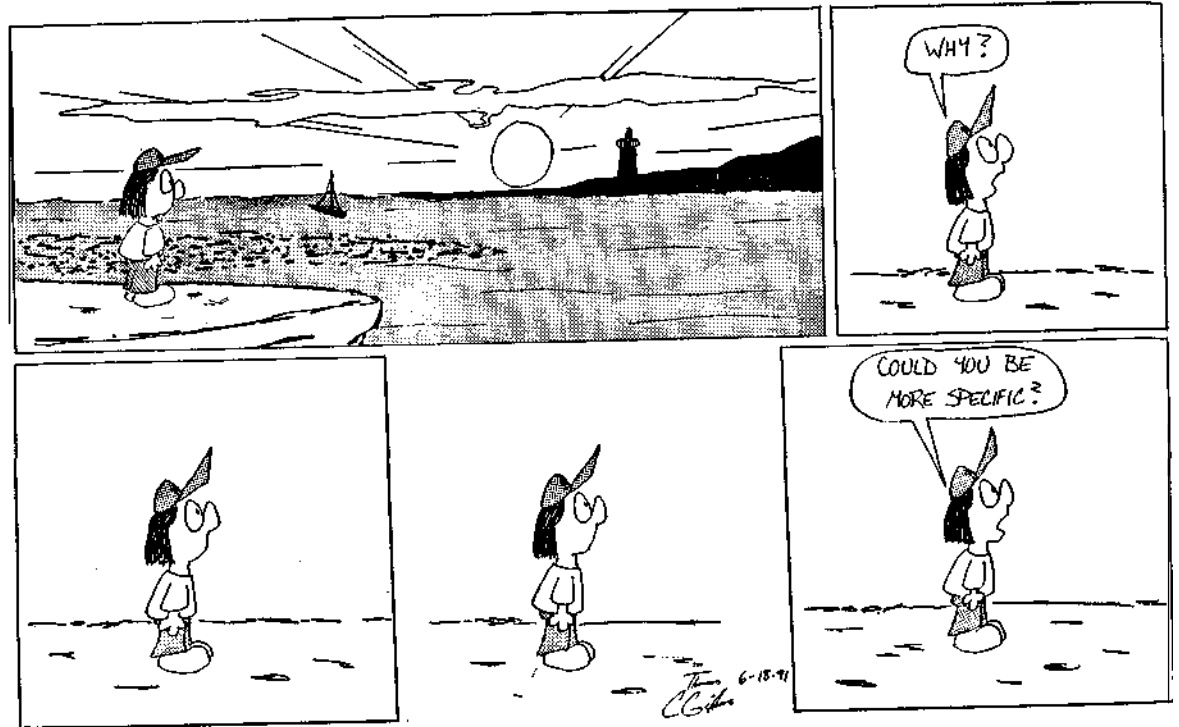
I can say, however, that I pray every morning. I can say that I love God and all of His creatures with my whole heart. I can say that I will give my life in service to Him and His children. I can say that with God, anything is possible. I can say that I place all of my faith, all of my trust, in Him. I could not say any of this before the day that the tears fell.

I'd like to be able to say that all of these feelings that I have towards God are noble and have developed from a spiritual revelation. In part, they have, for charismatic prayer has opened to me a world of God's glory that I never even imagined. Yet a part of me wonders if my new faith in God has stemmed from the fact that I haven't had a seizure since I started praying again. If I faint tomorrow, will I still want to praise God charismatically? I like to think that I would, yet I'm not always so sure. It's something that I pray about. Whenever I have doubts, I turn to the tears, to the prayer that has healed me again and again.

When I pray in tongues, I feel my faith restored. I feel God present in my body and know the truth and reality of Him within me. I'm not claiming to know God completely—I don't. In fact, I recognize that there is an infinite amount of information about God that will always be a mystery to me. The more I learn, the more there seems to be to know. But I know that God loves me; I can feel it every time the tears fall, special and unique, different and yet bonded in the theme of God's power and love.

The last time the tears fell was August 19, 1992. I was getting my final EEG before college. I knew that something would be different this time, because that morning the tears fell. And I knew the reality of my mother's words when the doctor informed us that for the first time since my head hit the floor on Christmas in fifth grade that my brain waves were regular. "Thank God." Damned straight.





"Being is the great explainer."

Thoreau

Who Are We, Why Are We, What Will We Be?

by Phillip Hurley

The necktie. A funny sort of thing, isn't it? We tie a long decorated piece of cloth in a slipknot and pull it snugly under our collar. And collars for that matter: folded over portions of our shirts, sometimes with buttons at one point, other times not. Why do we wear such things? Why doesn't everybody? Who thought of it all anyway?

Ridiculous questions? Perhaps - but the deeper issue to which they are connected has everything to do with what we are as a culture, as human beings, and how we came to be who we are and to live as we do. The search for the origins of our very nature and identity can produce insights which surpass by far the reasons we dress as we do; it is, in itself, largely responsible for our cultural identities.

At a time when change, dramatic change, is occurring at a rate unprecedented in all of human history, it is more imperative than ever before that we attempt to understand more fully what it is that brings about the evolution of our different cultures and that of what is now a world community. As the Berlin Wall and European communism crumble, as Germany unifies, South Africa abolishes apartheid, and the priorities of a post-cold war America come into question, more windows of opportunity for such change appear. We need to take the time to stop and think about where we are going and how and why we are going there, lest we realize too late that we made a turn for the worse.

The question we need to ask is whether or not the changes we are undergoing (and ultimately the forces impelling the change) are moving us in the direction of a more just society. It would seem, with so many extraordinary and seemingly beneficial events transpiring, that justice is being administered, and it is in many cases. We need to try to ensure, though, that as new laws and new States are formed, precautions are taken to prevent the injustices of the past from recurring.

While the rate of change at present is unprecedented, our nature as human beings, and therefore the fundamental causality behind the change, is not. I am a firm believer in the study of history as an important advisor in our looking to the future; in order to know what we are becoming, we need to discern how we became what we are. The fundamental and pivotal basis for utilizing such hindsight is to be found in how we define this causality. Again, the best way to decide upon such an important conceptualism is to see how it has affected history thus far.

There are two basic and seemingly divergent theories as to the driving force behind this "cultural evolution." Some propose that history progresses and cultures develop because of a small number of people, mainly leaders in their

respective time frames, who are recognized as "great." That is to say, they are the heroes and heroines of their age. On the other hand, there are those who view cultural change on much broader terms—as an organismic development generated by the culture itself. If the effect each way of thinking has on the administration of justice is sought, each theory will be found to have its merits and its pitfalls. It is tempting to label these as the contrasting opinions of the sort of romantic and realist types in the circles of historical study. It is advisable to avoid such categorization, however, as the best way to deal with both views is to incorporate the fundamentally just and true ideas from each together and implement them in how we view change.

Perhaps the best way to study this "happy medium" is to look far back into history, to a time when the first humans did not have to deal with nearly as complex and large a society as we now have. This was a time when such advances as better spear-throwers and sewing methods were at the forefront of current events. Archeological evidence indicates that such ideas were developed and passed freely among groups of our ancient ancestors, and that fighting between groups was virtually nonexistent. The reasons for such a peaceful existence can be speculated—were these people so primitive as to be unsusceptible to the problems of more advanced societies like our own? It is assuredly not due to any lack of cultural depth or complex thought, for they produced such refined artwork as an entire cave of wall paintings at Lascaux, France, and used the natural world with a sophistication nearly equal to that of our technological advances: in tracking, obtaining food, and medicine in particular, they knew how to properly utilize the world around them (Putman 448-449). Did the small size of the individual communities (around thirty members) allow for more communication between leaders and the people? This seems very likely, but the reason for the connection may lie in more than just population size: while we are far from understanding these people fully, it is clear that there was a natural tendency toward moderation in their views on change. Those in authority (leaders and holy people)—in other words the great people of the society - were recognized as such while still remaining close to and indeed dependent on the people as a whole. In other words, both great and common people were seen as important to society in a proper balance. Since it worked within and not against this naturally occurring framework, the culture flourished.

Though they can work compatibly once such a rational balance has been achieved, there nevertheless are vast differences between the theories of causality when both are taken to their opposite extremes. It is in the framework of such extremism that many of the most catastrophic instances of injustice in history have developed - it seems that as time wore on and societies expanded, the divergence between the great and the common tragically grew.

WHO ARE WE, WHY ARE WE, WHAT WILL WE BE?

As the nomadic and cave-dwelling people began to organize into even the first cities (in the area of Mesopotamia), a rigid social structure complete with a king, nobles and priests, commoners, and slaves could be found (Chambers *et al* 8). This was the first of ages of civilizations to come in which the disparity between those "great" and those "common" was so vast that some people starved while others lived amidst riches and luxury. And any protest on the part of the general masses could be easily quelled with retribution as swift and violent as a thunderbolt from on high. Indeed systems of government developed that placed the leaders of society so far above the "rabble" that they were given power beyond human reason; an utterly unjust philosophy which is frighteningly still implemented in many parts of the world today.

The nineteenth century writer Thomas Carlyle ventured as far as to entitle an essay "On Heroes and Hero-Worship." Sincere and well-intentioned though he may have been, Carlyle enters dangerous territory when he places great people on deific pedestals: "...Thoughts that dwelt in the Great Men sent into the world: the soul of the whole world's history, it may justly be considered, were the history of these. Society everywhere is some representation...of a graduated worship of heroes — reverence and obedience done to men really great and wise" (237). Certainly there have been great people true heroes and heroines, but the idea that history is "justly" nothing more than these few leading the reverent masses is seriously flawed, and to put such an idea into practice in the realm of government is to expose society to the threat of tyrannical rule. No matter how great or heroic, a person is but a person, and people have been known to make mistakes. It is indisputable that Adolf Hitler was a military genius and a masterful leader; many people thought him to be a great man and consequently they murdered twelve million people in his concentration camps. Such atrocities as the holocaust need little philosophical clarification in my mind to be seen for what they are: blatant injustices. Hitler was given too much power, had too much influence over a very disillusioned German public who were ready to follow their messiah like so many lost sheep.

Doubtless we still find there to be a comparable, if not similar, situation even in modern day America: we have the power-brokers who manipulate the business world, the drug lords who control and kill people as they please, there are homeless starving in the streets while the great corporate giants and professional sports heroes thrive. Free speech is much more manifest today, certainly, but cover-ups, bribes, bureaucracy, and even threats and violence silence effectively many attempts at reform and equality of opportunity. The death of such leaders as Rev. Martin Luther King, Jr. and Malcolm X, purely power-motivated scandals such as Watergate and the savings and loan bailouts, and the simple fact that the most technologically advanced and democratic nation in the world is

not feeding all its people are proof that ideas about who is greater and what powers greatness entails are still seriously askew.

For as long as the disparities in society continued without significant or ample change, they were only to be just as tragically decimated by some reform attempts made in relatively recent times. Just as detrimental to the good of society as "hero-worship" is the notion that there are no great people who are of any significance amidst the interminable machine of history and those societal forces which fuel it. Economics was proposed as such a force by a man named Karl Marx. Everything from the general history of which I speak to the smallest sensibilities Marx says occur "...thanks to social development, thanks to industry and commercial relation. It is well known that the cherry tree...only appeared in our zone a few centuries ago thanks to commerce..."(Burkharin *et al.* 13). In lieu of worshipping heroic figures as the creators of all history, Marx advocates (albeit indirectly) economics as filling the role. Marx envisioned society as progressing toward a classless State. The dangers this entails produce calamities similar to those associated with the former extreme. If everyone in a society is completely restricted by that society, if its history is unaffected by the actions of even the greatest people, then it is doomed to virtual stagnation. Yet we know, as was said before, this scenario is implausible - in every society there are those who will have new ideas and those who can capture the attention of the masses. So, in effect, Marxism, communism or any other theory of cultural evolution divorced from great leaders implementing natural change has to be artificially enforced in order to exist. Herein lies the danger for injustice: violent, bloody suppression of free thought and change (at the hands of those in government who claim to be "fellow citizens"), which has been evidenced in such communist States as the former Soviet Union and mainland China. Images of bodies mangled by treads in Lithuania and Tiannanmen Square are all too vivid reminders of the cost of this ideology.

So we find that putting the extreme of either theory of cultural evolution into practice when shaping the future can ultimately result in senseless death and suffering. While many cultures throughout history have fallen under one or the other of these categorizations simply based on the opinions of unjust rulers and cultural mindsets, there have been exceptions to "the rule" - it seems that a culture free of two such restraints naturally tends to develop within the framework of the compatibility which is to be found between the valid ideas contained in both extremes.

While it certainly is good to know that corrupt leaders and erroneous conventions cause injustice, this fact has been well established for some time, and still the injustice continues. It seems to me that what has been missing is a realization that it is often the theory of progress of each of these mindsets which is the

WHO ARE WE, WHY ARE WE, WHAT WILL WE BE?

ultimate cause; different leaders and mindsets are but temporary offshoots from the complex, hidden, firmly rooted ideologies which are an integral part of a culture. What needs to be ingrained in society today is the knowledge that economics, religion, nationalism, and other societal forces create change in society in addition to the great people who appear in cultures, or the great deeds done by people previously considered to be ordinary. Such people should not be worshipped with blind faith, nor should their talents and prominence be suppressed; it is the denial or ignorance of this fact which leads and has led throughout history to disastrous extremism.

The best known way to avoid ignorance is to learn, and we need to afford children the opportunity to understand at an early age how a just society should function in the context of moderation. What this really amounts to is augmenting the conscientious awareness already contained within a child's mind. The Greek philosopher Plato explicates this concept in Book VII of his The Republic: "...our reasoning indicates that [understanding] is already in the soul of each, and is the instrument by which each learns..." (Rouse 317). The comprehension of the moderate view as just is therefore ingrained in human nature; a child will readily understand that if people die because of one idea and can live happily with another, the latter is good and the former bad. That is, one is just and the other unjust.

Such a realization is harder to bring about in the mind of adults, who have had a longer time to be instilled with societal ideas and who will be much more adamant about retaining these preconceived notions. What I feel truly makes a person great, and which also constitutes the ability to alter the course of a culture, is first the capability to have their consciences stirred, and then the ability to stir the consciences of others. This is why societies do change. I am certain that many more people have their inner perceptions of right and wrong troubled than just those who can rouse awareness to such trouble. These are the "ordinary" people, who really are extraordinary in their own right, and who keep history moving steadily in their small sphere of influence. It is out of these people that those great leaders who induced widespread change emerge.

The natural way culture evolves can be related to a theory for the biological evolution of species, called punctuated equilibrium. It proposes that evolution does not occur at the same steady rate: rather, it is sped up occasionally by some punctuating factor, such as drought or other climatic change. Even during the times between the drastic speeding up, though, evolution does occur to varying degrees. By the same token, cultures develop as a result of forces such as economics and as a result of the actions of society as a whole, but that development is also sped up or altered by great leaders. As Frederick Hebble states, "Great men are the tables of contents of mankind" (Elliot *et al.* 239). While

F O R U M

great people play an extremely important role in history, they do not encompass all of it. As the table of contents stresses the major points of a much more involved text, so do those recognized great comprise the predominant people of their ages. If both forces are tempered and worked with in conjunction much suffering and injustice can be prevented.

Perhaps if each time we noticed a particularly nice necktie we considered the ideas which brought it into existence, and it reminded us of why the drastic cultural and ideological change the world is undergoing developed, it would help us realize the exciting urgency of our times. We find ourselves at the proverbial crossroads in attitudes toward cultural evolution. Having been held awry by one extreme for most of history, the balance of justice has recently tilted too far again by overcompensation on the other side of the fulcrum. Our predicament is akin to one in which Robert Frost found himself while deep in a yellow wood. In order for us to view accurately and soundly where we are going as a culture, we must choose, as did Frost and our ancient ancestors, the ill-worn path between the two extremes. In this light, we may finally be able to change in peace.

WORKS CITED

- Bukharin, N.I., *et al.* Marxism and Modern Thought. New York: Harcourt Brace, and Co., 1935.
- Carlyle, Thomas. "On Heroes and Hero Worship" from Themes in World Literature. Editors: George P. Elliot, *et al.* Boston: Houghton Mifflin Co. 1989, 236-40.
- Chambers, Mortimer *et al.* The Western Experience. New York: McGraw Hill, Inc., 1991.
- Elliot, George P. *et al.*, editors. Themes in World Literature. Boston: Houghton Mifflin Co., 1989.
- Putman, John J. "Search for Modern Humans" from National Geographic, October 1988, 439-81.
- Rouse, W.H., editor. Great Dialogues of Plato. Canada: Mentor, 1984.

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Writing Department
Prize Winners

*"True ease in writing comes from art, not chance, as
those move easiest who have learned to dance."*

Alexander Pope



*"The hand that rules the press, the radio, the screen,
and the far-spread magazine, rules the country."*

Learned Hand

What Every Girl Needs to Know

by Carlene Bauer

*"... that intoxicating illusion,
sometimes present on a night like
this, that I was young and lovely-
looking, while in reality I was
a very small, excited girl in a very
large velvet hat."*

Anne Morrow Lindbergh

My adolescence can be divided into two halves. In the first few years, I experienced enough angst to fill a few John Hughes films (minus the misfit-makes-good endings) because I was not outgoing or bubbly enough to fit the mold of "Popular Teenage Girl"—like Anne Morrow Lindbergh, I recognized my limitations. In the latter half, things ran more smoothly; I was quite content with the fact that I could not and did not squeeze myself into that confining mold. But, during both these periods, Seventeen, that Fodor's for young females, occupied a permanent place on my nightstand, even when I had stopped seeing it as a friend but as a foe of some sort.

When I first began reading Seventeen, however, I saw it as a Rosetta Stone, an older sister who would reveal the secret to self-confidence and popularity. I did not corner the market on either of them, however, being that I had just moved and entered a small junior high whose well-dressed social circles I found difficult to infiltrate. I was the new student, a "nerd magnet."

I read my first issue that year, when I was thirteen. The purple headline on the January, 1986, cover gave me encouragement that those circles could be broken just by opening the magazine. "New Year, New You!" it proclaimed. Well, certainly. What I had in mind exactly. I had waited a long time to become a teenager, and now I teetered on the cusp. Technically, because I possessed the suffix "-teen," I was "of age." Yet, it was not at thirteen that the magic began. One struggled under the badge of orthodontia, attacked pimples with all the ferocity of the Green Beret, and tried vainly to control oversized limbs and "baby fat."

Seventeen, according to what I had been told by the media, was when everything fell into place. By then one had emerged victorious, with clear skin, straight teeth, and regulation-sized body parts. This was the most exciting time of your life—you were allowed to wear makeup, exercise independence by way of car, and go on dates, too! At least this is what I garnered from ABC

"AfterSchool Specials" and other prime time viewing. Locker-side chats and goodnight kisses were played out so that only Hamlet's "to be or not to be" speech could surpass them in dramatic importance.

Seventeen purported this conventional wisdom. What else was a girl supposed to think? Pages full of bright, expensive clothes worn by red-lipped, white-toothed models (sometimes cavorting with a strapping young buck, sometimes not) on beach, on city street, on mountain trail. Eye-catching ads for shoes, perfume, makeup (those almost made this eyeshadow eschewer run to the nearest CVS). Bold headlines in pink, green, orange, purple. It all came together in a product that practically screamed, "I enjoy being a girl!" Adolescence seemed to be the apex of a female's existence in the United States; the message permeated Seventeen and wafted from its pages, like the fragrance inserts which are indigenous to so many fashion magazines.

But what if the smell was not that sweet for you? Not to fret—there was advice. And lots of it, dear. What to wear, what to do if he doesn't like it, and even how to handle emotional scars. There was a column for every ailment—physical, emotional, ethical, sexual. In fact, my mother once expressed her misgivings about a thirteen year old's exposure to Seventeen's "Sex and Your Body" column. "Mother," I replied in the exasperated tone one uses when dealing with mistaken but well-meaning parents, "it's not as if I file it away for later use."

I never filed any of the advice away for later use. I may have wanted to be older but never took any steps to arrive there—that required a certain amount of brazenness which, as a quiet, shy person, I did not think I could muster. Since I grappled with the question "Do I dare disturb the universe?" on a daily basis, the makeup hints went unheralded and the fashion tips were taken with a grain of hydro-perfected, micro-capsulized translucent face powder.

Plus, in real life, no girl I knew could carry off or afford the Vogue-worthy styles Seventeen favored. The models were, technically, teenaged, but they had a cool, runway-acquired beauty that made them look right at home in plaid wool blankets-cum-skirts and Chanel-inspired ensembles. Coeds go haute couture. No one I saw around me, including the most popular girl in the class, ever looked that good, even in airbrushed yearbook pictures. So the resultant image of confident, unblemished, perpetually put together young women was one I regarded as myth, fiction.

Instead, I concentrated on the facts that Seventeen provided. Being a music and film fan, I devoured the "Talent" section, and I stalked its pages for the "Voices" column, where readers could have opinionated essays published. (As an aspiring writer, it gave me insight into future competition.) This was the information I filed away for later use. I saw the magazine as another step to

WHAT EVERY GIRL NEEDS TO KNOW

being well-informed, "up on things." I read Time just as voraciously. However, most girls I knew did not read Seventeen, they flipped through it.

I suppose that was why they changed the format when I was older. The editors seemed to be listening to what is said so often about my generation—that we can't concentrate. "Voices" was no longer a monthly feature. And the entertainment and information pages became colorful blurbs, nothing more than sound bites. Interviews, which once rambled on back to the black and white ads for hair remover and modeling schools now did not stray further than a column. I noticed this increase in image and decrease in print and was not happy.

It was around the time of these changes, when I was about sixteen or so, that I began to look with suspicion on the magazine. Who were they writing it for? The thirteen-year-olds or those of its title age? I never remembered the magazine seeming so like bubble gum, and it was not without heavy rolling of the eyes that my friends and I noted that Vanilla Ice and the New Kids before him were voted "coolest male singer." It had to be the thirteen-year-olds, for no seventeen-year-old in her right mind would deem those acts "cool." Or maybe it was just the seventeen-year-olds I knew who thought it was ludicrous.

Maybe we were out of synch with popular thought: part of the "old guard" who could concentrate and think—and were, therefore, unimportant to the editors. Of course, Seventeen was never a journal for budding female intellectuals, but we smart girls liked to look pretty, too. Pardon us for wanting a little credibility between clothing ads. According to Karen Heller, a columnist for the Philadelphia Inquirer, editors for women's magazines don't give their readers much credit. Just "another 5,000 word opus about the living hell of acne" instead of weightier matters. So, when the meat (what little there was to begin with) became scarce enough to please a PETA member, my suspicious attitude gave way to a cynical one; the publication that I once thought was really neat really wasn't. I wanted them to speak honestly and directly to their readers. Sure, they were forthright when it came to the "Sex and Your Body" column—you'd hope they would be, for the sake of those who saw it as a "how-to" manual—but I wanted them to have the guts to discuss current issues, too.

They didn't. The copy in the magazine became cloying, fawning. Models were written about as if they were individuals who had accomplished something of importance, like winning the Pulitzer. And when a publication that is written and read predominantly by whites used the word "def," my "wince meter" went off the charts. "Sound like yourself," Kurt Vonnegut tells writers. Seventeen's editors, in their Fifth Avenue offices far above and away from the boroughs where that diction rings true, should have heeded such advice.

What also provoked my cynical bent was the "His Side" column. Perpetually confounding adolescent male behavior explained at last? Well, sort of. I did

F O R U M

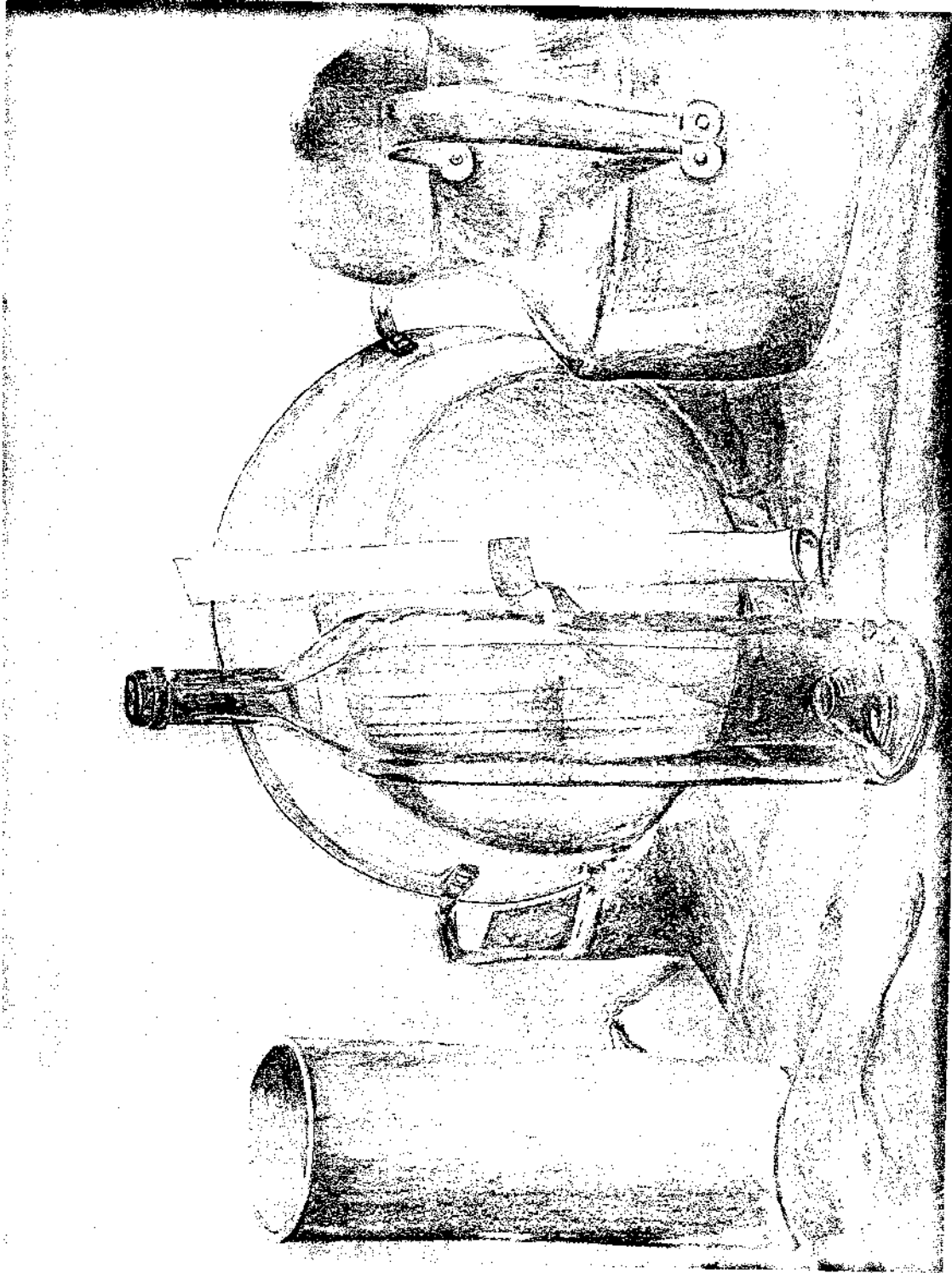
not think I was getting the whole dish because the author and the friends he used in cutesy anecdotes-as-illustrations seemed to be too sensitive—the type of guys who would date the valedictorian and spend hours reading Thoreau in caves. Of course, those things only happen in movies like *Say Anything* and *Dead Poets Society*.

Though I bought the magazine, I never "bought into" it. And I never bought into the circus of conformity that surrounded American adolescence, the very thing I eagerly awaited. I was not on the "Four Proms in Four Years" plan. I wore long, dark skirts when Seventeen cried "Short! Bright!", and my friends were "artsy fartsy" types, the "play geeks." High school to me meant a widening of educational, not social, vistas; otherwise, I would have made Herculean efforts to date a quarterback.

But I felt that reading Seventeen was something that had to be done to complete the teenage experience, a self-imposed assignment. I figured that I should keep an eye on what those around me were doing and wanted to know what everyone else found interesting even though my interests lay elsewhere. I was largely tickled by the fringe but sometimes found myself wading in the mainstream. I was back to observing adolescence, or rather, what society thought it entailed, like I had been in those anticipatory years, when Seventeen seemed true to life. I did my own thing while watching others play out scenes I'd thought I'd be starring in, and if someone had handed me a pen and said, "Take notes," I would have jumped at the chance. Seventeen took notes so I wouldn't have to.

Doing my own thing happily, however, was an acquired behavior. At first, I did not think "watching from the wings" was the greatest place to be, but it does wonders for a square peg's sanity when it realizes that the round holes must be ignored—if not regarded with a critical eye.

Now the five complete years, with not a month missing, sit in my basement, chronicling five years' worth of pop culture, from acid washed to acid rain. All that glossy perfection and my relative lack thereof might have damaged my tender female psyche—or so I think when I let the feminist inside me have a roar or two. But I grew happy to be a little "rough around the edges." Ultimately, I did not and do not see Seventeen for what it's supposed to be: an "American Ingenue's Guide to Life." Instead, it's a darn good deal—a hundred pages of sociology for just \$1.95 a month.



"Just Say No!"

National "War on Drugs" Campaign Slogan

NO VIRGINIA, THERE ISN'T A SANTA CIAUS:

The Dangers of Feeling You Must Say No

by Jonathan Ogas

"Drugs will make you wise. Drugs will open your eyes."

At least, that's what Gary said. Gary did a lot of drugs. Some might say he did too many drugs. Sometimes Gary thought he was a cartoon character and would hold his arms over his head to form a circle, believing that he could only be heard if he created a cartoon balloon for his words to appear in. I was fourteen when I met Gary. My friend and I were riding to 7-11 on brand new Huffdy dirtbikes. When we pulled up behind the store we saw a dirty, grimy animal, perhaps a dog, sitting on some cardboard next to the dumpster.

"Come here," said the animal.

Realizing the ragged creature was a person, we got off our bikes, but still kept a good distance away from the man. We had been told not to talk to strangers.

"I'm Gary," wheezed the man, pulling out a small roll of white paper which looked a bit like a misshapen cigarette. That's when Gary imparted his insight to me, almost in a whisper, as if he were the divine carrier of some secret knowledge: "Drugs will make you wise. Drugs will open your eyes."

He babbled to us for quite a while. His hoarse voice was captivating, but it eventually began to scare me. By age fourteen, the drug education classes of the public school system had pounded into my head the various horrors of drug use. People who did drugs were insane, they had no jobs, no life, they stole, they raped, they sat behind 7-11's and tried to get innocent children high. Television, newspapers, and parents had all inculcated within me a distinct fear of drugs. The mere notion of acid, pot, or cocaine carried with it a connotation of insidious evil, like a serpent hissing in an apple tree. Throughout my childhood and adolescence, when offered an illicit substance, I would refuse without hesitation. Upon discovering that a person of some acquaintance engaged in the perfidious act of getting stoned, any previous notions of his or her integrity as a human being would crumble. In ninth grade, I switched seats in math class after overhearing the girl next to me tell her friend she had just bought a bag of pot. My mind would go back to those many pamphlets we were given in elementary school—the one showing a man on speed with his eyes popping out of his head; the one talking about a boy on acid thinking he was Superman and jumping out of his window to his death; the one saying that people who smoked pot become impotent. The photos of babies looking like Caesar Salad, born from the wombs of potheads. And my one drawing—an assignment we were given in 6th grade—portraying the effects of drugs: a picture of a man who snorts

F O R U M

cocaine turning into a buffalo. Unfamiliar with biology, I didn't realize this transformation was highly improbable.

Falling back on what I had been taught at school, I left Gary to his private wisdom, and bought a Slurpee.

Many years later, after continuing to walk the straight and narrow in high school, I went to college at MIT in Boston. Everything was unfamiliar and wonderful, every experience fresh and potent. At MIT, rush occurs during the first week of school, where all first-year students are wined and dined by the various Greek houses. Intoxicated by the clever promises and smiling faces of the brothers of ZBT, I joined a fraternity. The frat was relatively large, and we had a huge house in the posh neighborhood of Brookline.

I quickly learned that at MIT nearly one half of the student population did drugs. Most of my fraternity did. Early in the first semester, I was hanging out in an apartment with three Brothers—Ted, Doug, and Joe. They were my best friends my first year at college. Even though it was a school night, we had all finished our homework. Ted and Joe were both straight-A students at MIT and were both among the smartest people I had ever met, Ted being a math wizard, Joe acing nuclear physics. Even more impressive at the time, Ted had at least a dozen girlfriends. And Joe earned twenty dollars an hour as a consultant, which to me seemed like a fortune. So, when the conversation turned to drugs and then turned to nitrous oxide (laughing gas) and then slid into a decision to go buy a tank of nitrous oxide, my usual barriers buckled under the weight of my new friends — smart, impressive, and motivated. I decided to go along.

The four of us drove for about half an hour down Route 80 to the New England Fountain Supply Center. This is a great place to get cheap nitrous with little hassle. The small woman with the long hair will ask you what you want. Just say, "A tank of nitrous to go," lay down a sixty dollar deposit for the tank, and you're ready to roll. On the first visit to New England Fountain, though, I didn't go inside. Still nervous, I got a Coke from the cafeteria next door. When I returned, Doug loaded the 5-foot steel cylinder into the back of his car. Afterwards, we drove to Rite Aid, where we purchased a pack of balloons, whose purpose was unclear to me at the time.

The conversation during the return trip had very little to do with the activities we were about to engage in: Ted talked about his research grant, Joe talked about his trip to New York to visit his girlfriend, Doug talked about the environmentalist organization he was setting up. After we parked the car near Ted and Joe's apartment, Doug covered the tank with his jacket, and furtively went into their apartment through the back door. They set up the tank in the middle of Ted and Joe's bedroom, next to the couch. The tank was light blue, with a golden nozzle and flow control knob on top. It also had a bright red diamond-

NO VIRGINIA, THERE ISN'T A SANTA CLAUS:

shaped sticker on it saying, "WARNING: DO NOT MISUSE. CONTENTS MAY BE FATAL." Suddenly, the cold black fear from my upbringing welled up. Commercials of frying eggs began to block my vision. Reading the label had provoked a flashback to the countless horrors of drug abuse. Unaware of my apprehension, Ted laughed, took a red balloon, put it to the nozzle, turned the knob, and, with a shrill WHOOOOSSSHHH!, filled the balloon with nitrous oxide. With a grin, Ted put the balloon to his lips, inhaled, then said in a voice reminiscent of James Earl Jones (nitrous, the opposite of helium, making your voice much, much deeper), "Here you go," handing the balloon to Doug. Doug inhaled, then handed the balloon to Joe. Joe inhaled, then handed the balloon to me. By this time, the balloon was empty. Ted, now leaning back against the couch with a rather vacuous smile on his face, motioned for me to fill the balloon up with more nitrous.

I put the balloon on the nozzle, turned the knob, and a blast of nitrous shot through the nozzle, sending the balloon flying across the room. "Not so much," croaked Ted. I selected another balloon and tried again. Success. I turned the knob slowly, causing the balloon, green, to expand until it looked like a ripe melon. I held it between my fingers, attempting to push all of the vivid horror stories about drugs out of my head. Joe nodded at me. I closed my eyes, put the balloon to my lips, and breathed in.

I looked around. Nothing. No demons, no perverse desires, no sudden changes in convictions about my ability to fly. Nothing. Not even pleasure, which my friends obviously seemed to be feeling, as they rolled about on the couch and bed, eyes wide and staring.

Ted, now back from his rush (nitrous "hits" only last about a minute), asked me how I felt.

"Nothing. What am I supposed to feel?"

Ted looked at Doug. Doug continued to look at the ceiling. "Try it again," urged Ted.

I took another breath of nitrous. Nothing. "Hey, Ted, I don't understand..."

The next thing I remember is lying on my back on the floor, with Ted, Joe, and Doug bending over me cautiously, looking concerned. I also remember an incredible wave of pleasure flowing through me, pulsating and rippling. Everything moved in slow-motion. Up to that point, I had never experienced such sheer physical pleasure. Every cell of my body seemed to be surrounded by warm, pulsing fluid. I was floating. And then it faded away, like a ship departing with one's beloved on board.

"Wow," I stuttered.

"You okay?" asked Doug.

"Wow," I stuttered.

F O R U M

They laughed, and filled up another balloon.

The incident left me confused, and as I continued to use drugs over the ensuing months, I became even more bewildered. Here I was, using drugs, and enjoying myself. I kept an A average that semester at MIT, produced my own radio show on a non-commercial station, and even had the time to fence intramurally and work as a tutor — all despite my society-condemned use of drugs. I spent the semester waiting for the other shoe to drop: when would all the terrible things happen? When would I want to drop out of society? When would I start shoplifting to support my habit (which came out to about two dollars a week)? When would my life crumble?

I began to wonder if perhaps all of the anti-drug propaganda I had heard may have been overstated. But how could the government be wrong? The schools? How could my parents have been wrong? A fundamental tenet of my socially inherited belief system—"just say no to drugs"—had been challenged. I pondered: could I be a dupe?

As a highly impressionable child, like all children, I had been soaking up everything my environment had instructed me to believe. In third grade, I knew there were fifty states, I could spell the word "discern," and I knew that Rome was the capitol of Italy. I also believed in the tooth fairy, the Easter Bunny, and, of course, Santa Claus. Who else would leave quarters under my pillow when I lost a tooth? Who else would hide the eggs in my backyard? And who could possibly deliver toys to me and all of my friends, all during the course of a single night? I was surprised one day when an older boy of ten laughed at me, telling me there was no Santa Claus, and that it was my devious parents who would sneak downstairs to plant the gifts I naively thought had been delivered directly from the North Pole. As I contemplated my drug use, I realized that I felt the same way I had when the ten-year old told me the truth about Santa — gullible, and confused.

I had never questioned the reality of the Easter Bunny, any more than I had questioned the reality of drug use. It was as if I had come down from a nitrous hit and saw the world in its true colors. How many other mistaken ideas might I have picked up as a preschooler, as a middle school student, as an adolescent? I recalled an eighth grade teacher who told us that boys were much better in math and science than girls while girls were much better in English than boys, and had pushed me to excel in algebra, while encouraging my friend Susan to write stories. By the time I was a high school senior, however, I had begun to doubt this, since I had won countless essay writing contests, though I was far outmatched in Calculus by a math wizard named Emily Seals. It seemed to me that boys and girls could both be talented in any subject—contrary to the opinions of my eighth grade teacher. But what if I had been influenced by more

NO VIRGINIA, THERE ISN'T A SANTA CLAUS:

subtle social views?

Our society is engulfed in a media cocoon. Children and adults alike are continuously bombarded with images and suggestions, usually attempting to nudge us into purchasing a particular product or service or subscribe to a specific viewpoint. As I reflected on my childhood impressions of Santa, gender roles, and drug use, I gaspingly realized the volume of socialization I had been exposed to. "Coke is It," "Milk does the body good," "Don't talk to strangers," "Jogging is healthy," "The Japanese are dangerous," and on and on and on. Most of these views I had unquestioningly accepted, the same way I had innocently believed that St. Nicholas rewarded me annually for my good behavior. How had society come to this?

During the middle ages, the Catholic Church dominated Europe, and dogma promulgated by the Vatican was espoused by nearly all of civilized Europe as divine law, not to be questioned. The Church declared that the sun revolved around the earth, that papal indulgences were necessary to gain entrance to heaven, that all able-bodied men should journey to the far-off Middle East to battle against the hordes of foreigners who occupied the Holy Lands. And, seven hundred years ago, almost all Europeans unquestioningly accepted these statements, believing the earth was the center of the Universe, paying and bribing church officials to ensure an eternal life in Paradise, and marching off to Jerusalem to die in the Crusades.

Who are we to believe, then, if there is even an historical precedent for the dissemination of misinformation from authorities? How can we question institutions the size of the school system, the entertainment industry, the United States Government? Centuries ago, many courageous and free-thinking men independently stood up and challenged the authority and opinions of the Catholic Church. Copernicus announced his discovery that the Earth, in fact, revolved around the sun. Galileo agreed, and pushed further, peering into the far reaches of our solar system. Both were persecuted by the church, made to publicly recant their beliefs, and harassed for all of their careers. Many others who attempted to seek out the truth for themselves weren't as lucky—tens of thousands died in the Inquisition, and other great thinkers were humiliated and banished. Thomas of Aquinas, Meister Eckhart, Descartes, Galileo, Copernicus...the Catholic Church does not exactly have an impressive track record when it comes to persecution.

Is today much different? Are we encouraged to question viewpoints expressed by authorities and institutions? Or, like the Middle Ages, are we somehow coerced into acceptance, either overtly, through the threat of retaliation, or quietly, through a lack of dissenting opinions or an implied threat of social ostracism? As a newly inspired student at MIT, I attempted to find out.

Certainly there were some social influences which were easy to question and reject. Junk mail, announcing lavish prizes I had won, offering easy-credit cards, detailing get-rich-quick schemes— these were easy to reject, since I could just throw them in the trash. Commercials, too, could be turned off, made fun of. But when it came to more ingrained social attitudes, questioning without fear of ridicule or ostracism became problematic.

"Niggers are just lazy and don't want to work. They stay on welfare as long as they can and just have babies," a classmate informed me. I tried to discuss the ramifications of what he was saying, how he might have been influenced by his upbringing. "Aren't you worried about taxes? We are the ones footing the bill while the niggers just loaf around," he responded, and then walked away. I was surprised — a bright young MIT engineer, unwilling to examine the source of his own opinions.

"God, I hate people who smoke. It really makes me sick," my Harvard friend Terri told me one evening. Still eager to discover how society responded to attempts to question its tenets, I suggested that perhaps a decision to smoke was a personal choice, like choosing to be a salesman or a business executive — two careers which are at a high risk for heart attacks. "It's not the same thing. Smoking is bad for you. And it smells bad," she retorted. "I can't believe you're defending smoking." Actually, I don't even smoke, and I was again surprised by what seemed to be a myopic perspective from an Ivy League undergraduate.

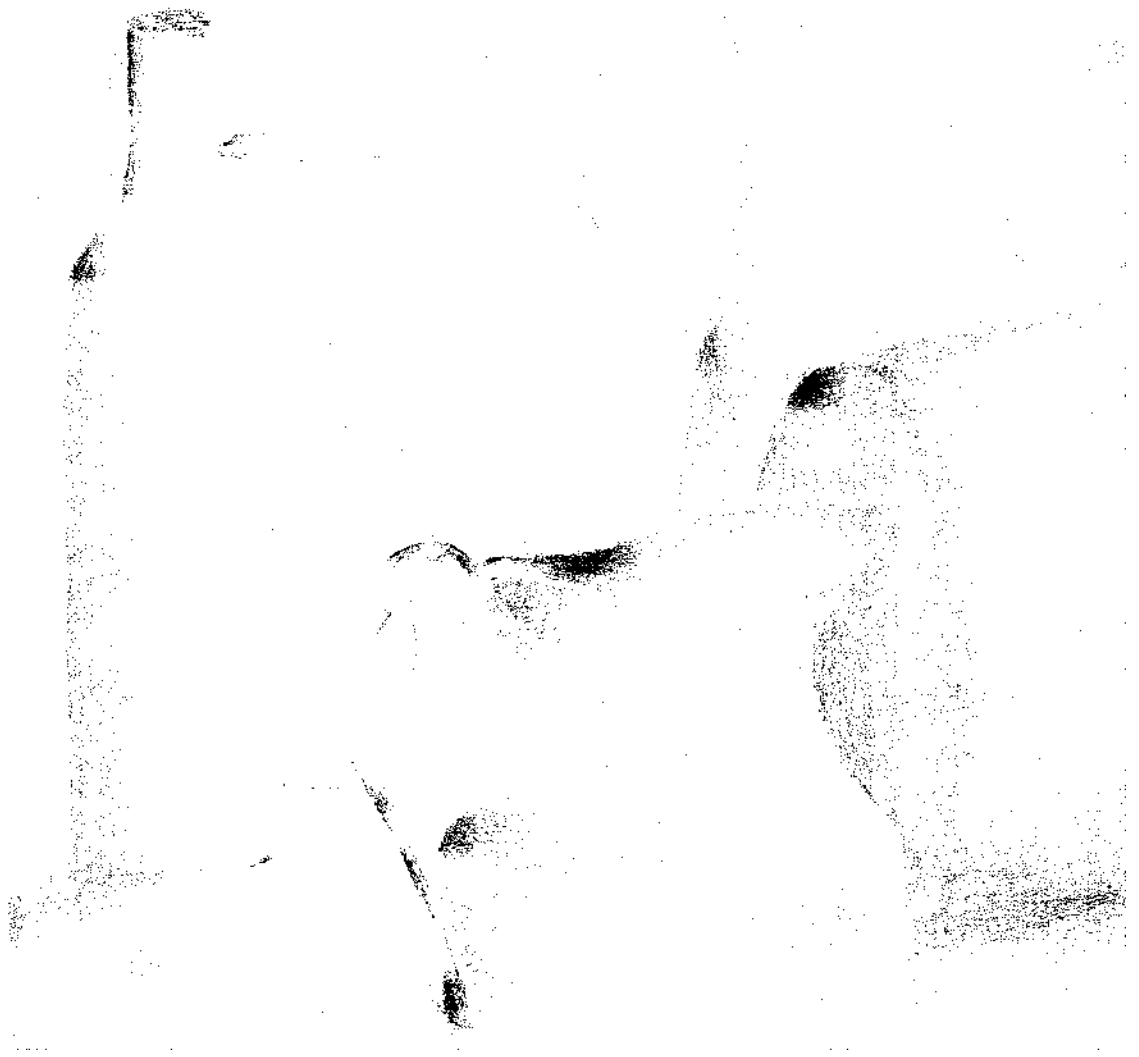
Time and time again, I was stifled, unable to persuade others to challenge the beliefs that society may have imposed on them or even make them contemplate the thought that they may have been influenced by socially imposed dogma. Perhaps we are unable to throw off the shackles forged in our childhood. Though disheartening, I felt that I had reached a conclusion on the questioning of authority—that it is up to the individual to discover the truth about an issue for him or herself. Galileo stood alone as he gazed through his telescope at Jupiter, and bravely stuck to his individualistic beliefs and personal discoveries even in the face of overwhelming social criticism. We can only hope to be the boy who is bold enough to point out the emperor's lack of clothing.

I ponder the issues for myself, now. For example, when the Iraqis invaded Kuwait, the American government's decision reminded me of the Pope's decision almost a millennium earlier — send all able-bodied men to the Middle East to battle hordes of foreigners to recover a critical land. Unfortunately, I wasn't able to come to a definite conclusion, for lack of evidence. The only information we got on the war was from two sources: the government and CNN, two huge authoritarian institutions. Perhaps atrocities were being committed in Kuwait City. Perhaps oil companies were the primary influence in Bush's decision to send over troops. But I was hesitant to join the almost unanimous sweep

NO VIRGINIA, THERE ISN'T A SANTA CLAUS:

of support for the Gulf War. With drugs, I knew what society said about their use and abuse, but I had never found out for myself. With the Iraqi War, though, the government seemed to supply us with ample reasons why we should be involved, I wasn't in the Middle East. I don't know what was happening, and don't have nearly enough knowledge to make a case either way. But I still felt more comfortable in my abstinence from a position than in jumping on the cultural band-wagon. I refrain from attempting to convince others to feel the way I do: I keep my opinions to myself, and gently nod when others promulgate convictions which I have reason to doubt. I may not change society for the better through activism, but, perhaps if everyone began to analyze their influences, we could all see the stars more clearly.

As to my friends who were with me the first time I did nitrous, Doug is now a teacher in Chicago. He is a computer consultant at night. Joe is in a PhD program at Princeton. And Ted...well. Ted's not doing anything right now. This summer, while on drugs, Ted climbed to the top of a twelve story building at MIT, and jumped.



*"Music lasts by itself and cares not who composed it;
nor can music recall the thousand anonymous
fingers and mouths who tamper with it, beautifully
or badly."*

Ned Rorem

Busking

by William Desmond

The plan occurred to me at the start of my vacation in Cork, Ireland. It had been an ambition of long standing, and I felt that by now I had an extensive enough repertoire. After all, to what good had been my seven years of training? What rewards had I for my two hours of daily practice? Where was my just dessert for having braved every week the Transylvanian temper of my teacher, a Romanian Paganini with a madness for perfection? Here at last was my chance to shine. All summer long I deliberated: to busk or not to busk?

In Ireland, busking—playing the fiddle on a street corner and setting out a cap for money—is an old art with a venerable history. Centuries ago, the bards of Ireland were employed in the courts of princes and kings to play music at feasts, weddings, funerals or any occasion of importance. To the accompaniment of a harp, bards would sing of great heroes and their deeds, much as perhaps Homer and the ancient Greek poets sang with their lyres of Achilles and Odysseus. The bards provided one of the only forms of entertainment and were accorded one of the highest places in Irish society. In 1602, however, this relationship was destroyed when the British at the Battle of Kinsale defeated an Irish army, breaking the power of the old Gaelic aristocracy and forcing it to flee for the continent, an exodus subsequently named "The Flight of the Earls."

The bards remained in Ireland, but they too were stripped of their positions. Without their patrons, they wandered across the country, destitute and homeless, playing wherever they could for food or money. From these wanderers the tradition of busking has developed. Now city streets provide a ready platform for buskers of every sort imaginable: traditional players, classical musicians, jazz players, one man bands, young kids singing for a few "bob."

But I, always the noble soul, had no capitalistic designs—or at least they were secondary! It was the glamour and romance of busking that fascinated me. I was particularly enthralled by a pair of old buskers who were a familiar sight around Cork. Everywhere around the city they could be seen, at football matches, at horseraces, on street corners, one sawing at his fiddle, the other twanging a banjo. They were silent and strange men, with the appearance of Irish peasants who had just come out of the bog or down from the mountain, rough-shaven, dishevelled, weather-worn. Their appearance and clothing never changed. Wherever they appeared, they would stand like statues, bolt-upright with fiddle and banjo, staring into the distance. Only their fingers seemed to have life as they played the songs written generations earlier. Of all the times I saw this pair, I never heard them speak, move, or do anything other than play. Perhaps that was all these two bent old men could do—play some hackneyed old folk tunes, and not very well at that. Yet they remained for me a source of fascination, even

mystery, as the guardians of a long tradition of music and busking in Ireland.

But along with the romance, busking carried harder, more terrifying visions. I dreaded the noisy streets, where all my practice and classical training might come to nothing, where people might laugh, hurl rotten tomatoes, and all the "arrows of outrageous fortune." Risk, ridicule, and failure just to busk? The thought made me pause. Yet the lure of joining the ranks of those two old men, of becoming a busker and a bard remained, and so I dithered.

As the summer slipped by, however, I mustered my courage. The slow deliberation of my decision was akin to Irish swimmers on a beach on a summer day: some dip their toes in the cold sea, wade gingerly through the waves until up to their waists, and gradually sink down with a grimace; others tear down the beach and fling themselves belly-first into the ocean, knowing that he who hesitates will never swim.

I did both—deliberated, and took the plunge! Sallying forth one sunny morning, violin in hand, I claimed a spot of turf on Paul Street, a popular busking site. Once there, however, it must have taken a full five minutes to actually begin, I was so nervous. My fingers shook, my bow trembled, and my heart began to beat uncontrollably in my chest. Yet I was a fool to be nervous or embarrassed. No one else seemed to mind, even to notice. The crowd streamed by with only a few casual glances. Some children stared as they passed, perhaps as fascinated with me as I with the old buskers, but they too kept moving.

My opener was "The Banks of My Own Lovely Lee," a local ballad designed to loosen the heartstrings of all Cork people—and their purse strings! People walking by, perhaps surprised by my rendition of a ballad more often associated with pub drunks, smiled and showered my hat with change. When no "boos" or rotten tomatoes hounded me away, I began to relax and actually enjoy my Paul Street spot in the sun. The jigs and reels and songs came out easily, and I even threw in some well-known classical pieces, in case the spirit of my purist teacher was hovering! "Eine Kleine Nachtmusik" brought an imaginary crowd to sit in benches nearby, and I dreamed that all Cork had stopped its work to listen and watch.

But there were different eyes watching. As my hat was covered with silver, another vagabond sidled up and began to talk about Bach and Handel. "Could you play a Handel sonata there for me? I haven't heard a Handel sonata in a long time, and I'd love to hear one again!" he said. He kept me in polite chat for a few minutes, telling me how long I must have played, how nice my violin sounded, what nice weather we were having, and so on. This, however, was just sweet talk, or as the Irish call it, *plamas*. Coming to the real business, he became more subdued, and, in a very quiet voice, he asked if I could spare a ten pence. He needn't have worked so hard. That day I felt like Magnificence herself and

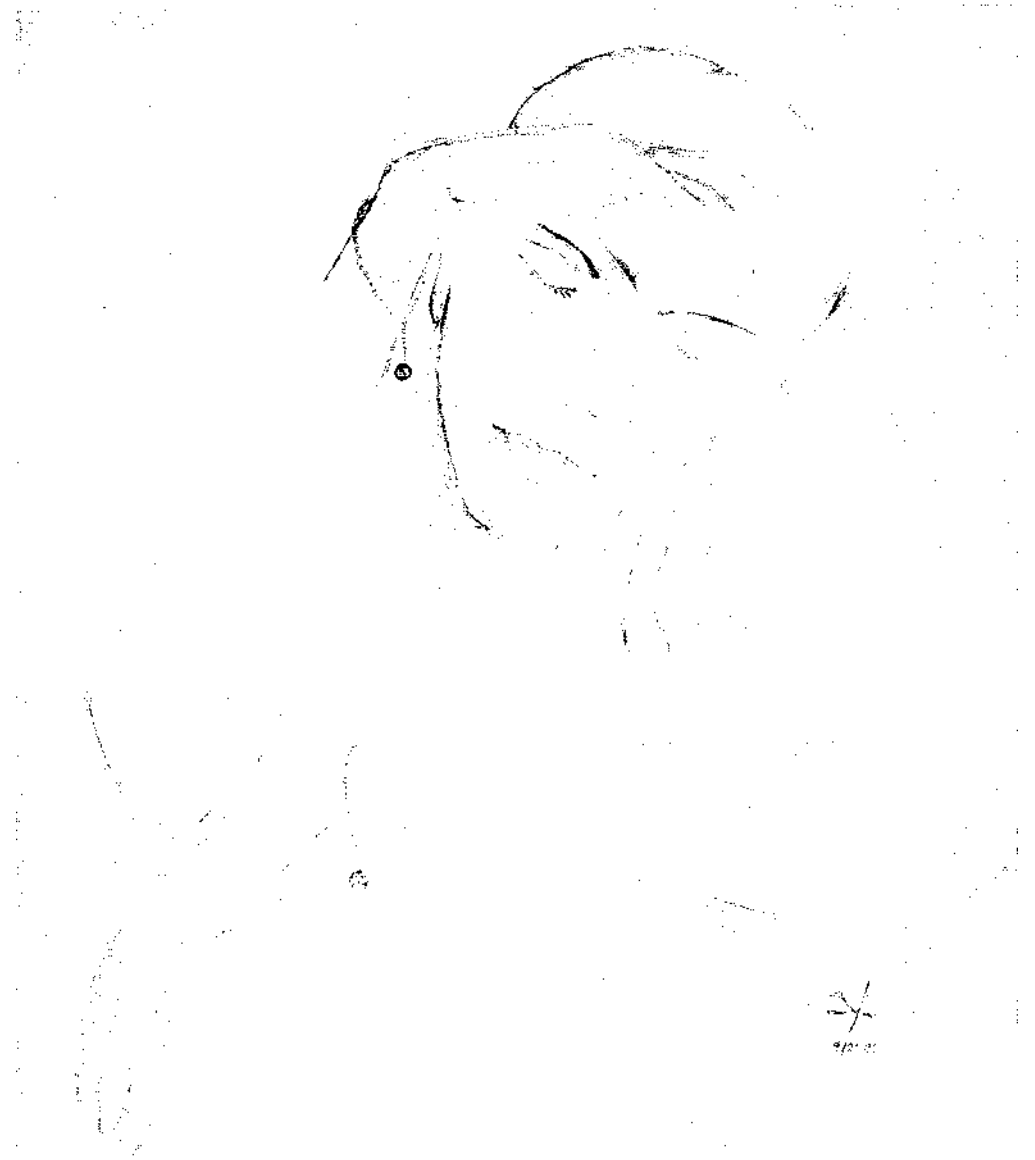
BUSKING

would have given away all the ten pences that others had given to me!

But the next encounter was not so pleasant. As I was waltzing with the "Blue Danube," a rough-shaven man marched up and demanded to know when I was leaving. He had a scratched guitar slung across his shoulder; he was obviously another busker, a competitor who had been eyeing my hat filled with money, and who now wanted my corner on the market! This fellow claimed the need for equal distribution of the means of production. "We all need to share the corners, ya know," he kept repeating loudly. But his rhetoric only raised my hackles, and I informed the comrade that I would not leave for another twelve hours. Before he could get a word in, I set bow to string and played a reel with such speed and fury that the poor man must have thought I was a fiddler in league with the devil. He watched for a few moments in dismay, and then retreated. I had held my ground.

I played on, often repeating the songs, for my repertoire did not match my boast of twelve hours. My fingers wearied and ached. I packed away my violin and poured my money into my pockets, filling both. It seemed the day was done, but even as I turned to go, an old man beckoned me to a bench where he was sitting. It had been a warm, sunny afternoon, and he had stopped to hear the music awhile. Now that it was over, he thanked me, in that gentle way of older Irish people, for the songs and particularly for the "Banks."

He never knew that I lived in America. He probably thought I was a Corkman through and through and would live there all my life as a busker. Sometimes, in moments of nostalgia I dream of Cork. But distance lends enchantment to the view, and I wonder whether such a life would in fact be so charming. I am now a sometime busker, in my own eyes and in the eyes of others. I now belong to a centuries old tradition that has wedded bard with king, beggar with beggar, young boy with old man. Such a belonging is worthy in itself, a love for one's people and their customs. And yet it demands an odd mixture of the familiarity of the native and the distance of the outsider. I am both a busker and not a busker, part of a tradition and an outsider to it. Paul Street has not seen me since my debut years ago. But though I have not gone busking again, I keep with me more than just memories. In a secret spot lies hidden a little sack with all the silver coins I won. I have never wanted to spend the coins, nor even dared unloose the sack.



"So many worlds, so much to do, so little done, such things to be."

Alfred, Lord Tennyson

Modern Computer Technology: Have We Rediscovered Fire or Are We Still in the Dark?

by Lee Gordon

From the advent of fire to the development of modern supercomputers, human rationality has allowed us to create and implement tools which work toward the health and prosperity of our race. The exponential rise in technological development over the last several decades has, however, taken our capabilities far past sheer necessity. Whereas earlier human technology helped us, for example, in harvesting crops more efficiently, our recent surge of innovation has given us abilities far exceeding those of such basic human sustenance. Current computer technology enables us to have satellite television links, telephone answering machines, and word processors. While we certainly don't require these types of things to live and breathe, they are undoubtedly useful. The question is—how much so? That is to say, is all of our technology being put to justifiable use? Are the majority of our innovations being directed toward relatively superfluous ends, as with an answering machine, or are we really making the most of what we have in areas that matter, such as health and education? Are we so busy expanding our technology that we're neglecting to properly implement our new capabilities? Or, most importantly, has our technology simply outgrown us? Through an examination of both the power of our current computers and some of our corresponding implementations of that power, I intend to show that we have yet to grow into our technology's capabilities, and I'll give a few hints as to how I think we can more efficiently harness our technological power in the future.

Some may argue right from the start that our computer technology is still in its infancy, that it's only really beginning to come into development, and that we should wait to see how it all pans out before making any judgments as to our effective use of it. This is an important point to address, because I think too few people actually realize what astounding power we already have. Take the computer I'm sitting at right now, for instance. It has a twenty megabyte hard drive. For those who don't know, a hard drive is simply an internal storage device like a common floppy disk, only capable of holding much more data. This one holds twenty meg—but twenty meg doesn't mean much to you, you say? Well, put it this way: for every letter I'm typing, one byte of memory is taken up. One megabyte is equal to a million bytes, or letters, so I have the capacity to hold twenty million letters on this drive—that's quite a few term papers. And that's just the power of one particular method of storage on one computer; one which, incidentally, has since been out-moded by newer models which generally come with at least a forty megabyte drive. The CD-ROM is

F O R U M

another type of storage which uses the common audio CD medium to record computer-readable information. Each CD holds approximately 600 megabytes—and that's quite a few more term papers. In fact, a single CD can hold a set of encyclopedia's worth of information, and then some.

Aside from the vast amounts of storage our computers are capable of, the machines themselves perform with amazing power. The microchips at the heart of all computers are capable of transmitting signals internally at speeds in the millionths of seconds. Again, this may not mean anything to some, but a simple demonstration can aid in understanding these figures. Imagine the wire in a wall going from a lightswitch to a ceiling lamp. Turn on the lightswitch and the light goes on, with virtually unnoticeable delay. Now imagine the electricity flowing through a section of that wire about a foot long as the lightswitch was turned on; quicker than the fastest blink, almost inconceivably fast, the electricity passes through it. The electricity took approximately one millionth of a second to do this. And now, we're moving toward having billionth-of-a-second microchips—to picture that, cut that wire down to about an inch.

The power in speed and capacity is but a small, almost trivial, part of what our technology is capable of, but I think it serves the point. Many people have a sort of vague idea of "computer" in their minds, knowing that it can spell-check their history papers or aid in balancing their checkbooks, but don't really have any notion of the true power behind these machines. The related technologies, such as the CD-ROM, are too numerous to mention, but suffice it to say that if the speed and capacity I've described are merely the most basic of modern computer abilities, then the power of computers, when taken to the max, is truly astounding.

In addition, the capability I've mentioned is only that of the hardware, the raw, physical components of the machines, which, taken by itself, leaves us with just that: raw machines. Hardware is only half the picture, just the backdrop of power on which implementation is imposed. The common fork is a very powerful instrument; you can stab someone with it, open a letter with it, scratch your initials into a tree with it, or simply eat with it, but you must do something with it for it to be of any value. So it is with a computer; it has no value unless we use it.

Of course, what differs in this analogy is the fact that the fork is not an advanced, expandable technology; it's simply a fork. It's intended primarily for eating, and thus, so long as you eat with it, you are using it to an acceptable potential. To throw the fork out would be a waste, and to use it for something more than just eating would be unnecessary, but neither would draw complaints (well, with the exception of stabbing someone). A computer, however, represents a large investment, in more than one way. Computers are a large in-

MODERN COMPUTER TECHNOLOGY:

dustry, computer technology has been hailed as the new business, an educational and recreational frontier, and, on a more local level, for owners of personal computers, they represent a significant monetary investment. For these reasons, unlike the fork, to waste our computer technology would be unacceptable; it would be wrong not to use them for just such potential. Well, the hardware's been delivered, the raw power is there, the potential exists, but the question is, are we truly using it? The best way to answer this question is to examine some of the ways in which we are implementing, and planning to implement, our computer technology.

Educational uses are one of the largest areas of computer implementation, and certainly one of the most important, as our educational system can use all the help it can get. With all of the possibilities computers offer us, then, it would seem that we'd be working perhaps hardest of all at making full use of the computer's potential in the classroom. Michael Swaine's article from the October issue of MacUser magazine, however, details some recent educational uses for computers that would seem to show the contrary. In it he discussed, among other things, the use of a sophisticated math-simulation program called "Mathematica" to help give students "hands on" experience with mathematical concepts. Specifically, the program is being used to help demonstrate fundamentals such as multiplication to second-graders. While this is certainly a well-intentioned endeavor, there are a few problems with this so-called "radical" new approach. Mainly, Mathematica is a high-end math program intended for scientists, engineers, and college students in math-intensive fields of study. Also, this is a program which, in the low-end of the two versions available, retails for \$519. To understand why these facts pose a problem, let's consider the main issues behind setting up an integrated educational computer system.

The main ideas involved with such a task are effectiveness, affordability, and integration. The system has to get the job done, meaning aid the kids in learning something, in order to be effective. But it also has to be affordable enough to justify the investment made in it. The Mathematica program certainly represents a significant investment, and it has been shown to further the students' understanding of their math curriculum, but is the power justified? Clearly, since the program is intended for engineers and scientists, the vast power it possesses is not being used nearly as efficiently as it could, and its expense is therefore not truly justifiable. Further, since the power of the program is, to a large extent, remaining untapped, it is not as effective as it could be. The only one of the three basic criteria being met in this instance is the integration, but why? Why haven't we designed affordable systems intended for use by second graders, systems with the appropriate price affixed to the appropriate corres-

ponding function? Why? Because we have not yet grown into our technology.

As it stands, it's as if we're pouring a sick child an adult dose of cough medicine, giving him a third of it, and throwing out the rest, wasting both the money we paid for it and the curative powers it could have for someone else. But what are our plans for the future of computer technology? Are we at least attempting to find more realistic and practical solutions to the demands we place on our technology? The concept of "virtual reality," or VR, is big talk in the industry right now, promising us amazing results once it's finished development. Perhaps examining this sample of the industry's future plans will shed some light on these questions.

In Steven Levy's article, "Cyberspaced," from the November, 1991, issue of Macworld magazine, he discussed the imaginary world of computer-generated sensory data known as virtual reality. Although the exact ways and means of the system have not yet been fully completed (or even effectively prototyped), VR would probably be something like putting on a helmet or standing in a special room in which the computer would generate all your sensory data. This means three-dimensional images, along with smells, sounds, and everything you would normally experience, all adding up to an "imaginary universe," an utterly complete simulation of reality. It sounds like a futuristic video game to me, but the proponents of the concept maintain that there would be several practical uses for it. Real estate agents or architects could, for example, give their clients an "imaginary" tour of their property before it is constructed. Or, as Timothy Leary is said to have suggested, we could all go off on non-braindamaging computer-induced LSD trips.

In his article, Levy concluded that, while VR fanatics praise the technology, all their fervor is rather foolish, considering that VR is not expected to be effectively used until at least well into the next century. I agree with Levy; I think that this is no more than an experiment, a dream, and one, at least at this stage of development, not worthy of all the fuss. But I take further issue with VR, because I think it not only says something about our tendency to chase after impractical dreams, but also about our uses and plans for computers in general.

The example of educational implementation showed that we have yet to grow into the power we possess, and the VR phenomena begins to tell us why. After all, how can we concentrate on developing systems appropriate to our current technology when there are so many people raving about a system years, perhaps centuries, away from realization? We're too busy looking toward the future, trying to find the most outrageous ways to expound upon our current abilities, that we're not developing ways to use what we have now. I admit that VR is an interesting concept, with some fascinating possibilities, and I can't disclaim vision or creativity. Who knows, perhaps it sounds outrageous now, but someday

MODERN COMPUTER TECHNOLOGY:

VR will be a way of life. But that's someday, not now, and that's vision toward the future, not the present. Promising as it may or may not be, VR, and other such dreams, are taking brilliant minds in programming and putting them someplace distant, years away, when we need them now.

It's a lost cause, however. It is very possible, albeit very rare, to efficiently and effectively use the technologies we have. Two such examples of such implementation were reviewed in the December issue of MacUser magazine. Two interactive videodisk packages, one on AIDS and one on American history, were given rave reviews for their effective use of this medium.

The idea of "interactive videodisks" may seem a little technically weighty, but it's simply a program that operates on a combination of a normal computer and monitor and a videodisk player hooked up to a television. Taking the AIDS package as an example, this set-up allows the user to, say, read some information on the computer screen about the trauma that AIDS victims undergo, and then, with the click of the mouse, watch a clip of an interview with an AIDS victim from the videodisk.

Because of the amount of small video clips a videodisk can hold (they can hold approximately six hours of video material, which, in terms of thirty-second to one minute clips, is quite a lot), and the "naturalness" of watching live-action video, this combined medium is capable of a diverse range of educational and reference applications, and it is very effective and practical. Moreover, this system represents a success; it's successful in terms of price-for-power, as it uses the power of both the computer and videodisk technologies without waste, and, more importantly, it successfully uses them now. No group of developers decided to wait for a new "optical disk" system, or some "holographic" display years away from completion. Instead, they have developed an efficient method of using technology currently available to the max.

The interactive videodisk packages, and the handful of other such effective implementations of our current technology, are rare. They represent the minority, not the majority, of applications we've come up with. With planning, however, I think we can reverse this trend in the future. I've become familiar with a few areas of current computer development, and come up with my plan, which I think, if fully realized, would lead to a much more efficient use of our technology in the future.

First, I think we need to perform what I call "scaling." That is, we must scale down (or up) the computer power allotted as appropriate to its application. This would mean, for instance, that our elementary school wouldn't be given the same type of computers that our high schools are given, nor our high schools given the same systems used in universities. I think common sense dictates that second graders don't need the power of a high-end computer for their types

F O R U M

of activities (learning the basics of multiplication, for instance), in much the same way that they don't need high-end software like "Mathematica." But scaling goes both ways: students in an engineering school will use the vast power that comes in a multi-thousand dollar system, so its expense would be justified. With a lesser system, their software will run more slowly, the systems won't be able to handle as many different applications, and the whole set-up will generally waste time and money. If we can scale our power logically, both downward and upward, the money spent in changing over would balance itself—both in the efficiency gained in purchasing new high-end system and through the savings gained by purchasing cheaper computers when the expensive power isn't needed.

Additionally, I think we should work on developing expandable systems, in terms of both hardware and software. This would mean that a small company would purchase a computer system appropriate to its needs (one made to handle a small, localized client base, for instance, as opposed to a nation-wide client base), and, as the company grows, the system would be fitted with greater power to handle the growing demands placed on it. Expansion could also be applied to educational computer systems. As computers become increasingly more popular in schools, more possible applications will be thought of for them. Therefore, when a school first purchases a new system, they could get one capable of handling only their current demands, but as more areas of education involve computer use, the system could be easily upgraded to take on a greater variety of tasks.

Also, expandable software, particularly for education, should be developed. If Mathematica were made in an expandable format, for example, the second-graders could have a cheaper, scaled-down version, rather than the same version sold to scientists and engineers. Then, if the school later decides to use the program with their sixth-graders' pre-algebra studies, an expansion module could be purchased which would upgrade the program from second- to sixth-grade specific capabilities.

Both scaling and expansion would provide vast savings through more appropriate, and therefore, more efficient, use of our computing power. My final suggestion involves a more general change in the industry. Specifically, I recommend an alliance between the two major computer manufacturers, IBM and Apple. While the companies have talks underway on such an alliance, most computer periodicals in which I have read about it are concerned solely with the welfare of the individual companies should such a junction be achieved; I believe the alliance is more important for the consumers, however, than it is for the corporations.

As any student who has visited a computer lab will know, there are two main

MODERN COMPUTER TECHNOLOGY:

forces in personal computing: the IBM machines, running under the DOS operating system, and the Apple Macintosh computers, running under their own operating system. And, as any student knows who has ever learned how to use an IBM machine but not an Apple, or vice-versa, the two operating principles are completely different and incompatible—until very recently, the two computers could not even accept each other's floppy disks, the most popular and widespread storage medium.

This incompatibility is extremely detrimental to the overall acceptance of computers, for a few reasons.

As someone who has never really had much difficulty in figuring out computers or adjusting to new operating systems, it used to surprise me when I would talk to someone who was "scared" by the machines. I have slowly come to realize, though, that just because computer use comes easily to me doesn't mean everybody can so easily adjust. Further, when people who are unfamiliar with computers attempt to, say, write a term paper on one, only to have the computer accidentally erase their work as a result of a misplaced command, their fear of technology builds on itself. Having two completely incompatible operating systems only serves to increase the "foreign-ness" of computers-. It's hard enough for many people to adjust to one operating system to the point where they're comfortable using it, but it'll be a real slap in the face when they show up for their first day on a new job, or they arrive at the computer lab when all of their type of computers are occupied, and they find themselves sitting at a machine they haven't the foggiest idea how to use.

For this reason, it is imperative that IBM and Apple join forces and create some standard operating system that users of either system can manipulate. I understand that older generations are one step removed from understanding computers, and it may be, as a result, more difficult to make them comfortable with the machines. But if students of today, who have been raised in an age of computer technology, are turned off to computers from the start, then the work force of tomorrow is in some real trouble. Computers are designed to help us, but they can do no good if everyone is fearful of them. If we can unify the two major standards, it would take much less time to become familiar with computers, and we'd help both ourselves and the industry heads.

These few suggestions are only a start, just the beginning of some major changes that will need to be made if we are to fully exploit our computing potential. Whether these specific ideas will ever come to being I can't say, but the important thing is that we recognize that something must be done. It's wrong for us to achieve proper implementations of our technology, such as the interactive videodisk packages, so rarely. It's wrong because our technologies represent a large investment in both personal and large business scales, it's

F O R U M

wrong because the power we've invested in is going to waste, and it's wrong because, in effect, it's hypocritical.

Since the oncoming of modern computer capability in the late 1970's, the industry has been in a collective state of "back patting." There have been books and articles, reports and reviews, of the incredible power and ability of our computers. Everyone's been saying, "Wow, look what we can do with this great stuff we've made," but instead of saying, "Let's find ways to use it," they've said, "Let's find ways to make more great stuff." For all the power we have, and all the self-congratulating we've done, we've hardly even gotten off the ground. As mentioned earlier, the hardware, the software, the raw material is only half the picture. Without effective use, the power of our tools is useless, and our amazement at our accomplishments is without purpose. Fire alone has no virtue—but when cavemen touched it with a stick, they could find their way in the night. If we don't turn our attentions to developing what we already have, if we don't make more effective use of all that is available to us now, we will, as the cavemen surely would have been, be left in the dark.

WORKS CITED

- Landau, Ted. Review of *Health: AIDS and GTV-1. A Geographic Perspective on American History* by ABC News Interactive and National Geographic Society. MacUser, September 1991, 85-89.
- Levy, Steven. "Cyberspaced." Macworld, November 1991, 61-65.
- Swaine, Michael. "The Desktop Blackboard." MacUser, November 1991, 41-43.





"...this land was made for you and me."

Peter, Paul, and Mary

It's Not Easy Being Green

by Tavia A. Kowalchuck

Such a bloodless word. A flat-footed word with a shrunken heart. A word increasingly disengaged from its association with the natural world.

—Joy Williams

Environment. We use the word so much these days it has lost any relevant meaning. We say "environment" as if we were name-dropping; it is cool to be "environmentally aware." We all mention the "Greenhouse Effect" and the disintegration of our ozone layer at the dinner table and speak of rising smog levels and the toxicity of our ground waters while socializing. We claim to be "aware," and appropriately remark, "They should make a law" to remedy the latest environmental crisis. This cultural facade is perfectly captured by Joy Williams in her tirade, "Save the Whales, Screw the Shrimp," in which she brings out all of the pretty, compact terms that the corporate, political, and social sectors of America use to legitimize the pillaging of our planet.

We discuss the effects of this plundering, as good citizens should, among ourselves. We swap the facts we have heard that lend credibility to, or shoot holes through, the reports of the widening gaps in our precious, life-sustaining shield of ozone. If one were to hack through all the jargon flying through the air, he might wonder if we really even know enough about the topic at hand to discuss it and to fret over it.

I was, unfortunately, entangled in such a discussion this torridly hot summer. One of my more skeptical friends and I debated the very existence of the Greenhouse Effect for over an hour, quite ironically while we were driving halfway across the country in a gas-guzzling van with the air conditioning going full blast. While I kept insisting it was a real and present malady, my friend informed me of studies which "proved the Effect was highly overrated, if even 'effecting' at all." Unfortunately, I could not argue his specifics. Because this global warming issue is presently such a "hot" topic, I had thought I knew more hard, cold facts about it than I really did. I had struck an "aware" stance because that was the socially correct one to have, not because I was actually "aware."

This seemingly aware stance is one often assumed by many, yet the number of those who are actually well-informed, I have found, is disproportionately low compared to the amount of media attention our ailing earth receives. "The Environment" has been such a hot media topic, from the "Exxon Valdez disaster" to the washing-up of medical wastes on the East Coast during the summer of 1989, that the Time magazine, in its January 2, 1990, issue, named earth "Planet of the Year" for 1989. Magazines, from GQ to People to Seventeen all now have "Green Pages," which deal with the latest developments, activist

F O R U M

groups and products connected with the environmental issues. Catalogs, though they can barely be considered media, reflect this greening of society by including products made of recycled paper, or of which a portion of the profits go to some activist group, or tee shirts which have silkscreening of baby seals on them. (Of course, these catalogs and magazines are rarely printed on recycled paper, nor are they recyclable.)

All this media coverage had created a public hype about environmental issues. Earth Day 1990, because the media over-publicized it, was an anticlimactic event. Designed to inform the public and arouse grass-roots action for our planet's well-being, Earth Day 1990 sadly turned out to be a commercial event which capitalized on the burgeoning trendiness of being "green." This faddish, shallow success of Earth Day 1990 was underscored by Earth Day 1991. Without the massive advertising hype that Earth Day 1990 had, Earth Day 1991 wasn't nearly as dynamic as its predecessor and barely made the news. This illustrates a basic public apathy that, without the excitement of a trendy event, will do nothing towards addressing some of the basic issues of environmentalism.

"Environmentalism" is an empty word, and it's the latest thing to be "Green." I worry about these trendy things—isn't the accompanying phrase "Here today, gone tomorrow?" If we continue to pursue environmentalism as it seems we presently are, our planet will be going, going, gone, right along with the "Green" trend. We tramp through state parks on our vacations, and then drink from styrofoam coffee cups while driving to work during the week. We watch the nature shows and say, "That's beautiful," then switch back to our favorite sitcom when the show starts talking about how the species will be extinct in three years. Nature is taken for granted, by us, by our government, and by big, corporate America. Environmentalism has become caught in the death sentence of trendiness. If we want to save our planet, we need to reinvest the true meaning into "environmentalism," and make it part of our national culture, part of our everyday habits and consciousness. A large part of America's culture and habits, however, is intricately entwined in the dealings of big business. The health of our economy, unfortunately, is dependent upon the financial success of big business, and placating the Fortune 500 has been on the Administration's agenda for at least the last decade. (Funny, the last decade was the 80's, aptly known as being the decade of decadence brimming with wasteful yuppies.) The 90's became our frowning parents, wagging a finger at the child sick from eating too much candy. The soothsayer media, which had already glued onto the green trend for good headlines, decided the 90's were the time to make up for our sins and to love nature as we should.

Reparations were in order, and the government acknowledged this, if only

IT'S NOT EASY BEING GREEN

nominally, in the Clean Air Act's 1990 amendments. Of course, there are provisions in the CAA's legislation established by the Environmental Protection Agency (EPA) which enable certain companies to postpone updating their plans for up to six years, according to Bradford Mckee in his article "Clean-Air Rules Affect Small Firms." This is justified because, as director of environmental quality at the National Association of Manufacturers, Theresa Pugh said, the CAA limits the "flexibility" of business, thus hindering their ability "to compete," (Tucker 173) The EPA's reluctance to take any definitive, non-exceptional stances reflects President Bush's almost moody attitude towards many environmental issues. Bush still is, as Senator Al Gore (D., TN) said in September, "stonewalling the world," and the nation as well (Stevens, C8). He is dancing around the issue, especially where big business—and thus the most consequential cut backs—is concerned.

Bush's latest scrap tossed to the environmental hounds is a bill that is supposedly trying to "phase out" (one of those political/economic terms) chloroflourocarbons (CFC's), the gases which love to snack on our ozone, by the year 2000. This is a step in the right direction, even though, in William K. Steven's article "Summertime Harm to Shield of Ozone Detected Over U.S.," President Bush makes it sound like he is wearing lead boots. This is a classic example of the prime reason the Administration is dragging its feet on establishing environmentally sound legislature and treaties: It is in perpetual homage to the "Almighty Dollar." Government regulations on carbon dioxide (carbon dioxide is the main contributing gas to the Greenhouse Effect) emissions are purposely being put off for ten or more years because the EPA feels that regulations beyond the new ones on CFC's would be too costly (Stevens A11).

It is this constant eye on the bottom line which started this whole avalanche of global illnesses in the first place. America's need to consume, to buy more, to have more, to use more, and, consequently, to throw more away, is intrinsic to the problems presently facing us. Americans need to be accommodated. We all want two cars (happily spewing carbon dioxide and other wonderful pollutants into our breathing space), a big house with central air (pumping out plenty of CFC's with the cold air), and a newly-developed acre or two to call our own. Big business, the ones who would be most affected by mandatory cuts on carbon dioxide emissions, have such a grasp on the government and on our economy, that the EPA protects beautiful, priceless nature within the quoted guidelines to finding an "acceptable level of harm from a pollutant and then issues rules allowing industry to pollute to that level ... any other approach would place limits on economic growth," (Williams 264).

One is initially shocked by the EPA's guidelines because they demonstrate such a blatant disregard for nature. But wait. Why are we shocked? If you think

about it, we shouldn't be, especially if we look at our history of using natural resources. We killed most of the Indians for their farmland, then sowed it until it was no longer arable, and then laid down a railroad through it, so trains could spew coal smog across the United States. We brought many species of wildlife to the verge of extinction, and almost cut down all our forests. We plowed away whole mountains in pursuit of copper ore. We are constantly dumping sewage into any body of water we find and are allowing developers to nibble and bite at the Everglades. No, the EPA is just forgoing most formality when they state their guidelines. They are confident that none of us would stop "growth," progress, or economic expansion just to save some trees.

Besides, haven't you heard? Part of the U.S.'s plan developed in September at the International Global Warming Conference in Nairobi is to plant a billion trees a year in an attempt to slow the quickly increasing rate of carbon dioxide levels. Question: Why do the trees have to do it when we are the ones clogging up the skies with floating poisons? Granted, we should be planting more trees. But not only because they suck up carbon dioxide. Trees are beautiful. They give us wind in the spring, shade in the summer, vibrant colors to experience in the fall, and icy crystallized branches to gaze at in the winter. Trees are a part of our heritage. We have always had Christmas trees, the Great Redwoods, Johnny Appleseed, and tree houses. Planting a billion trees a year is a fine idea, but that is not all we should do to slow the rate of the increasing levels of carbon dioxide. Now is not the time, President Bush, to be concerned with placating the economy. (Maybe if you cut back on some of your military spending ... but that is another essay.) Put more rigid regulations on carbon dioxide emissions from cars, trucks, and buses. Give tax breaks to people who commute, take public transportation to work to recycle. Put federal requirements on the minimum amount of recycled paper which must be in every newspaper, magazine, and cardboard box produced in and brought into the United States.

Regulations, legislation, and environmental incentives must be constantly added, revised, and expanded. What happens in the year 2000, upon the ideal culmination of the CFC phase out plan? Will the ozone layer suddenly heal up and be whole again? Will our carbon dioxide levels stabilize after we plant three billion, four billion, five billion trees? And if this happens, can we then continue to indulge and consume as we so desire? Can we revert to our old habits? If we do, if we stop planting trees, and don't phase out more harmful gases, we will just be picking at a newly-formed scab. This will make the wound worse than it was before, and leave a more visible, permanent scar than if we truly reform.

However, reform must be more than reluctant regulation.

Certain major corporations have already taken steps which go beyond federal regulations. According to Stevens, "Du Pont Company, the world's largest

IT'S NOT EASY BEING GREEN

manufacturer of CFC's," is accelerating its phase-out plan to end three to five years earlier than required by the federal government. (All). Perhaps, though, the most visible of all company "greenings" is that of McDonald's, the 2 million-pounds per day garbage leviathan of the fast-food market. In a move more symbolic than safe, McDonald's did away with the polystyrene clamshell burger packaging, reported Bill Gifford in "The Greening of the Golden Arches." But there is much debate over how much better for the environment the replacement is, a paper wrapping, McDonald's still made an important change when they also decided to recycle all its corrugated cardboard from behind the counter, which constituted eighty percent of their daily disposal (Gifford 35).

Unfortunately, these two progressive companies are among the minority today, and McDonald's still has a long way to go before they are environmentally safe. Big business continues to base their policies on the bottom line. After all, McDonald's main reason for dropping the clamshell, according to Gifford, was because it was hurting their public image—their consumers were displeased with the styrofoam packaging (36).

If McDonald's can change, for whatever reason, then we should be able to change. But our change cannot be simply in our actions. We must change and deepen our thoughts about conservation, nature, and environmentalism. This means changing our attitudes towards recycling and towards buying products made with CFC's or other by-products which aren't environmentally safe. It means driving our cars a lot less often, and rarely using the air conditioner. No longer can we merely affect an attitude of awareness that "Summertime Harm to Shield of Ozone Detected Over U.S." means much higher rates of skin cancer and crop damages, as Stevens so nicely informed anyone who read his article.

We have a responsibility, then, to ourselves and to our descendants, to maintain a beautiful, safe and inhabitable planet. Nature can no longer be taken for granted. It will not always be there, waiting for us to realize its beauty—it is already disappearing. Williams yells at us when she writes, "Nature has become ... a mere source of materials. You've been editing it for quite some time; now you're in the process of deleting it," (270). We need to respect nature for what it spiritually adds to our existence. Continuing environmental legislation is necessary not only to impede deterioration of our ozone or the warming of our globe—those are negligible factors when you consider that we have a moral obligation to set right what we've overturned. Man has molested the earth for hundreds of years. Our actions pile up, and we are answerable.

Nature and environmentalism go beyond what we see on the front page. It starts in our homes and communities with recycling and commuting and extends, yes, to outer space. We have even managed to pollute our previously pure heavens. 3.5 million useless pieces of satellite and space craft, all less than half

an inch large, plus over twenty-four thousand larger pieces, orbit our earth. Francoise Harrois-Monin is amazed at this negligence in his article, "Celestial Junkyard," and feels something should be done about it. "The outskirts of our planet have become quite a junkyard, and there is a need to clean it up," just as there is a need to clean up the surface of our earth (54).

Man was made to roam the earth. He was intended to live in harmony with nature. Adam and Eve weren't thrown out of Eden until they plucked from the wrong tree and used their resources in an exploiting manner. The American Indians used every part of the animals they hunted and were thankful to earth for sustaining them. They lived off the earth without being a leech and sucking away the earth's—and their—lifeblood. It wasn't until the American pioneer decided to kill the buffalo for their hides alone that the beasts became endangered.

The Indians, although less deliberately, practice the idea of "substantial growth." In business terms, that is "industries and nations, cannot thrive if they sacrifice future quality of life for present economic gain," wrote Art Kleiner in "What Does it Mean to Be Green?" (38). In other words, using up all our trees, wildlife, mineral ores now in order to make more money will leave us with nothing to even live off of later, after we've exhausted every resource. The tiny fishing nation of Iceland has lived by that ideal throughout history. The moratorium placed on Iceland's whaling four years ago is not environmentalism. Iceland has always practiced sustainable growth—they have a yearly quota of whales that can be harvested, and each whale was used by scientists for marine biology research. Iceland realized the value and ephemeral quality that our fragile world has. Americans, on the other hand, cannot see beyond the next quarterly profit report.

Man needs and relies on nature, but he does not need to exploit and abuse it. Nature is there for us to appreciate and survive from, and also to be part of. Jean Giono wrote of this moral, necessary way of living with and among nature in "Le Cypres":

"[Man] had need of the company from those things that are not man.
He who doesn't feel the need, make the sign of the cross and go your
way; that's a fellow who had been put together in the wrong way;
his mother turned him out a miser" (Horton 160).

There seems to be an abundance of misers these days. And in these times of frequent animal extinction, continuing destruction of our rainforests and increasing maladies, the "miser" is the last thing we need an abundance of on our planet.

IT'S NOT EASY BEING GREEN

WORKS CITED

- Gifford, Bill "The Greening of the Golden Arches."
Rolling Stone, August, 1991, 34-36.
- Gribbin, John "An Assault on the Climate Consensus"
New Scientist, December 15, 1990, 26-31.
- Harrois-Monin, Françoise "Celestial Junkyard."
World Press Review, May, 1991, 54.
- Hurton, Tom "The Wind Rules" Bay Country.
Baltimore: Johns Hopkins University Press, 1989.
- Kleiner, Art "What Does It Mean To Be Green?"
Harvard Business Review, July 1991, 38-47.
- McKee, Bradford "Clean Air Rules Affect Small Firms"
Natzen's Business Review, July, 1991, 28.
- "Planet of the Year: What on Earth Are We Doing?"
Time, January 2, 1990, Cover 24-30.
- Stevens, William K. "At Meeting on Global Warming, U.S. Stand Alone"
New York Times, October 23, 1991 (A1, A11).
- Tucker "Green Tape Factory" Forbes, July, 1991, 171-173.
- Williams, Joy "Save the Whales, Screw the Shrimp"
The Best American Essays 1990. Editors: Robert Atwan and Justin Kaplan.
New York: Ticknor and Fields, 1990, 265-275.