

the 1994  
Writing  
Anthology



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# The Writing Anthology: 1994

As a way of recognizing and rewarding academic excellence, the Honors Committee and the Skills Committee take pleasure in publishing this anthology of student writing. Professors from across the curriculum were invited to submit papers of all types which, in their judgment, demonstrated good writing.

Twelve papers were selected for their originality and insight. Two of the twelve finalists received the John Allen Writing Award for overall excellence. Sinikka Wainionpaa was chosen for an essay that illuminates Shelley's *Frankenstein* through the poetry of William Blake. Her essay synthesizes complex ideas through the emotions of the creature *Frankenstein*. Jody Dallas' essay combines the stories of different people in different parts of the world into a single narrative. In doing this Dallas took some risks with writing style and structure and made it work. One of the finalists, Wes Chaplin, received the Maureen Danks Award for writing in the sciences. His essay on chaos theory and nonlinear science explores some of the deepest ideas that have emerged in the natural sciences over the past three decades.

We received approximately 50 papers this year. All were well-conceived and well-written. We had to eliminate some high quality work in order to cover the spectrum of disciplines.

— Julie Noordsy and Paula Peterson, editors  
Walter Cannon, Cathy Haustein, and Keith Yanner, faculty advisors

We extend a special thanks to Randa Van Dyk for her computer guruship in preparing this anthology for publication, and to Melissa Kuhn and Daniela Koger for their artwork.

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# Oh, Wretched Self! "What Am I?"

by Sinikka Wainionpaa

British Literature 1660-1850

Dr. Mary Stark

Assignment: Create a persona from our class readings.

The following is a journal entry. It is a recollection, by Frankenstein's creation, of the fateful climax of his quest for his identity. It is a relapse into the passionate emotions found at the zenith of his existence, which brought about his plummet to the depths of his own personal hell. It is a return to that ill-fated night when he extinguished the spark of life in the beautiful child William Frankenstein. This account of the events, in the creation's own words, intertwines the extremes of the creation's emotions with the powerful words of the poet William Blake in his poem's "The Lamb" and "The Tyger."

I am weary of my travels, weary of passing through each forest by night and sleeping fearfully and fitfully each day. My very joints ache, and each vile sinew and tendon of my inhuman form cries out from the pain of being twisted and contorted to fit in often too small hiding places. But their cries are silenced by the deafening screams of my fallen heart. My only escape is the darkness, which hides my monstrosity from the world and hides myself from my thoughts.

I paused last night, lonely and dejected, momentarily abandoning my search for my accursed creator, in an effort to find peace in the sounds of the night. I had not been there for but a few moments when I saw before me "a beautiful child who came running with all the sportiveness of infancy into the recess I had chosen. Suddenly, as I gazed on him, an idea seized me that this little creature was unprejudiced and had lived too short a time to have imbibed a horror of deformity. If, therefore, I could seize him, and educate him as my companion and friend, I should not be so desolate in this peopled earth" (168). So I called to him, in a vain attempt to woo his innocent mind with curiosity and flattery. "Little Lamb, who made thee? / Dost thou know who made thee?" (This child could not begin to know how oft' I have demanded of myself a similar question with a much darker answer: Oh wretched creature that I am, who "Gave thee life & bid thee feed?") Hence I entreated the child to approach me, yet I avoided his gaze lest he flee in terror. And I began to recount to him my tale.

He listened patiently as I told him of my creator, the one who brought life to my flesh. But traces of alarm and unease moved across his visage as I told him of the one who, upon granting me the gift of life, recoiled from me in "breathless horror and disgust" (58). I recalled with pain my deep consternation at that moment, for I was unaware of my abhorrent appearance. I had demanded, of no one in particular, for there was no one around when my creator fled, "What was I?" (151) As I told the child my tale, my voice rose and fell with the emotions of my heart, building from a low moan to a sound somewhat akin to a beast-like roar, and as I spoke, I became so absorbed in my words and my heart that I began to forget the child was there. I told him of my gradual understanding of

what I appeared to be, yet at the same time, my perpetual ignorance of what I really was. I was indeed "terrified when I viewed myself in a transparent pool! At first I started back, unable to believe that it was indeed I who was reflected in the mirror, and when I became fully convinced that I was in reality the monster that I am, I was filled with the bitterest sensations of despondence and mortification" (131). I did not at that time describe to the innocent child the hideousness of my face and the monstrosity of my total appearance, yet I warned him of my lack of beauty, and I told him of my quest. "My person was hideous and my stature gigantic. What did this mean? Who was I? What was I? Whence did I come?" (151)

The poor child's face contorted into a mixture of fear and enthrallment, and I feared he would flee, so I softened my tone, let my story fall, and soothed his alarm with gentle words. Looking back, I realize that "It was a strong effort of the spirit of good; but it was ineffectual. Destiny was too potent, and her immutable laws had decreed my utter and terrible destruction" (37). "By the stream & o'er the mead;" I asked that precious child if he knew who "Gave [him] clothing of delight, / Softest clothing woolly bright." Yet alas, in my woe, I could not contain my own plight from resurfacing. I muttered "God, in pity, made man beautiful and alluring, after his own image, but my form is a filthy type of yours, more horrid even from the very resemblance" (153) Catching myself in my rage, I went on to ask who "Gave [him] such a tender voice, / Making all the vales rejoice!" Yet even as I asked this question, my mind would not erase the memory of my own first utterances: "Sometimes I wished to express my sensations in my own mode, but the uncouth and inarticulate sounds which broke from me frightened me into silence again" (118). But these thoughts I did not voice to the child. I asked again, "Little Lamb who made thee? Dost thou know who made thee?"

But the poor child came too close to me, whether out of curiosity or accident, I know not. He screamed at my wretchedness, and I seized his arm and his throat in an attempt to sustain and silence him. I demanded with all of the fury that burst forth a more urgent and pressing question. Did that child know who made me? The memory of his words still tears at my heart. "Hideous monster! Let me go. My papa is a Syndic--he is M. Frankenstein" (168). Could it be? I wondered. Could I have been so fortunate as to have found the kin of my accursed creator? And was this beautiful child of distant ties, or would the fates allow him to be the very offspring of my enemy? I seized the hope that this child was his, though I know now that his innocence and purity should have told me that he was not. My words to him were the answer to my own question, and I whispered them in his ear. "Little Lamb, I'll tell thee." Little William, so innocent and fair. I was torn agonizingly with an uncertainty of what to do. This precious child did not deserve my wrath. But Frankenstein... "He is called by thy name, / For he calls himself a Lamb," I said. "He is meek & he is mild," compared to me, M. Frankenstein is nothing; I could destroy him in a moment, that man who dared to set hand and foot in God's realm. I told the child that Frankenstein had played a game he could not win; "He became a little child;" and since he is my creator-father, and I am his creation, "I [am] a child." But if I am a child of the foolish boy Frankenstein, then I am tainted by his arrogance. In and of myself I am rejected by the world; how much more so shall I be rejected by God for my ties to him. But you, sweet William, are his child as well, yet you have done nothing to deserve this hatred. Oh, what does that make you, my precious little one? "I am child & thou a lamb." Yet together, "We are called by his name:" You, for you are his kin, and I, for I am his child, his very

creation.

"Little Lamb God bless thee." You are so naive to all of this, so pure and innocent amid it all, yet you cannot live, for I must punish my creator. No, please don't scream. God will comfort you. Go to Him. I must do this to avenge my existence. Oh, God in heaven, forgive me, I cried out. Please, dear William, don't scream. Goodbye, little lamb. Goodbye, fair William. "Little Lamb God bless thee." "The child still struggled and loaded me with epithets which carried despair to my heart. I grasped his throat to silence him and in a moment he lay dead at my feet" (169). I had torn life from that innocent lamb, thinking to destroy my creator. Yet had I shredded a piece of my own heart and my own will to survive as well? There has never been a sound which brought more anguish to my soul, than the brief silence that followed.

For a mere instant, "my heart swelled with exultation and hellish triumph" (169). But a greater awareness has overcome me. "now crime has degraded me beneath the meanest animal" (269). In that moment, I surrendered all control of my enraged and tormented soul. "I gave vent to my anguish in fearful howlings. I was like a wild beast that had broken the toils, destroying the objects that obstructed, me, and ranging through the wood with a stag-like swiftness" (160). Oh, what truth there was in the child's words! I was indeed a monster at that moment, and it was the endless cycle of questions which rendered me mad with uncertainty. "Tyger! Tyger! burning bright / In the forests of the night," What I had done, even the darkness of night in the woods could not hide. How could I have taken this life, this child's life, this precious little lamb? Not moments before, I had asked "What immortal hand or eye / could frame [my] fearful symmetry?"

Cursed was the day in which life was born in me, and more cursed was the man who brought life into this body! But was I not as cursed as he, for I had put out the light within that child's soul? Oh, wretched self! "In what distant deeps or skies burnt the fire of [mine] eyes?" Was I also cursed with the inclination to seize the fire of life and play out the hand of God in another's existence? What man on earth could have that right? "On what wings dare he aspire? / What the hand dare seize the fire?" I questioned my own actions and my own motives, searching for where to place the blame. When I found no answer there, I turned again to thought of my accursed creator. Even further back, I wondered from whose lifeless body I was formed. "And what shoulder, & what art, / Could twist the sinews of [my] heart?" Who died to grant me arms or legs, brain or heart? "And when [my] heart began to beat, / What dread hand? & what dread feet? What work had he done, how many hours had he slaved away, in an arrogant attempt to create life? What brought about this evil work? "What the hammer? what the chain?" "What the anvil?" Oh creator, what were you thinking to create such a monster? "In what furnace was thy brain?" And as your hand seized the tools you used to construct this monstrosity, did you know "what dread grasp / Dare its deadly terrors clasp?"

Where was my creator at that moment, when above all else I needed to question him? He must be held accountable for his actions, and for his arrogance. I wondered if he was even aware of the disastrous results his impertinence had caused. It was at his request, at his beckoning "When the stars three down their spears" and shed their secrets of creation. And at that moment, life was born in me, a spark of existence, "so negligently bestowed" (112). Thus it came to be on that fearful night, that out of vengeance I extinguished the fire of life in one so young and fair, and the very stars above broke out in sobs "And water'd heaven with their tears." I demanded to know what my creator felt, upon fully grasping the terror

of it all. "Did he smile his work to see?" He whose thoughts are recorded in the small book in my pocket, he whom I know by no other means than that book, and the memory of a horror-stricken face, is he proud of his creation? He vowed he could tame life, create it at will, but did he know that life would destroy him? I marvelled at the irony of it all-to create death from life from death. Could he have known the consequences of his actions? Did he give any thoughts to what might become of those he loved? And at the time, I wondered if I had succeeded in my purpose, if William was indeed his kin. "Did he who made the lamb made [me]?"

I sobbed and howled for many an hour that day, instilling stark terror into the hearts of all who could hear me, and I did so deliberately. I no longer wished to hide from the wretched world, but I longed instead to be found, in order to cast the blame of William's death on my creator, so that all would see his foolish and ignorant pride. All thoughts of poetry and the splendor of knowledge vanished from my mind, for I had become too drunk on the knowledge of life and how tormented and fleeting it could be. "I cannot believe that I am the same creature whose thoughts were once filled with sublime and transcendent visions of the beauty and the majesty of goodness. But it is even so. The fallen angle becomes a malignant devil" (269).

These reflections leave me empty, exhausted, and unfulfilled. I long to follow William, to seek his forgiveness for what I have done, to entreat him to see that I, like him, have been caught in a passionate whirlwind of emotions over which I have no control, and to reach his side and know that we are fashioned of the same soul. It is not time, yet, for me to leave this earth, but I do not belong to it. I am not a man, yet I have been as destructive as every man I have encountered. I am not a child, yet I too have sported with life. I do not wish to be a creation, for I've no stronger desire than to do away with my creator. And I could not bear the thought of being called a monster, for it would remind me of the angelic voice of that precious child. I am not a freak of nature, for there is nothing natural about me. So what am I? Perhaps I am a tiger, the product of uncontrolled rage and dark hours of labor.

"Tyger! Tyger! burning bright  
In the forests of the night,  
What immortal hand or eye  
Dare frame thy fearful symmetry?"



# Belly Dancers and Saloon Games

by Jody Dallas

**Non-Fiction Travel Writing  
Professor Keith Ratzlaff**

Assignment: Write a personal/informal essay based on an experience you've had in another culture.

*"The ever-whirling wheel of change;  
the which all mortal things doth sway."*

-Edmund Spenser

The historic Dayton Station building on the corner of Main and Pike, in "old" Dayton, Nevada, burned to the ground on a winter night in late 1979. Somewhere in the back of my second grade mind I can still smell the smoke as my school bus went past the site the following morning.

\*

I am in Wales. I am on the floor of the sitting room of a 150-year-old stone house on a dairy farm in Newcastle Emlyn. The electric fire is glowing with that orange heat-colour that could burn holes in your wool socks if you get them too close. I am a purist when it comes to fires and I was skeptical of this until it happened once to me. My host, Margaret Evans, is bringing me boxes from the attic with the excitement of a child showing off a stash of toys to a new baby-sitter. From the box tops emerge a cowboy hat with a feather band, belt buckles, baseball caps advertising seed companies and casinos, a turquoise watch band, and boxes and boxes of slides. She also brings out two boards, hinged together, that open up to show a map of the United States. The map is marked with numerous dots and stars all over Nevada and Illinois.

Fifteen years ago, when Margaret was in her early twenties, she spent a year on an educational exchange program organized by 4-H in the U.S., and the Young Farmers Club in Wales. She stayed for two weeks at a time with 4-H farming families in Nevada and Illinois, one of which happened to be the Tennants, family friends of ours. Now in her late thirties, she was getting a chance to pull out all of her treasures and show them to an interested and captive audience; me.

I don't remember Margaret from her visit to Dayton. I only know that as soon as Laura Tennant found out that I would be studying in Wales for a semester she insisted that I look Margaret up. Initially I was shy about doing so, as Laura had not written to, or heard from her in about three years. But after a couple postcards and phone calls I was warmly invited to spend a weekend with her at her family's dairy farm.

The farm is beautiful. It is embraced by the tiny valley of Brongest just outside of Newcastle Emlyn. Stone walled barns that date back 200 years house the newborn calves and an equally large herd of cats. The barns and farmhouse are topped with slate roofs and the eaves are painted a deep red color that somehow adds more permanence to the grey rock. When I arrived, the eighty-eight milking cows were grazing the south pasture, milling with the tranquil pace of all good things Welsh. A

small creek forms the western border of the property at the base of the fern green hills. Stone walls and hedges trace most other pasture and property boundaries.

\*

The Dayton Station was a bar and restaurant, frequented by Marilyn Monroe and Clark Gable during the filming of "The Misfits," which was shot partially in Dayton. I remember seeing a picture of her on the front porch of the building. She was wearing a white halter dress printed with lots of tiny red apples, and she was playing with one of those paddles that has a ball attached with elastic. Long time residents take this bit of history very seriously, and when *People* magazine came to Dayton to do an article on Monroe a few years back ("The Misfits" was her last film), one woman proudly claimed to have cooked tacos for the starlet. Imagine, cooking tacos for Marilyn Monroe.

The same strip of false-fronted buildings can be seen in Clint Eastwood's movie "Honky Tonk Man." That was during a summer when I was about 10, and I was upset because we were going camping and I wouldn't get to be an extra with the rest of my friends. Of course, by this time the Dayton Station had burned, and the movie people constructed a jail front on the lot. Now, that too, is long gone.

Although charges were never filed after the fire, the general consensus among residents was arson. The owners left town in a hurry with their insurance money never to be heard from again. I have a feeling that if they ever come back some redneck would host a proper hanging.

\*

"There was this one afternoon that Laura had a small tea so that I could meet some of her friends," Margaret tells me. "And there was this one gal that I thought was just the greatest. She drove a white jeep, and the top was off. It was brilliant. And she was a belly dancer— Oh, she was great, honestly the only person I met that day that I remember so well. I wanted to drive that jeep more than anything."

I laugh, knowing immediately who she is referring to. I feel obligated to update her as to what her belly dancer is doing now. Sadly, the jeep is gone, and she has settled into a life of domestic things: second marriage (the first one, to the artist, didn't work out), building a house, a "real" career as a florist. Margaret seems disappointed.

I can see why there would be an attraction. Margaret herself is quite a character. She is very blunt and honest with a quick wit. She runs the farm with her "partner" (boyfriend) Andrew, and she does not hesitate to instruct him, or the hired men, how things must be done. I laugh to myself when she shouts instructions to the farmhands in Welsh over the noise of the tractors. They shout back the equivalent of "Yes, ma'am" and don't argue with her.

When Margaret gets out the slides and projector we first go through two boxes of Illinois photos. The scenery and landscape remind me of where I go to school in Iowa. Halfway through the first box I have to stifle my yawns. This is quickly turning into a vacation slide nightmare, and ironically, I am the one on vacation. The third box, Margaret tells me, is labeled "Nevada." "Maybe it'll be a bit more interesting for you," she jokes.

\*

It is strange the places nostalgia can hit you, both emotionally and geographically, like the way a song on the radio can take you from a stretch of interstate in Nebraska to that bar in Colorado before you get to the second verse; which is like the way a certain smell of furniture polish your freshman year of college can send you sobbing into your pillow with homesickness; and all

similar to the way that slides of your Nevada home town fifteen years ago, viewed on a home movie screen in Wales, can send you back to second grade.

\*

When I went to Disneyland when I was 14 I made it a game to try to casually wander into the background of strangers' photos. I wonder now how many family vacations I have been a part of. Would people recognize me if I made the national news? Will anyone ever point me out and say, "Hey, I know her?"

\*

The Nevada slides are great. There are photos of Dayton Valley before the golf course, the subdivisions, the high school, the industries. The elementary school playground is still dirt. The Tennant family is 15 years younger. And there is a picture of my father, the elementary school principal, before his hair turned grey, in the background where Margaret is giving a presentation to a group of sixth graders.

"Things are so different now," I tell her. "The town has grown so much. Do you remember the little road that went over the river and all the way out to the Tennant's house? There's a new bridge and it's all four lanes now. There is even a stoplight in the center of town." I point out on the screen where sagebrush has been transformed into the posh Dayton Valley Country Club, and where three new schools have been built. "You probably wouldn't even recognize that side of the river at all. Of course "old" Dayton hasn't changed. The old timers will never let it."

"Good," she says. "I remember it had so much character, just like you'd see in the cinema."

Whenever I look at pictures of the American west, I look for familiarity in the geography. I look for a point of reference, of recognition, so as to know if I've been there before or can name it. I do this when I look at the black and white pictures of mining towns, which have long since been built over or deserted; the geography itself never changes, only the things that inhabit it. I think this is why Margaret's scenery photos don't strike me as oddly as the others. Mt. Como traces the same silhouette across the southern horizon that I have seen for years through my bedroom window.

Margaret shows me her scrapbook, too. It is full of ticket stubs and newspaper articles shoved into the clear plastic covers. In the back there is a small bundle of postcards which I start to file through. Most all are from Nevada. Carson City, Minden, Virginia City, and one of Main St. in Dayton. Margaret looks over my shoulder. Something is out of kilter in the shot, but something has been out of kilter in most all the shots, I tell myself.

"What is in all those buildings now?" Margaret asks. "I remember having quite a party at that restaurant on the corner...I can't remember the name of it, but it is in this building right here," she indicates by pointing to a red brick building almost cut out by the angle of the photo. "Is it still a restaurant? The bar was terrific, I remember there were dollar bills stuck all over the ceiling. I never figured out how they got them up there. One old local fellow tried to teach me, he wrapped the bill around a silver dollar with a tack sticking out the top. Then he just threw it up at the ceiling and there it stuck. The silver dollar fell out and he caught it before it hit the floor." She stares into the postcard as she continues, "The more I drank that night the harder I tried, and I had a few ya-hoos cheering for me too, but I never got one up there."

\*

I'm on a bus and over the green high-backed vinyl seats I can see wisps of smoke against the deep morning-

blue sky. I can smell it too. The bus turns right onto Pike street and the volume of chatter instantly rises. "Look! There was a fire...".

# Order Within Disorder: Deterministic Chaos and Jurassic Park

by Wes Chaplin

Science and Literature  
Dr. Cathy Haustein

Assignment: Write a term paper which illustrates a connection between science and literature.

As human beings, we operate within a complex world of systems that push and pull us in a million different directions at once. Everyday, we can see the effects these systems have on our lives, as we run up against "unexpected" delays and "unforeseen" difficulties. If we could have only one wish, most people would desire to glimpse into the future, and be able to predict when these "unpredictable" events that alter our lives are going to occur. With this ability to predict the unknown, we could then take corrective steps to eradicate the problem. While this ability to foretell the future seems like a wistful dream, in reality this power is available to us right now, in the form of the Chaos Theory.

The Chaos Theory seeks "to explain the science of physical systems governed by nonlinear dynamical laws."<sup>1</sup> In our world, there are a number of factors influencing us every second, even if they are not readily apparent. Consider the flip of a coin. At first, it would seem to be a simple system, with only two outcomes: either heads, or tails. Based on this information, we could apparently predict the outcome of a coin flip approximately fifty percent of the time. However, if we delve beneath the surface, the nonlinear dynamical laws that influence this system become clearer. Persi Diaconis, a statistician at Stanford University, states that "If you look hard, things aren't as random as everyone assumes."<sup>2</sup>

Diaconis analyzed the previously mentioned coin flip, and found that we can plot the initial velocity and spin of the coin on a two dimensional graph. When the coin is always in the same position initially, we can map out the regions of the graph that result in heads and those that will produce tails when the coin is flipped. Near the origin of the graph, at low initial velocity and spin, (essentially, the coin remains motionless or doesn't flip), we can predict the outcome of the flip with 100% accuracy. If it starts with heads up, and low velocity and spin is applied, heads will be the result.

Now consider what happens if we move out from the origin, increasing velocity and spin. Our ability to predict the outcome of the flip is reduced to zero. It is obvious that "a slight change in the initial conditions will produce a drastically different result."<sup>3</sup> This is the basis of the Chaos Theory: while we are unable to predict the outcome, we can identify the possible outcomes, based on the initial conditions and the variations among them.

Michael Crichton utilized the work of Heinz Pagels

regarding Chaos Theory in his book *Jurassic Park*. The book centers on the creation of an island entertainment complex, where dinosaurs, created from amber-preserved DNA samples, are the main attraction. One of the main characters in the book is a mathematician named Ian Malcolm. When a team of scientists is invited to the island to assess its stability, Malcolm uses the Chaos Theory to explain why he can predict in advance that the island will ultimately fail.<sup>4</sup>

In order to understand Malcolm's argument, we will first have to gain an understanding of the Chaos Theory. In 1963, M.I.T. meteorologist Edward N. Lorenz began to study the unpredictability of the weather system. He was convinced that the well-known unpredictability of the weather ought to have an explanation in terms of deterministic equations. He discovered, however, that most of the equations that describe phenomena in the natural world are nonlinear. The following is Pagels' summary of Lorenz's work:

"Lorenz put his nonlinear weather equations on a computer, and the computer was printing out lists of the three quantities as time advanced. He would stop the computer, examine the lists of the three numbers, pick an intermediate set of three values, and then start up the computer with those intermediate values as the initial data. Normally one might expect that the computer would print out the same list as before. After all, these were deterministic equations, and if the initial data were the same, the development of the system should be identical. Instead, the values of the three quantities on the lists would quickly differ from the original run."<sup>5</sup>

What Lorenz had discovered was deterministic chaos. Initial variances in a nonlinear system produced vastly different results.<sup>6</sup> The Chaos Theory evolved from Lorenz's work with deterministic chaos. The hallmark of chaotic behavior is that the "state of a system typically turns out to be very sensitive to its earlier states- one of which could be called the system's "initial condition."<sup>7</sup>

It is important to note that chaotic behavior is determinate and law-governed. "Chaotic" does not refer to something "random" or "given to chance", as if events happened without a cause. Chaotic systems may look as though they evolve randomly, but they are still governed by specific laws. It is just the sensitivity of a system's final state to its initial state that is meant by the term "chaos."<sup>8</sup>

The presence of chaos in a system creates a trade-off. If we want to explain the behavior of the system with large-scale, general laws, we must pay a price. Assuming we have these laws, we can only explain the system if we have exact knowledge of its initial conditions. If we do not have exact knowledge of the initial conditions, our general laws can only be used to approximate system behavior.<sup>9</sup> Provided that the laws that govern a chaotic system are known, as the difference between initial conditions and final events grows, the greater the accuracy with which those initial conditions must be known.<sup>10</sup> By studying initial conditions, and analyzing the differences that occur between them in the same system, applicants of the Chaos Theory can show how a supposedly "disorderly" system actually exhibits order.

George Reisch feels that "One beauty of Chaos Theory is its generality, its concern with the general and global features of systems as diverse as cigarette smoke, the weather, and biological populations."<sup>11</sup> This diversity is very evident when we look at the number of fields that the Chaos Theory is currently being utilized in.

Zoologist Frank Heppner is using Chaos Theory to

explain coordinated behavior by flocks of birds.<sup>12</sup> Heppner noticed that certain small birds, such as starlings, fly in coordinated flocks that display strong synchronization in turning, initiation of flight, and landing. However, efforts to identify a leader in these flocks have, to date, failed. Heppner, with the help of computer scientist Ulf Grenander, put together a computer model of bird flocks that simulates their chaotic behavior, based on four simple rules: 1) birds are attracted to one another, unless they are very close, 2) birds are attracted to their roost, 3) birds slow down at curves and then speed up to their preferred velocity, and 4) birds are sometimes knocked off course by random environmental disturbances— ie. a gust of wind, or a barking dog.<sup>13</sup> Heppner & Grenander's model functions because of the Chaos Theory— small variations in the initial conditions (starting point of each bird, number of birds in the flock, proximity to other birds, etc...) produces a drastic change in the final outcome ( a coordinated flock pattern that appears random and unstructured, but is actually very organized and ordered).<sup>14</sup>

The Chaos Theory is also being utilized in the medical field. It has long been thought that the human body was a regularly functioning system, and when a sudden change occurred, it was a symptom of a larger problem. Now, however, medical scientists are finding this is not true.

When the human heart beats, we often listen for a "regular" heartbeat. Ary Goldberger and David Rigney have proposed that a regular heartbeat is a warning sign of cardiac arrhythmia, one of the top three major causes of mortality among Americans. Goldberger and Rigney base their hypothesis on the fact that the heart responds to changes in its environment, by either increasing or decreasing its beating. This sensitivity to initial conditions is what makes the Chaos Theory so important to heart specialists. In the hours before a heart attack, the heartbeat loses some of this variability, and settles into a regular pattern.<sup>15</sup>

Gottfried Mayer-Kress has developed a way of monitoring this process on a small computer that plots the chaotic behavior of a normal, healthy heart that is responding to changes, against a regular pattern seen in victims of heart attacks. The hope is that Mayer-Kress' program will be able to alert doctors to a patient's susceptibility of a heart attack, so that preventive measures can be utilized.<sup>16</sup>

The Chaos Theory has also been applied to structural engineering. When engineers are designing a ship, they must be conscious of "transient phenomenon." "Transient phenomenon" means that the vessel will be moving in an irregular fashion. In the past, when engineers designed ships, the method they used assessed how stable a ship was in motionless water. The method simply required that the forces on the stationary vessel when tilted at various angles should be such as to try to right it. With the application of the Chaos Theory, however, modern structural engineers are able to use computer programs that run vessel prototype simulations, varying initial conditions ever so slightly, in order to discover the correct ship design and specifications.<sup>17</sup>

The Chaos Theory has also been applied to our meteorological systems, as we try to predict the weather.<sup>18</sup> The Chaos Theory influences stock market investors, as they try to predict fluctuations in the market.<sup>19</sup> George Reisch even uses the Chaos Theory to explain inevitable variations in the course of history:

"There are times when circumstances and their inherent possibilities give rise to very unstable situations whose outcomes are selected by what

might seem at the time the most trivial of factors; put differently, the present might well be wholly different if the past were just slightly different."<sup>20</sup>

Michael Crichton was well aware of the Chaos Theory when he penned the book, *Jurassic Park*. In the book, the mathematician Ian Malcolm predicts, before even seeing the island of dinosaurs he has been sent to evaluate, that the system will inevitably fail. Malcolm bases this belief on the Chaos Theory, and uses his "Seven Iterations" (his own summary of the Chaos Theory) to prove his point:

- 1) At the earliest drawings of the fractal curve, few clues to the underlying mathematical structure will be seen.
- 2) With subsequent drawings of the fractal curve, sudden changes may appear.
- 3) Details emerge more clearly as the fractal curve is redrawn.
- 4) Inevitably, underlying instabilities begin to appear.
- 5) Flaws in the system will now become severe.
- 6) System recovery may prove impossible.
- 7) Increasingly, the mathematics will demand the courage to face its implications.<sup>21</sup>

With our newfound understanding of the Chaos Theory and its applications, we can see how Malcolm was able to predict the failure of *Jurassic Park* before he had even stepped inside its gates. An examination of Malcolm's iterations, and their effect on the system of life inside *Jurassic Park* will emphasize the application of the Chaos Theory.

With reference to the first iteration, few clues to the underlying situation will be evident at the onset. The basic principle behind *Jurassic Park* was simple: a zoo where people could drive through and view the animals. The creator of *Jurassic Park*, John Hammond, did not feel that this was a revolutionary concept, but just as a precaution, he took great pains in hiring the most qualified people and preparing for every imaginable emergency.

"It's that Malcolm," Hammond said darkly. "He's got his theory that complex systems can't be controlled and nature can't be imitated. I don't know what his problem is. Hell, we're just making a zoo here. World's full of them, and they all work fine."<sup>22</sup>

Malcolm's second iteration stated that sudden changes may appear as you proceed through the system. This was evident in *Jurassic Park*, as the preliminary inspection team proceeded on their journey through the park. For instance, the dinosaurs had been genetically engineered to be unable to breed, for park security reasons. However, one of the paleontologists on the inspection team, Alan Grant, discovers the eggshell of a velociraptor, a very dangerous predatory dinosaur. When the park management refuses to believe the dinosaurs are reproducing, Malcolm asks for a copy of the height graph of the procompsognathids (comps, for short), which had been released into the wild in three batches:

"Notice anything about it?" Malcolm said.  
"It's a Gaussian distribution," Wu said. "Normal curve."  
"But didn't you say you introduced the compy's in three batches? At six month intervals?"  
"Yes. . ."  
"Then you should get a graph with peaks for each of the three separate batches that were introduced," Malcolm said, tapping the keyboard. "But you didn't get this graph. The graph you got is actually a graph of a breeding population. Your compy's are breeding."<sup>23</sup>

In accordance with Malcolm's second iteration, sudden changes had appeared.

The third iteration states that details emerge more clearly as you progress. This is a direct attribute of the Chaos Theory, which we should recall, is characterized by drastic changes brought about by subtle variations in initial conditions.<sup>24</sup> In *Jurassic Park*, some of these details that emerged were glitches in the supposedly "foolproof" computer system, and the existence of velociraptors and compys on the mainland, proof that they had somehow escaped the confines of the island.<sup>25</sup>

"Inevitably, underlying instabilities begin to appear" is the fourth iteration of Ian Malcolm. Applying the Chaos Theory, we can see that as we move out from the initial conditions, and vary slightly, the effects of these changes "snowball" into a monstrous deviation from the anticipated outcome. Malcolm was able to see this in advance, thanks to the Chaos Theory. The designers of *Jurassic Park* neglected to account for the Chaos Theory, however, and in this case, it led to disastrous consequences.

The computer engineer, Dennis Nedry, had been paid 1.5 million by a rival genetics company to obtain samples of dinosaur DNA, and when he took a wrong turn on his way to deliver the samples, he encountered a poison-spitting dilophosaurus. His death led to the crash of the *Jurassic Park* computer systems that controlled all the mechanisms designed to contain the dinosaurs. Consequently, within a few hours of Nedry's death, when the computer system ran into a bug, no one was able to detect it, and the system automatically shut down.<sup>26</sup>

Applying the Chaos Theory, as Malcolm did, we can see how Dennis Nedry's death (a slight variation in the initial condition of the park) would cause significant reverberations throughout the ensuing life of the system. When Malcolm's fifth iteration ("Flaws in the system will now become severe") asserted itself, *Jurassic Park* began to fall apart, as dinosaurs roamed free and began to attack the humans on the island. Hammond and his park engineer, John Arnold, felt that they could regain control of the park by rebooting the computers. They rebooted, and the park system came back on line, turning the electric fences and protective barriers back on. However, when the system came back on line, it used up all the auxiliary power, and when the power was depleted, the system shut down permanently.

"Jesus," Arnold said. Apparently, main power had not been on since shutdown. When he powered back up, only the auxiliary power came on. Arnold was thinking that was strange, when he suddenly realized that was normal. It made perfect sense: the auxiliary generator fired up first, and it was used to turn on the main generator. But Arnold had never before had occasion to turn the main power off. And when the lights and screens came back on in the control room, it never occurred to him that main power hadn't also been restored. But it hadn't, and all during the time since then, while they were looking for the rex, and doing one thing and another, the park had been running on auxiliary power. And that wasn't a good idea. In fact, the implications were just beginning to hit him—and then, from somewhere in the distance, he heard a scream.<sup>27</sup>

This ties in with Malcolm's sixth iteration: "System recovery may prove impossible." With the computers permanently down, the park was at the mercy of the dinosaurs. Hammond, who never believed in the Chaos Theory, found it hard to believe that the park had failed so quickly, according to Malcolm's warning.

"Damn it all," Hammond said. "It must surely not have escaped your notice that at heart what we are attempting here is an extremely simple idea. My colleagues and I determined, several years ago, that it was possible to clone the DNA of an extinct animal, and to grow it. That seemed to us a wonderful idea, it was a kind of time travel. Bring them back alive, so to speak. . . We got this island, and we proceeded. It was all very simple." "Simple?" Malcolm said. "What is that, going on out there? That's your simple idea. Simple. You create new life-forms, about which you know nothing at all. Your Dr. Wu does not even know the names of the things he is creating. He cannot be bothered with such details as what the thing is called, let alone what it is. You create many of them in a short time, never learn anything about them, and expect them to do your bidding?"<sup>28</sup>

This brings us to Malcolm's seventh, and final iteration: "Increasingly, the mathematics will demand the courage to face its implications." In the case of *Jurassic Park*, the designers of the park had neglected to account for the unstable environment called "the real world" that the park had been created in, and it ended up destroying itself. If the designers had only used the Chaos Theory, to consider some of the possible variations in initial conditions, they could have anticipated the possible outcomes. With this knowledge, they could have taken preventive measures, in case these unfavorable outcomes were realized.<sup>29</sup>

Michael Crichton's novel *Jurassic Park* may be a fictional account of the destruction of a system of life, but one certainly finds it believable when the Chaos Theory is applied. Crichton's engaging style of writing draws the reader in, and makes them feel a part of the story. In *Jurassic Park*, as the reader gains a background in the Chaos Theory, he/she can appreciate the simple brilliance that the theory produces. After reading the book, I can see how important it is to consider all possible variations in initial conditions, before undertaking any experiment or job.

In my own life, the Chaos Theory can be applied. It has long been my desire to someday become an attorney, and I can trace this desire to a term paper I was assigned in sixth grade. The topic I was randomly assigned was "Careers in Law", and through my research into legal careers, I began to picture myself in the field. If I had varied the initial condition ever so slightly (perhaps by drawing out "Careers in Medicine" instead of "Careers in Law"), I might not be writing this paper today (instead, I might be sitting through a lecture on physical anatomy at the University of Iowa, or welding pipe in Alaska). The Chaos Theory demands that we be responsible for our actions, and anticipate the outcomes produced by our actions.

"Nonlinear dynamics and the Chaos Theory is in its infancy. This discovery of deterministic chaos in nonlinear equations is probably just the tip of the iceberg. New and wonderful things remain to be uncovered. Scientists are just beginning to face up to the immense challenge nonlinear equations proposes."<sup>30</sup>

The presence of the Chaos Theory will eventually cause a major change in the way we view our world, as well as science. Unpredictability can be eliminated, by incorporating every possible variation in initial conditions of a system. With today's rapidly expanding computer technology, it is foreseeable that scientific experiments will someday only occur on a computer monitor, as the Chaos Theory will make actual experimentation

unnecessary. In *Jurassic Park*, Ian Malcolm can visualize this type of world, where Chaos Theory is utilized in every aspect of life.

"Everything looks different on the other side," Malcolm whispered, "when paradigm shifts. . ." "Paradigm shifts?" Harding said. He knew about paradigm shifts. For the last two decades, they had been the fashionable way to talk about scientific change. Paradigm shifts were said to occur whenever science made a major change in its view of the world. Such changes were relatively rare. Darwinian evolution had forced a paradigm shift. Quantum mechanics had forced a smaller shift. Now Chaos Theory?<sup>31</sup>

*Jurassic Park* is a superbly written scientific thriller, but what makes Michael Crichton's novel stand out above the crowd and demand to be acknowledged is its application of the Chaos Theory. Perhaps the Chaos Theory will someday be disproved, and relegated to the fate of the Piltdown Man, but until then, we cannot afford to overlook its implications.

Our very existence as a system of life depends on anticipating the outcomes most favorable for our survival, and then altering our conditions to obtain these outcomes. With the Chaos Theory, this power is in our hands, to use or abuse as we see fit. If we wish to continue as a system, we must be prepared for the "unpredictable" changes that will impact our lives. If we are not prepared, and do not utilize the Chaos Theory, our fate as a human race is sealed. In the words of Ian Malcolm:

"The history of evolution is that life escapes all barriers. Life breaks free. Life expands to new territories. Painfully, perhaps even dangerously. But life finds a way. You have a choice—adapt with it, or face extinction. Life is too inherently unpredictable for us to afford to overlook the implications of the Chaos Theory."<sup>32</sup>

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# The Role of Perceptions in U.S./Russian Relations: The Limits of Foreign Aid

by Mary Green

U.S. Foreign Policy

Dr. Jim Zaffiro

Assignment: Write a research paper of approximately 10-15 pages on a topic of significance for American Foreign Policy

The passing of the Cold War has opened up a unique opportunity for democracy to spread to all parts of the globe. However, the transition of former Communist nations to market-based economies is difficult. As the republics of the former Soviet Union face financial chaos, the United States has been slow to react. In this paper, I will investigate how conflicting perspectives shape the decision-making process. I will also examine the transitional nature of American public opinion, leadership, and foreign policy itself in the post-Cold War era. The ability of the U.S. to construct a cohesive foreign policy of either aid or investment will have profound effects on the future of American-Russian relations.

The concept of perceptions in Soviet-American foreign relations was documented by Richard Herrmann in a 1986 *American Journal of Political Science* article. Herrmann notes that if basic perceptions do not change, frustration with unrealistic expectations for existing policies can result. As Herrmann explains, "perceptions determine policy choices, but they also define the context and criteria for evaluating policy success in solving troublesome problems" (Herrmann, 1986: 873). Although the superpower relationship has greatly changed since this article was first published, perceptions are no less important.

In comparison to current events, the Cold War was characterized by a fairly stable, albeit hostile, relationship. In his article, "Forget the Soviet Union," Paul A. Goble notes the temptation to cling to the status quo:

"There is a kind of nostalgia for the older and simpler days and a tendency to preserve old methods of conducting relations. Unfortunately, both can contribute to serious problems, the first by diminishing our appreciation for the achievements of Yeltsin and others, and the second by creating some unintended and regrettable consequences" (Goble, 1992: 64).

The breakup of the Soviet Union has resulted in 15 separate states. These states encompass one-seventh of the Earth's land surface and are home to nearly 150 million inhabitants. However, the creation of the Commonwealth of Independent States (CIS) is much more than a change in nomenclature. The fifteen states of CIS are not monolithic. Rather, each has their own unique

identity and ethnicity.

For the purposes of my research, I will focus on Russia. Because the issue of aid continues to evolve, much of my research is based on the past few years. In fact, daily events in the former Soviet Union make analysis precarious at best. I have combined both journal articles and newspaper stories in an attempt to balance in-depth analysis and up-to-date information.

## THE NEW RUSSIAN IDENTITY

The impact of the separation of the other republics should not be overlooked. Each state is in a different stage of transformation from communism. The states are forced to compete for a piece of the foreign aid pie. Western assistance policies have not recognized the individual needs of each region.

In fact, Russia seems to be viewed as "the de facto ruler of the CIS" (Goble, 1992: 56). American foreign policy seems to be geared toward dealing with one large entity rather than 15 separate ones. Such a stance will only further isolate and increase competition between the states.

John Edwin Mroz's article, "Russia and Eastern Europe: Will the West Let Them Fall?" recognizes the breakup of the region as destabilizing to the market:

"One of the biggest factors contributing to Russia's economic crisis is the severing of most economic ties between Russia and the other republics. That factor, more than any other, accounted for a decline of nearly 50 percent in Russia's net exports" (Mroz, 1992: 46).

The significance of Russia's problems are evident in G. Khanin's article, "The Economic Crisis in Russia." He illustrates the unprecedented nature of the transition:

"The Russian economy has been going through an extremely grave crisis in the last few years on a scale that is unequalled in modern peacetime world economic history and that in terms of the decline of production and living standard is comparable to the rigors of wartime and the occupation of part of the country's territory" (Khanin, 1993: 69).

Statistics confirm that Khanin does not overstate the nature of the problem. In 1992, inflation reached 1,300 percent a year, while income increased only 7.4 times (Mroz, 1992: 46). Russia's GNP and industrial production shrank 20 percent. Retail prices increased 20 times. The ruble fell from the pre-reform exchange rate of 60 rubles to the dollar to nearly 600 to the dollar (Islam, 1993: 58).

These statistics are not entirely reliable because most of the government estimates are kept conservatively low. However, statistics do not tell the whole story. The economic crisis results in personal hardship. Mroz says world leaders have been oblivious to developments that "cover an enormous range of problems—from a subculture of lawlessness in each of these countries to substantiated reports that more than half of Moscow's school children are infested with lice due to poverty and a shortage of soap" (Mroz, 1992: 45).

According to Mroz, the health of Russia's youth and elderly has reached crisis proportions. Journalists, empowered by glasnost, have begun to uncover startling information about serious environmental problems. Unrestricted industrial and agricultural practices have caused considerable damage to the health of the already malnourished masses. Any clean-up efforts, which are likely to cost billions of dollars, are a low priority of this struggling region. The strained economic conditions, which require the immediate attention and resources of the government, severely hamper a commitment to the

environment.

Alexei Yablokov, Yeltsin's chief adviser on environmental matters, says that radioactive contamination is Russia's greatest environmental problem. Michael Dobbs of the *Washington Post* reports, "The seas around Russia - from the Baltic to the Pacific - are littered with decaying hulks of nuclear submarines and rusting metal containers with tens of millions of tons of nuclear waste" (Dobbs, 1993c: 13).

As Mroz points out, Russia could be on the brink of a national catastrophe: "Many Russian nuclear plants and reactors are not receiving even cursory maintenance due to the wild slashing of the national budget, a shortage of parts, and bureaucratic inertia" (Mroz, 1992: 45).

The Russian government has resorted to selling weapons to foreign countries to raise money. In October 1992, the sale of Russian submarines to Iran was met with harsh criticism by the West (Fessler, 1992: 3181). With Russian industry so intensely geared to military production, the transition to market goods such as food has been slow.

Even after free-market reforms were introduced, extensive organized crime networks have proliferated. Currently, the easiest way to make a great deal of money in Russia is to bribe a government official for an export license (Dobbs, 1993b: 9). Some supplies donated by Americans have been resold on the black market. Not only does it discourage American participation in the economy, it also creates a sense of lawlessness (Dallin, 1992: 325).

Khanin expresses a view that is common among Russians, "Contrary to the hopes of many ordinary citizens and scientists, the dimensions of the crisis are growing with the expansion of the market and private property. The more capitalism there is, the worse matters become in the economy" (Khanin, 1993: 69).

Unlike Eastern Europe, Russia does not have a history of democracy. As Dobbs points out, "With the exception of brief intervals - following the collapse of the czarist regime in 1917 and the collapse of communism from 1989 to 1991 - Russia is a country that has always been ruled by dictators and autocrats" (Dobbs, 1993a: 23).

Russians have been socialized to depend on the state to run the economy. The transformation of Russia is not just in the market system, but also in the beliefs under which the entire nation has been socialized: "Apart from undoing the formal trappings of communist rule, eliminating the legacy of communism means changing the psychology of the population—convincing them of the capacity of the individual to act singly and in small groups to bring about change" (Mroz, 1992: 51).

To many Russians, there is a profound feeling of hopelessness. The severity of the problems has far-reaching effects on the national psyche. As Dobbs says, "A new generation of Russians face the task of rebuilding their devastated country. In many cases, they are so disillusioned by the failed Communist experiment that they no longer believe in the possibility of a better, more normal life" (Dobbs, 1993b: 6).

## RUSSIAN FEELINGS TOWARD THE UNITED STATES

At first, Russians thought the U.S. would make a greater contribution to the transformation to capitalism. However, Russians argue that the type of aid given so far has failed to meet their specific needs. As Mroz observes, "With the notable exception of defense-related projects (destruction of nuclear warheads, support for nuclear scientists) where America's interests are most visible, Washington is viewed even by its friends in Moscow as having failed to respond to Russia's economic straits" (Mroz, 1992: 47).

Expected aid has been delayed or was exaggerated. Although the media touted a multi-lateral assistance package of \$24 billion, the greatest portion of this amount was comprised of normal trade credits. The actual U.S. contribution was only expected to be \$4.5 billion. In reality, less than \$2 billion of actual assistance has been disbursed (*CQ Researcher*, 1993: 223).

According to the numerous public opinion polls, the majority of Russians appreciate American humanitarian assistance (Mroz, 1992: 47). However, they see this contribution as modest as compared to the size of the crisis. Furthermore, they resent the stipulations that go along with non-humanitarian aid. Two out of three respondents would prefer to reject any further aid that required continuation of tough economic reforms (Mroz, 1992: 47).

The polls also reflect a wave of anti-American sentiment. According to Mroz, "a surprising large number of Russians actually believe that the United States intends to use economic reforms as a method to destroy the Russian state, much as they think the United States helped to engineer the destruction of the U.S.S.R. under President Mikhail Gorbachev..." (Mroz, 1992: 47).

Russia also faces the burden of a continuing identity crisis that may present difficult challenges to the West. Mroz says the Russian people "have a sense of mission and destiny that is almost spiritual in nature but always in flux. The constant search to redefine themselves is something particularly Russian" (Mroz, 1992: 53).

From his point of view, the perceptions of Russia are paramount:

"The collapse of the Soviet Union and the current impotence of the Russian state is a cause of great shame for many Russians. The West must be sensitive to this fact or it may suffer the consequences of a transformation of pride in Russian nationhood into some extreme chauvinistic Russian nationalism" (Mroz, 1992: 53).

The United States walks a fine line between recognizing sovereignty and encouraging ethnic divisions. Arguably, the response of the United States will be a decisive factor in relations between Russia and the rest of the world. From the other research I've done, I would say that Mroz has a fairly accurate picture of Russian's feelings.

Mroz sees the potential of Russia to repeat the experience of Yugoslavia. However, I think he overstates American leaders' desire to "meddle with the integrity of the Russian federation by encouraging or recognizing the independence of any of the peoples living within Russian borders" (Mroz, 1992: 53).

More accurately, there seems to be a reluctance on the part of U.S. leaders to see any more divisions in Russia. In general, the United States has taken a largely reactive, rather than proactive stance toward CIS. Goble says the U.S. policy-makers would prefer to see a single state emerge. He points to the fact that the U.S. was the 39th nation, after Mongolia, to recognize the independence of the Baltics (Goble, 1992: 64). Taking recent events into consideration, the stability of CIS looks doubtful.

## U.S. PUBLIC OPINION TOWARD RUSSIA

Goble is probably the most detailed of all the sources in his explanations of how the U.S. needs to change the internal structure of policy-making toward Russia. Yet, he does not discuss one of the strongest determinants of what foreign policy will be: American public opinion.

Polls taken during the 1992 election campaign reflect the recent ambivalence of Americans toward foreign policy. Seventy-one percent of Americans polled said that

U.S. "must take an active part in world affairs" (Yankelovich, 1992: 6). Yet, there seems to be a general trend toward isolationist feelings. Five out of six agreed that "we shouldn't think so much in international terms, but concentrate more on our own national problems" (Yankelovich, 1992: 5). On a list of public priorities, voters ranked foreign policy at or near the bottom.

In his book about the 1984 presidential election, Michael Nelson distinguished the role that foreign policy plays in voting behavior. The common perception has been that voters are simply unaware of and do not respond to issues of foreign policy. However, Nelson concluded that interest in foreign affairs is based on whether the issues affect their lives directly: "On the international issues the voters do care about, they care very deeply...when foreign policy begins to reach deeply into daily life in the manner of domestic policy issues" (Nelson, 1985: 138). Nelson refers to these issues as "intermestic issues."

Because the impact of Russia's struggle for democracy does not affect the average American's life, the issues are not as salient. Language and life-style differences increase the remoteness of the Russian people. Lack of information forces Americans to rely subjective beliefs. Yet, foreign policy issues take on a greater saliency when American lives are threatened or lost, as was the case recently in Somalia. Meanwhile, even pictures of the bombed Russian Parliament seem obscure.

Nelson is accurate when he observes, "Americans have a low tolerance for foreign involvement unless it is quick, splashy, and tied to opposing a demonic foe or supporting a moral venture...Ironically, we may have arrived as a point in world affairs where patient and unglamorous diplomacy is needed the most" (Nelson, 1992: 117).

In his analysis of the 1992 election, Nelson correctly interprets Bill Clinton's presidential victory. He maintains that the outcome was symbolic of the attitude toward international issues. Clinton did not campaign for isolationism; rather, he campaigned mainly on domestic issues. In fact, Clinton may have done a disservice to the American people by not preparing them for the tough foreign policy decisions ahead.

Unlike presidents during the Cold War, American involvement abroad cannot be justified by the communist threat. A 1987 study found that politicians who focused on the threat of communism, militarism, and isolation had a large audience (Hurwitz, 1987: 1115). American's preoccupation with the Soviet Union made hawkish stances popular.

Hurwitz and Peffley observed the effects of perceptions during the Cold War: "Although European democracies probably have more to fear from the Soviet Union, evidence indicates otherwise; public distrust and hostility toward the Soviets is much higher here than abroad" (Hurwitz, 1990: 8).

According to Sigal, discontent with foreign affairs can be traced back to the mid-1980s in the midst of the Cold War. However, he argues that different factors are to blame for American's dissatisfaction: "Many felt menaced less by the Soviet threat than by the nuclear risks and exorbitant cost of deterrence" (Sigal, 1992: 1).

Economic concerns are precisely the reason for the shift away from foreign policy concerns. As Yankelovich says, "Most people, for example, strongly encourage the spread of democracy to other nations...But when it comes to setting actual priorities, support for democracy and other worthy foreign policy goals are subordinated to economic concerns" (Yankelovich, 1992: 8).

Even more important than the domestic vs. foreign affairs debate is the issue of the national economy, both at home and abroad. In effect, economic superiority is seen as greater insurance of national security than the

spread of democracy. As a result, the preoccupation with the Soviet Union has been replaced with increased economic competition with Germany and Japan. The shifting of antagonism can be partially explained by Finlay, Bobti, and Fagen's **Enemies in Politics**: "It seems that we have always needed enemies and scapegoats; if they have not been readily available, we have created them. Enemies help identify sources of frustration and justify actions..." (qtd. in Peffley, 1992: 457).

Hurwitz and Peffley caution that foreign policy public opinion may be more resistant to change than has been previously thought. Perceptions are not based on random, disorganized information. Hurwitz and Peffley observe, "While citizens' specific foreign policy attitudes may not be consistently related to one another or to political evaluations, more general foreign policy orientations play a stronger role in foreign policy decision making" (Hurwitz, 1990: 8).

American's assumptions about Russia have been part of an entrenched value system. The vehement distrust present from the late 1940s was an integral part of the Cold War. Certainly current U.S. policies may be a direct result of residual Cold War feelings.

A Russian aid package had difficulty passing through Congress when, "sponsors of the legislation also had to fight against the deep-seated antagonism and distrust of the former Soviet Union that...reflected the somewhat tenuous state of reform in the republics" (Fessler, 1992: 3181).

#### THE ISSUE OF AID

Although 90 percent of leaders support foreign economic aid, public attitudes toward aid are considerably more negative than in 1987 (Rielly, 1991: 93). Politicians are likely to bow to popular sentiment than to consider long-term U.S. national interests. Diamond warns politicians against capitalizing on these isolationist feelings: "It is fashionable these days to denounce foreign aid as a waste of taxpayers' money. But foreign assistance - both economic and political - can contribute to democracy and development, and thus to American security" (Diamond, 1992: 31).

Indeed, some politicians who stalled aid packages during the election year have since had a change of heart. Representative Ronald V. Dellums, for example, once demanded an urban renewal package for U.S. cities before granting aid to Russia. In March 1993, he did a quick turn-around saying, "If you can spend hundreds of billions to wage war against someone, you can spend a few billion to wage the peace" (Fessler, 1993: 609).

Although foreign aid is a favorite source of budgetary cutbacks, it only accounts for one percent of the budget and 0.2 percent of GNP (Sewell, 1993: 13). On a per capita basis, the U.S. lags behind both Britain and Germany in the amount of aid given to the former Soviet Union (Dallin, 1992: 324). Instead of increasing the total amount of foreign aid, many members of Congress would like Russian assistance to be shifted from existing aid programs where U.S. national interests are not perceived to be as great (Fessler, 1993: 613).

Although the United States is pushing for a quick transition to capitalism, the overall consensus of my research seems to discourage this kind of revolution. Shafiqul Islam refers to the effect of rapidly proceeding to a free-market system as "shock-therapy" (Islam, 1993: 57). He notes that many foreign leaders feel that the long-term benefits will outweigh any initial hardship.

Nevertheless, Yeltsin is currently at a critical juncture. Russian public opinion is encouraging him to halt reforms, while the West accuses him of moving too slowly. The U.S. must consider if Yeltsin can withstand any more

coups like the ones in August 1991 and September 1993.

The problem is that it is not just a matter of rebuilding, but a matter of re-socialization. As Mroz states, "With the economy in shambles, Russians are unwilling to accept the introduction of more market mechanisms. Yet an increase in free-market mechanisms is needed to get the Russian economy moving" (Mroz, 1992: 50).

#### CHANGING PERCEPTIONS

Khanin says the economic reforms being enacted in Russia and the other East European countries are seriously flawed. "Building capitalism" requires the privatization of an enormous state sector, on which the entire economy is built (Khanin, 1993: 70). As Khanin notes the process will be long and arduous: "We cannot convert to capitalism in 500 or 5,000 days. This takes decades. Revolutions in the economy, as in society, are destructive" (Khanin, 1993: 71).

Mroz, however, says that there is no time to waste in getting started: "Waiting for an international consensus to build around a new strategy will mean that America will be too late and too uninvolved to make a difference" (Mroz, 1992: 57).

In the attempt to encourage democracy, U.S. intervention may actually cause more alienation and resentment than reverence. As Diamond says, "Promoting' democracy does not mean 'exporting' it. Except in rare instances, democracy does not work when foreign models are imposed, and many features of American democracy are ill-suited to poor, unstable, and divided countries" (Diamond, 1992: 27).

The infamous Russian winters are a breeding ground for uprisings among the people. Mroz says the Clinton administration should redefine and increase the U.S. humanitarian assistance to include medicine, hygienic products, and nutritional supplements. He says the advantages are twofold: "Apart from the ethical reasons for doing so, such actions would build considerable goodwill among the Russian populace and help counteract the growing anti-American sentiment" (Mroz, 1992: 55).

Russians are becoming frustrated with America's political maneuverings. As Bronislaw Geremek, a Poland parliamentary leader, says, "In some years, Russia will become a superpower again - and the memory of this period of weakness will have an important impact on a new generation of Russian leaders" (Dobbs, 1993b: 9).

Therefore, the West must continue to treat Russia as a viable player in world affairs. Mroz equates aid to the former Soviet Union with the importance of the Marshall Plan after World War II. Likewise, the West has much to gain from a democratic Russia. Dismantling Russia's vast nuclear arsenals would decrease the threat to the U.S. national security. In its desperate situation, Russia may start to sell even more of its arms to other countries.

According to Sigal, the proliferation of arms should be halted now by diplomatic and economic means, rather than later with military force (Sigal, 1992: 9). Dallin estimates that the cost underwriting limited assistance to Russia would be 10 percent of the Cold War defense annual budget (Dallin, 1992: 325). Not only would such a policy have profound national security implications, it may also allay American's fears about a militarized Russian state.

Furthermore, Russian production needs to be shifted away from military to food production. The U.S. must help jump-start Russian production of food to decrease the risk of dependence. Indeed, only long-term solutions will really result in the transformation of Russia. The new private sector must be given an opportunity to mature

before the old command economy can be dismantled. Attracting foreign capital is necessary for development within the private sector.

The debate for Russian assistance should highlight the long-term benefits to the domestic economy. Russia is a region rich in natural resources. The U.S. must carefully encourage investment while deterring economic exploitation. The latter will only make Russians even more skeptical of capitalism. Certainly, a degree of risk is involved: the U.S. could become the scapegoat for the economic hardships in Russia.

Undeniably, the U.S. cannot finance Russia's transformation alone. Yet, the U.S. can be at the forefront of the movement. The U.S. should work within the framework of international organizations such as the G-7 to rebuild Russia. The question is not "Can Russia rebuild itself alone?" Rather, the question is "Do we want to take the risk of Russia failing?"

Perceptions are a key to the current state of foreign policy. The perceptions of the Russian people are equally as important as the perceptions of the American people. American perceptions are based on two elements: the Soviet threat and economic weakness. Currently, public opinion and uncertain leadership are inhibiting the potential for peace. The stability of Russia is vital to U.S. national security, not only in terms of defense, but also in terms of the economy.

For Russians, anti-American sentiment seems to be growing as the economy continues to falter. The economic and political problems have no immediate solutions. The most dangerous prospect is that U.S. and Russia may resume the Cold War mentality. Capitalism and democracy in Russia do not mean anything to the United States if Russia is a hostile adversary. For now, economic assistance seems to be the first step in building friendly relations. Transforming perceptions is not easy, but as the saying goes, actions speak louder than words.

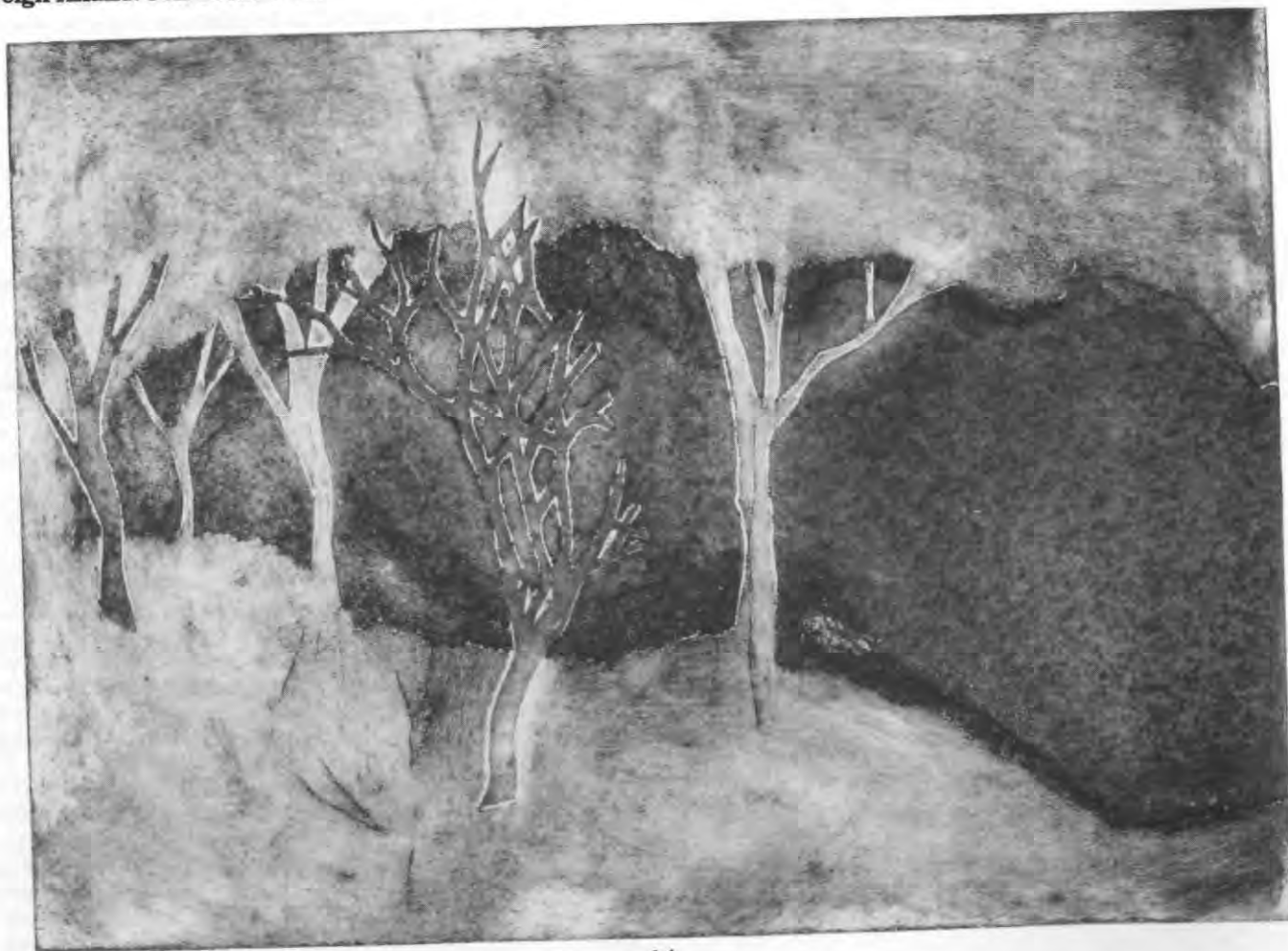
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## Bridge to Romania

by Kathy Schuitema

Non-Fiction Travel Writing  
Professor Keith Ratzlaff

Assignment: Write a personal/informal essay based on an experience you've had in another culture.

We all wore the one nice outfit we had brought on the trip, and each of us had the same rumpled, slightly grimy look to our clothes that comes of having worn them several times without washing, and then shoving them into a bag. We had been travelling for two weeks, and had seen our last shower about three days before. Now here we were, in this cathedral in Cluj-Napoca, Romania, ready to stand up as a choir and perform our music yet once more. We were tired, with the weariness that comes from sitting on a bus day after day, then walking around to "see the sights" when what we really needed was hot food, a shower, and a soft bed.

The people here had the same faces we had been meeting for the past two weeks, as we sang in the Czech Republic, Hungary, and the Ukraine. They looked tired and worn, with a hint of hard times suffered in the way they carried themselves as they silently filed into the church and sat on the rough wooden benches. We sat facing them, staring blankly and wishing we didn't have to stand through the whole two-hour concert again.

We had been told quite a bit about this place. It was rare for an American group to be allowed into this area of Romania. Cluj is located in Transylvania, and the people who live there are overwhelmingly Hungarian nationals. The Hungarian Reformed church was our connection to the city. Cluj was the home of a Hungarian Reformed Seminary school, and the Hungarian bishop had invited us, the Central College choir, to visit and meet these people who shared our common bond of religion. Living in America, one of the freedoms we prize highly is our freedom of religion. We really had no idea what price these Hungarians were paying for the same religion we practiced in freedom at home. The Romanian government openly persecutes these Hungarians, and they have forced them to live in a constant state of fear. We had been warned not to use the few Hungarian phrases we had picked up, and to be discreet in expressing opinions and views of any kind about the political or social system we observed. We were also careful to remember that the performance of the Hungarian national anthem, which we had learned for our concerts in Hungary, would be considered a crime against the government. We took these warnings very seriously, taking care to hide our copies of the song and keep our conversations confined to "safe" subjects. We had often heard stories of the treacherous Soviet system of secret police, so it was not hard to imagine a microphone hidden in every vase of flowers. Indeed, there were countless reminders of the Communist regime throughout the city--loudspeakers hung from every lamppost and were found in every hotel room, for the broadcast of propaganda. In theory, all this had ended with the fall of Ceausescu, but we saw little evidence to support a change in policy.

Our imaginations worked overtime. We were also haunted by the suspicion of a strange woman who had been following our group all day long, even joining us for

the complimentary lunch provided by the people of the Hungarian University. She was short, wearing a thin sweater and skirt as well as dark glasses. She carried a large purse, and she accompanied our group without a word. We became even more alarmed when our city walk was cut short and Figaro, the university student who was leading our tour of Cluj, admitted in a whisper that he thought she might be a government worker sent to watch our activities.

With all this on our minds, it was no wonder that we hoped for a quick, uneventful concert and an early departure for the Hungarian border the next morning. Cluj-Napoca was a grimy city, with drab people, and huge brown buildings that were identical cracker-boxes, with nothing bright or pretty to adorn them. There was nothing in the shops worth buying, and the streets were mostly empty of shoppers.

Our concert began as it had for the past thirteen evenings. We sang several short, classical selections and then went into Dvorak's "Te Deum," our major piece. We looked, felt, and sounded tired and half-hearted. Out of the corner of our eyes we glanced seriously at a tall man with a television camera. We should have been more excited that our concert was being broadcast to all of Romania, but instead it gave us our most intense feeling of many eyes watching our every move.

As we sang, our Hungarian audience remained impassive, and without reaction to each of our pieces. Were they just as nervous about Romanian eyes as we were? After we passed the hurdle of "Te Deum," our longest and most difficult piece, we began to gain a little more energy. The remaining pieces were spirituals that we loved to sing and hear the sounds we made resonate in the huge space of the cathedral. The congregation began to stir a little as we sang "By an' By" and let our enthusiasm for singing show. Several children seated in the front listened with rapt attention. We began to take more interest in watching the people react to us, and we began to connect with them, making eye contact and smiling. Imperceptible changes of expression showed that despite the language barrier, they knew what the message of our music was.

After we finished our last number, it was time to sing our benediction. It is the choir tradition to surround the audience and close each concert with this song, "The Lord Bless You." We stretched our group all the way around many rows of pews, and looked at our director expectantly.

From the corner of the church rose an elderly gentleman. He walked with an air of importance towards the pulpit, and motioned to our tour guide, Andrea, to follow. He stood for a long moment, letting his gaze fall all around the room. Then he began to speak, using his hands to gesture, and making eye contact with the choir members nearest him. As he spoke, his voice became choked with emotion, and his eyes became teary. Andrea translated rapidly, telling us that this was the Bishop of the Hungarian Reformed Church in Romania, and that he was telling of how much it meant to his people to have young students travel all the way from America to show that we share the same faith in God. We began to realize that our voice in Romania was having a much larger impact than we ever could have imagined. We listened as he told of poverty and suffering, and of faith as large and unshakable as the Carpathian Mountains surrounding Transylvania. I felt guilty for letting my own fears and discomfort dictate how I felt about sharing our music with these people, and I saw them in a new light. In our circle, we stood only a foot or so away from the pews, and we were face to face with our audience.

The Bishop closed his remarks, and we looked into the faces of those Hungarians and sang the benediction from our hearts. This, we felt, was the greatest intangible gift

we could give--asking the Lord's blessing on this church. We soon learned that there was a far greater gift.

As we dropped hands and stood in our circle, ready to leave, the organ began playing. We didn't recognize the music, and took it as a postlude, turning to walk out of the church. We expected the people to stand and leave as well. At the first tone of the organ, however, the change in the congregation was visible. Each person sat ramrod straight and faced the front, not meeting the curious gazes from the choir. Suddenly, on cue, they began singing as one. We stood frozen, shocked at what we heard. It was the Hungarian national anthem! We shot panicked glances around the room, at each other, and at our director. He was as confused and alarmed as we were. We had been told that the penalty of openly singing this song was a long and nasty imprisonment, and we had no intention of testing the theory. Then we noticed the cameraman from the television crew. His camera was at his side, and he was singing as loud as the rest. One at a time, we made our decision. One joined in, then another, timidly at first, then louder. Soon, the whole choir had rejoined hands in the circle and we were all singing together. As the congregation saw the American choir join them in singing their anthem, their faces fell and tears rolled freely down their cheeks. The singing grew louder and stronger, and every human being within those walls felt the bond knit between us.

As the last notes died away, arms reached to pull us close. Hands touched our cheeks in love, as people murmured thanks in two languages. We held each other and we all cried. It no longer mattered that we couldn't speak to each other in a common language or that the chasm between our lifestyles was too deep to bridge; we showed that we knew they had suffered and that we cared about their struggle.

The people who filled that room on that Sunday are now a world apart. The Americans have gone back to their free land of wealth, and the Hungarians continue to silently live their struggle to be free, day after day. Each group has renewed faith, for they have seen the love that can be built between two very different peoples, through a song that changed their lives.



# The Impact of a Sovereign Quebec on the Geography, Economy, and Political Relations of North America

by Travis Ridout

Introduction to International Politics  
Dr. James Zaffiro

Assignment: Write a research paper of approximately 10-15 pages on a topic of significance for international politics.

Most Americans regard Canada as a nice next door neighbor. Canada has the image of a society that is always agreeable, helpful, and keeps its house in order. But inside the solid exterior lies a dark secret; Canada is in danger of breaking apart. Canadians do not want to think about it, but the province of Quebec is headed toward a possibly bitter secession from the rest of Canada (ROC). How could a stable, Western democracy be close to falling apart? Although a brief background of the Quebec independence struggle will be given, this report will not try to explain its causes. Rather, this report will assume that Quebec has attained sovereignty and will examine possible geographic realignments and changes in northern North American diplomatic and trade relations. In addition, the significance of Quebec independence in the contemporary world will be discussed.

The roots of Quebec independence sentiments can be traced back over four centuries. In 1513, French explorer Cartier sighted the area that is now Quebec. Cartier's exploration paved the way for a small group of French artisans, farmers and fur traders to settle the land in the 17th and 18th centuries. By 1763, the population had reached 70,000 (Basham, 1978: 45). In that year, France transferred the lands of Quebec to Great Britain under the Treaty of Paris, suddenly leaving the Quebec economy dependent on the English, a situation that to some extent continues today. At first the relationship between Quebec and neighboring English-speaking areas worked reasonably well. In fact, the British were very accommodating to French speakers, even requiring the translation of many government orders into French (Basham, 1978: 22). But this cordial relationship did not continue. In 1791 a new national assembly was elected that considerably overrepresented Anglophones (English speakers), leaving many French feeling slighted. By the middle 1800s, there was consensus among Quebecers that the English were prepared to destroy and replace all French culture in North America (Basham 1978: 40). That feeling continued for over a century.

It's hard to pinpoint one cause for Quebec nationalist feelings, but a combination of "socioeconomic, power and status grievances, and cultural threats" all probably contributed (Pinard, 1992: 473). Francophones (French

speakers) feel they lack the economic opportunities enjoyed by Anglophones and feel threatened by the intrusion of English culture. For instance, there is intense interethnic job competition between English and French Canadians, a rivalry usually won by Anglophones who procure the most prized jobs (Belanger, 1991: 451). Statistics illustrate the cultural and language divide. On average, two-thirds of the news shown on the Canadian Broadcasting Company originates from Ontario, but only five percent comes from Quebec ("The Rose Revived", 1991: 8). And only one-third of Quebecers speak any English. These economic, cultural, and linguistic factors have together contributed to Quebec's push for independence.

The movement can be broken down into three stages (Pinard, 1992: 478). The first began in the late 1960s and lasted until 1980 and was characterized by long but slow growth. A failed independence referendum in 1980 marks the beginning of the second stage, which was defined by faster growth that lasted until 1988. In that year the third stage began, and it continues today. This time period has witnessed "spectacular growth" in nationalistic attitudes. An attempt to mollify these feelings occurred in 1990 with the Meech Lake Accord, an agreement that would have altered Canada's constitution and given Quebec more autonomy. The accord, however, failed to win approval from all provinces and therefore was defeated. This prompted bitterness in many Quebecers, leading fully 53 percent to conclude that separation was their best option ("The Old Place...", 1990: 46). Ambivalence over the next course of action remains today.

Steven K. Holloway envisions four scenarios for the future of Canada (1992: 536). First, the deadlock that exists today could continue. Another possibility is "the radical decentralization of Canada's federal system." Under this prospect, all provinces would be given additional powers and Quebec would be recognized as a "distinct society." The third possibility is less radical; it would simply give provincial governments a slightly greater degree of autonomy. Last, Holloway suggests the formation of an independent Quebec. It is the possible geographic, economic, and political results of this fourth scenario that this report will examine.

A sovereign Quebec would have a significant impact on North American political boundaries. Not only would Quebec create a third nation, but its secession would stimulate further geographic changes beyond its own borders. At least three possibilities seem plausible: remaining Canadian provinces could break apart and form new countries, the United States could admit Canadian provinces as states, or the ROC could continue as a unified political unit.

The secession of Quebec could promote the destabilization of the Canadian federation. What makes the breakup of Canada a credible extrapolation is Canada's strong provincialism. With the vast majority of the population living in a 100 mile wide band along the United States border that spans over 2,000 miles, it is not surprising that strong regional identification exists. Canadian loyalty to their provinces is greater than the attachment Americans feel for their states (Bashevkin, 1990: 7). Consider the power wielded by provinces compared to American states as measured by the percent of government revenue spent by each level of government in 1988:

	Canada	United States
Federal	48.1	59.1
State (Province)	41.3	24.4
Local	10.6	16.5

Source: Dion (1991), p. 20.

While the federal government controls over twice the money as states do in the United States, the money spent

is almost equal in Canada. The power of the provinces is even greater when one considers that provincial spending is only divided ten ways compared to 50 ways in the United States. Thus it follows that nationalism in Canada, especially when compared to the "fervently patriotic society" of its southern neighbor, is relatively weak (Bashevkin, 1990: 3). Canada simply lacks the national identity that is found in nations such as the United States (Lipset, 1991: 432). While Americans can identify the Revolutionary War as the birth of their nation, Canada's sovereignty was secured gradually. One case in point, not until 1980 was "God Save the Queen" replaced by "O Canada" as the country's national anthem. And until 1982 any changes in Canada's constitution had to be approved by Great Britain. The lack of a unifying national theme suggests that nationalism is not highly developed. The divide is deepest between English and French Canada, two societies that know little about each other. Even the television programs that they watch are different ("The Rose Revived...", 1991: 8). Given this environment of separation, it is not surprising that Canadian identification lies at the provincial level.

Indeed, at least five subregions of Canada can be identified. Beginning in the west, the provinces of British Columbia and Alberta are distinguished by their oil wealth and cosmopolitan character. Heading east, one finds the "prairie provinces" of Saskatchewan and Manitoba. In the heartland of Canada lies the province of Ontario, the center of population, manufacturing, and government. Next to Ontario is Francophone Quebec. Finally, embracing the Atlantic Ocean are the maritime provinces of New Brunswick, Nova Scotia, Newfoundland, Prince Edward Island. The provincialism reflected by these distinct regions could be heightened by Quebec's secession, and many areas might be tempted to follow Quebec's lead.

One candidate for secession is the Western region, comprised of British Columbia and Alberta, which is characterized by an independent attitude. Geographically far-removed from Ottawa, the West feels neglected by the national government. One case in point, conservatives in Alberta have left the national political organization to form their own political party ("The Post-Modern...", 1991: 18). At the present time, Quebec supports Western desires for a more decentralized government (Banting, 1992: 171), but if Quebec abandons the union, the balance of power could shift in favor of Ontario, further alienating the West. Animosity also stems from the present government policy of redistributing national wealth. Under this system, wealthier provinces subsidize equalization grants that are transferred to poorer provinces. With its rich deposits of natural resources and its wealth gained from proximity to the Asian-Pacific economy, the West is a net loser under this policy. Removing this monetary burden could be an economic incentive for secession.

Quebec's secession could also impact Ontario, the center of Canadian commerce and government. This author envisions Ontario acting as the captain of the proverbial sinking ship, trying to keep the rest of Canada held together. Ontario, location of the national government and the largest province by population at 8.7 million (*Road Atlas*, 1992: 113), would have to assert its leadership to prevent other provinces from following Quebec's path to independence. Another issue that would require Ontario's guidance is the matter of the 670,000 Francophones remaining in the ROC. Nevertheless, Ontario must avoid the temptation to seize too much authority and alienate outlying provinces.

The secession of Quebec would probably have the most effect on the Atlantic provinces because they would be

geographically split from the remainder of Canada. Without Quebec, two-thirds of Canada's population would reside in the wealthy provinces of British Columbia, Alberta, and Ontario. Without the voice of Quebec to counteract their power, these rich provinces might end the aforementioned equalization payments, adding to the economic woes of the Atlantic provinces (Banting, 1992: 170). Furthermore, with Quebec physically between the Atlantic provinces and the ROC, commerce could be difficult, straining the Atlantic economy even more. Yet independence may not be the only option for areas like the West and the Atlantic provinces.

The admission of Canadian provinces into the United States is another prospect. Because of the West's large oil reserves and booming economy, the United States might find that area particularly attractive. Documents obtained from the United States government under the Freedom of Information Act indicate that at the last time independence fervor reached a peak the U.S. was interested in the incorporation of British Columbia ("The Post-Modern...", 1991: 18). Others feel a logical match for the United States is Ontario. Some hold that Ontario is so economically linked to the United States that consolidation is inevitable ("The Post-Modern...", 1991: 17). The manufacturing economy of Ontario is virtually interdependent with the economy of the neighboring Great Lakes states. One could argue that the Ontario economy is more closely linked with Michigan, Indiana, Pennsylvania, and Ohio than it is with British Columbia or New Brunswick. Secession could also come from the Atlantic provinces. Isolated from the national government by Quebec, the area could turn to the United States (Banting, 1992: 171). On the other hand, U.S. annexation of Canadian territory is far from assured. No Republican is going to want the Democrats that more liberal Canadians would almost certainly vote into the House and Senate ("Muddling back...", 1991: 18). The breakup of the ROC is far from certain.

Several factors indicate that the ROC would continue as one political unit much as it exists today. Instead of breaking apart the ROC, Quebec's secession could promote a sense of unity among the remaining provinces. The ROC might embark on a closer association in order to avoid Quebec's fate and to plot a future for the nation. In addition, many Canadians who are tired of arguing over their Constitution might feel relief that the ordeal is finally resolved and be ready to focus on other issues ("Canada and Quebec", 1990: 12). Regardless of the ROC reaction, North America could not remain the same.

Quebec's secession would introduce a new dynamic into North American diplomatic and trade relations. The economies of Quebec, Canada, and the United States would all be affected by a free Quebec. Furthermore, the countries would have to reexamine their relations and role in the international system.

Determining the economic viability of a sovereign Quebec is an important factor to contemplate. A separate Quebec would have a population of 6.8 million and a GNP of \$118 billion (Holloway, 1992: 538). This would be comparable to Denmark with a GNP of \$113 billion (Kegley, 1993: 194). Though notably smaller than the economy of Canada, Quebec would have the twenty-second largest economy in the world (Kegley, 1993: 194). One factor in maintaining a solid economy is the ability to find markets. The most logical market for Quebec would be the United States. In 1990, 74.1 percent of Quebec's exports were shipped to the United States, an increase from 50.6 percent in 1980 (Meadwell, 1991: 227). Writer Hudson Meadwell in "The Politics of Nationalism in Quebec" examines the economic future of a free Quebec. Meadwell believes the key to economic success is

supporting a strong free trade policy that substitutes trade with Canada for trade with the United States (1991: 223). All indications show that Quebec would try to pursue a laissez-faire economic policy. In a 1990 speech, the leader of Quebec's main political party expressed that the U.S.-Canada free trade agreement should apply to Quebec in the event of a breakup, and furthermore Quebec would abide by all treaties made by Canada (Dorin, 1991: 402). The United States, on the other hand, might not rubber-stamp a free trade agreement with Quebec. One possible snag is Quebec's subsidization of some businesses enterprises (Symonds, 1992: 47). Additional economic problems would also face the country.

Quebec would have to cope with the economic legacy left by Canada. For instance, Quebec would have to assume a share of the Canadian external debt, which totaled \$340 billion in 1991, almost 56 percent of the GNP (Symonds, 1992: 47). Quebec's portion could reach \$100 billion. Quebec would also have to question if it wanted to abandon the use of Canadian currency. A new currency would be difficult to stabilize, but adopting the Canadian dollar would deny Quebec control of its own monetary policy, leaving decisions to the Bank of Canada ("Muddling back...", 1991: 15). Despite these problems, Quebec has many positives to look forward to.

Currently, Quebec is well-poised to take advantage of secession. First, government institutions already exist. Stephane Dion describes Quebec as "quasi-state" having a "modern bureaucracy" in place, complete with a pre-school through university educational system, public hospitals, pension plans, and a welfare system (1991: 18). In addition, by eliminating overlapping government services, Quebec could take advantage of economies of scale. One estimate puts federal and provincial duplication at 60 percent (Dion 1991: 18). Another factor in Quebec's favor is its growing positive attitude; Quebec is confident it can do well on its own (Symonds, 1992: 46). Indeed, many government offices are already planning for the operation of a sovereign Quebec. Quebecers also point with pride to the success of Hydro Quebec, a \$34 billion state-owned company that provides cheap electricity throughout the province and into some areas of the northeastern United States (Symonds, 1992: 47).

A breakup of the Canadian nation would greatly impact the ROC. Jeffrey Simpson writes, "If Quebec does decide to leave Canada, there will be bitterness, even shock, in the rest of Canada" (1991: 77). Non-Quebeckers are mentally unprepared for a division of their country. A survey found that in 1990 after the failure to pass the Meech Lake Accord, the agreement designed to keep Quebec in the nation by granting it extra powers, an astounding 62 percent of Canadians admitted to knowing little or nothing about the document (Simpson, 1991: 74). One can assume from this data that the Quebec independence movement is not a priority for most Canadians. After this initial shock, the prevailing mood might change to bitterness. Canadians, though not well-informed about the Meech Lake Accord, considered it to be a radical document with weighty demands, whereas Quebec thought the agreement was a first step (Simpson, 1991: 73). The document included a clause that identified Quebec as a "distinct society" and gave it a larger role in nominating Supreme Court judges and regulating immigration. In general, the ROC is "fed up" with Quebec ("Muddling back...", 1991: 15). To illustrate this animosity, ponder the actions of two Ontario cities. After the Quebec legislature passed Bill 178 in 1988, a law that forbade the display of signs that were not in French (Richler, 1992: 1), Thunder Bay and Sault Ste. Marie issued an angry response, passing laws that established

English as the only legally acceptable language. The possibility of acrimonious neighbors is not remote.

Canada's position as a global leader could be questioned if Quebec secedes. Its population would decline by approximately one-fourth. In addition, its GNP would decrease from over \$500 billion to under \$400 billion, a drop that could force Canada out of the G-7 and replace it with Spain. Canada might also be given less voting power in international organizations like the International Monetary Fund and World Bank (Holloway, 1992: 538). Quebec's secession would also remove many conservatives from the national legislature, leaving liberals who generally oppose the U.S.-Canada free trade agreement in charge. The abandonment of this agreement is just one example of how the United States might be affected by a post-Quebec Canada.

Though the United States would probably wish to remain uninvolved in internal Canadian problems, the impact of Quebec's secession would be felt in America. Since the Kennedy administration, American policy toward Quebec has remained firm. Simply stated, America places importance on its relationship with Canada, favors a united Canada, but refuses to get involved in Canada's internal problems (Simpson, 1991: 86). Steven K. Holloway warns, "Washington could find itself enmeshed in complicated and asymmetrical three-way relations or even at times playing Canada and Quebec against each other" (1992: 539). For instance, Quebec might request military assistance from the United States. When formulating its response, Washington would have to take care not to offend the ROC by its decision.

The breakup of the Soviet Union and the conflict in the former Yugoslavia has hopefully taught world leaders not to underestimate the influence of ethnic nationalism. Television news reveals every night the toll nationalism has taken on the people of Yugoslavia. Though governments may try to ignore the events in Eastern Europe, classify them as a European problem or an internal problem, the fighting has not stopped. The United States will not have the luxury of avoiding the secession of Quebec if it were to occur. Some may argue that separation in a modern democracy would be accomplished easily, without bloodshed. That is a hasty assumption. Though Yugoslavia may not be as economically advanced as Quebec, it certainly was not a Third World Banana Republic. If tensions rise, military action, possibly even from the United States, could result. As this report has illustrated, a sovereign Quebec would not only impact Quebec, but the rest of Canada, the United States, and most likely the rest of the world as well.

### Research Strategy

After selecting the topic of Quebec nationalism, I turned on my computer modem and connected with the Central College Library to begin a search of the library's book collection. I found approximately twelve books that matched my criteria. Upon borrowing these books and skimming each, I began to look for periodicals. I consulted the PAIS database on CD-ROM, the ABC Political Science bibliography, and the Social Sciences Index to find several appropriate entries.

Next, I decided to narrow my topic, feeling that examining Quebec nationalism fully would be impossible in a ten-page paper. Therefore I proceeded with the assumption that Quebec would separate, narrowed the time frame to the future, and limited the focus to the impact of Quebec independence on North America. Soon after I started to read the articles and take notes on them, carefully documenting the sources and page numbers.

Then I was prepared to write.

Perhaps the most important source I discovered was a 1992 article in *Orbis* entitled "Canada Without Quebec" by Steven K. Holloway. The article discussed how the ROC would be affected on the international scene if Quebec were to secede and examined the territorial adjustments that might result. Holloway offered a comprehensive study of a post-Quebec Canada and backed up his predictions with factual evidence.

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# The New "Personal" Computers

by Nathan Smith

Artificial Intelligence

Dr. Steve Ratering

Assignment: Artificial Intelligence may be viewed from a cognitive science or a computer science perspective. Computer science deals with functions, algorithms, data structures, and abstraction; cognitive science deals with thought and intelligence. Write an essay on artificial intelligence from a cognitive science viewpoint. Write for someone who has had little or no background in computer science.

Human beings are social animals which demand some form of human interaction for healthy survival. Although the concept is simple, close relationships are often started because of a desire to just talk with someone. Furthermore, each relationship relies upon and is strengthened by unique and complex personalities.

In one sub-field of artificial intelligence (AI), computer-based systems which attempt to imitate human relationships by including personality, intentions, feelings, and moods into their structure are becoming very popular. However, the increased study and rapid creation of these intelligent systems have begun to transform the way computer scientists are using contemporary computer technology.

In the midst of this change, the question that now emerges is whether some completely artificial system might not be degrading to humans. Neil Frude, author of **The Intimate Machine** commented,

"A device that could converse amiably and 'come to know' us might be seen as endangering the unique quality of human interaction and posing a threat to human relationships. Wouldn't such an upgrading of the talents of a machine decrease the extent to which we prize our contact with other people?"

On the other side of the issue are people who question if we should condemn such an innovation that could bring considerable benefits to a large number of people. These individuals believe that those who suffer severely from a lack of social contact could be emotionally strengthened by AI systems. Although these ideas are justified and relevant to the issue at hand, I think that it is necessary to analyze one of the dominant fields where AI systems are currently being implemented.

Many striking examples of emotional involvement with a computer program come from the area of computer psychotherapy. Eliza, a psychotherapeutic computer program created by Joseph Weizenbaum, provides a simplified but structured means by which people can talk to a computer which asks questions similar to those asked by a psychologist. The program has been written to be especially warm and lifelike so that a closeness can be established with the patient. Questions such as 'How do

you feel about that?' and 'Do you care to talk about it more?' are commonly used to feign genuine interest in the patient. Amazingly, "nearly half of the patients who used the system said they were more at ease than they would have been with a human therapist." Certain people have begun to develop strong emotional ties to the computer therapist. For example, questions about sexual problems, gynecological health, and alcohol intake are answered without embarrassment and with more accuracy and frankness than in personal interviews.

After reading **The Intimate Machine** by Neil Frude and pondering on the information that I have presented so far, I continue to be amazed with the intense emotional relationships between the operators and these "social" computerized systems. Although I do believe that, given a certain set of circumstances, human interaction can be closely simulated by computer programs, my understanding of AI systems and communication processes compels me to disapprove of the use of them for any type of social therapy.

A computer, robot, or any other programmable device does not have, nor will ever have, the ability to communicate in the same manner that humans do. Effective communication demands many specific skills for accurate transmission of messages. These skills include analysis of rate, tone, and facial expressions, along with the ability to determine the context of words in a sentence. Also, computers do not have the competence to understand hesitations, variations, and imperfections contained in natural speech. The significance of this part of communication cannot be underestimated or ignored if psychotherapy is to be effective.

Sir George Jefferson, an eminent British physician, once stated,

"No machine could feel pleasure at its successes, grief when its valves fuse, be warmed by flattery, be made miserable by mistakes, be charmed by sex, be angry or depressed when it cannot get what it wants."

The deficiencies that Jefferson speaks of in this statement are social emotions. Human communication and social interaction are not complete without emotion. Furthermore, emotions are (and can only be) an impulsive internal response to a stimulus. We should, therefore, prize human interaction far above that of any artificial system designed to imitate human personalities.

# The Preservation of Species:

**A study of the attempt to preserve endangered species from extinction using captive breeding and reintroduction. Based primarily on the case of the golden lion tamarin, or *leontopithecus rosalia*.**

by *Sinikka Wainionpaa*

**Environmental Studies**

**Dr. Jim Zaffiro**

Assignment: Write a paper on environmental studies.

## The Preservation of Species

Humans have long interfered with the natural process of evolution, often speeding up the process of extinction, and sometimes attempting to undo the damage and prevent the extinction of endangered species. In doing so, however, humans have altered the niche of certain species to such a degree that while true extinction has not occurred, pseudo-extinction has occurred, and the original species have been changed out of existence and replaced by similar but not identical species. In order to comprehend this process, it is necessary first to look at the definition and the process of extinction. From there, one can begin to understand the various methods of preservation, the logistics therein, and why some programs work and others do not. One way to fully appreciate the complex nature of this issue, however, is to trace the process in a particular species. The most relevant case study is the golden lion tamarin, or the *leontopithecus rosalia*.

## EXTINCTION

Extinction is in many ways a natural process; however, various environmental indicators have made it clear that extinction is currently occurring at an uncharacteristically high rate, causing there to be little hope for preserving endangered species. To a large extent, this is due to the impact of human beings on the environment. It is possible, and even recommended by environmental conservationists to view the current high extinction rate as a conflict for which enough solutions must be found to provide hope for species in the future.

A species is said to have undergone true extinction if none of the individuals survive, pseudo extinction occurs when the species has been genetically changed to such a degree that the original species no longer exists (Raup, 1991). True extinction can occur for many different reasons. Once considered to be a mark of weakness, extinction has recently been considered simply a natural process that occurs to some species as a result of "bad luck" rather than "bad genes" (Raup, 1991). For various species, extinction can be caused by a variety of

influences. Particularly fragile species or particularly small species can become extinct for demographic, genetic, social, and biological reasons. But in order for extinction to occur in a stable species, the influencing factors must fall beyond the bounds of the species' ability to adapt, and they must also impact the natural niche of the species (Raup, 1992, p124-5).

Although habitat destruction is a grave problem for endangered species, and for the ecosystem in which they live, for these dwindling species, loss of natural habitat is only one of the threats to their survival. There are also challenges and difficulties which occur in species' demographics and genetics, as individuals become fewer and fewer, and inbreeding becomes a problem (Fiedler and Jain, p280). Inbreeding can cause a reduction in the gene pool of the species, as well as cause a change in social behavior, and a decline in reproduction or fecundity. The question must be considered before any type of species preservation is attempted as to whether or not the species can be saved as it is, or if it must be changed in order to survive. "As geneticist Ian Franklin put it, 'Do we wish to conserve the elephant, or ensure the survival of its elephant-like descendants?'" (Ehrlich, p212).

## II. PRESERVATION OF SPECIES

The decision to preserve species by conservation being made, the consideration of the definition of conservation arises. "Conservation is really a timeless concept. You're conserving forever. You're conserving so that evolution can proceed naturally" (Ackerman, p52). But it must be understood, that in order to conserve biological diversity, complete ecosystems must be maintained. In order to rescue those species on the brink of extinction, it is necessary to preserve and maintain their natural habitats, as well as to design preservation programs for captive animals and education programs for those affected by the conservation plan. There is a world-wide attempt to rescue particular species known as "flagship species," because they are indicators that an entire ecosystem is endangered (Ackerman, p36). Through science, we can comprehend the extent of the influence of humans on the environment, and we can learn to manage and preserve our resources with the help of technology. Education, however, is vital, because it is the only thing which can change understandings and philosophies that can decide the fate of generations to come (Rosenthal, p55).

Before any conservation techniques can be fully established, it is necessary to have population, demographic, and genetic information of the various species within the ecosystem to be conserved to prevent inadvertent damage to the endangered population, which could cause premature extinction and defeat the conservation project. As it is now, some statistics show that it is impossible to save more than 10%-15% of any given ecosystem (Ackerman, p54). Reserves, national parks, and other lands which have been set aside for ecosystem conservation are too small, and species are continuously threatened by a lack of space. It may only be possible to preserve some endangered species, so some difficult choices must be made. These choices revolve around which species can be maintained, the capacity of the environment, the breeding intricacies and complications of the species, and how the preservation program should be developed. Throughout this process, it is absolutely imperative that genetic diversity be preserved, so that those species which can be propagated in captivity can eventually survive without the help of humankind (Hoage, 1985).

Ulysses Seal, chairman of the World Conservation

Union's Captive Breeding Specialist Group feels that captive breeding and reintroduction programs are "essential" (Sunquist, p39). But not all conservationists agree. Although there has been an overabundance of support generated for captive breeding programs, scientists are beginning to question the feasibility and effectiveness of the programs. For many endangered species, hope for survival can only be found in zoos and research laboratories, and in order for any substantial portion of the endangered species and ecosystems to be preserved, further research and development of these programs is vital. Captive breeding can be successful, but the conditions of the captive environment must be maintained at a level that promotes growth, health, and development in the captive-bred species. Continuing development and improvement of the captive environment for each species in captivity must be maintained. The captive environment needs to have enough space for its inhabitants, and it should allow for some variation so the animals develop motor skills and natural behavioral patterns (Box, 1991). Yet captive breeding of endangered species cannot preserve biological diversity: there is space and capital enough for the captive propagation of only a select few species; genetic stability provided by genetic diversity will be lost in many cases because of inbreeding; and reintroduction programs are rarely successful (Ehrlich, p212).

Reintroducing captive-bred animals as a method of preserving endangered species was at one time thought to be the solution, but the risks involved are becoming clearer (Sunquist, p35). The reintroduction of captive-bred species was attempted without a complete understanding of what was involved. Devra Kleinman, director of research at the National Zoo in Washington, D.C. said, "When we decided in the beginning to go ahead with the reintroductions, we didn't know exactly what the risks were, and we still don't" (Anderson, p89). Now it has become obvious that the process of reintroduction is not as simple as it was understood to be. The complications and complexities of reintroduction are many. Captive-bred animals have a difficult time learning to adapt to their wild surroundings upon reintroduction. Under optimal conditions, the animals will have lived in captive environment that resembled their natural habitat. But if this is not possible, then an orientation or training program can help the animals adjust to the wild.

Reintroduction programs should not be implemented without an understanding of the niche of the species, the social behavior of the species, and the effect the reintroduction of captive bred animals will have on the wild population (Benirschke, p965). Survival of the reintroduced species is also partially dependent on outside influences, so a newly reintroduced species should not be left to fend for itself, but should be monitored and even aided by a follow up to the reintroduction process, until the species can function normally in the wild (Box, p373). Complete reintroduction may take two to three generations, with animals in each generation being born to a new stage in the reintroduction process. Among the animals themselves, those individuals at differing stages of adaptation can help each other and learn from each other. For example, a "veteran greenhorn" is an animal that is accustomed to the wild environment and can teach the newer animals to adjust to the wild (Ackerman, p40).

Nearly 150 reintroductions have been attempted, comprised of more than 125 different species, 13 million of which were bred in captivity, yet only around 15 of these programs have been successful (Sunquist, p35). Perhaps the most significant reason for the failure of these programs is that not enough emphasis was placed on reintroduction programs. The reintroduction process is

neither foolproof nor easily enacted. It is, however, one of the more viable options, and it has been found to be at least somewhat successful in preserving specific species and in protecting a few endangered ecosystems.

## III. THE GOLDEN LION TAMARIN

One of the endangered ecosystems is the tropical region of southeastern Brazil. A flagship species of this ecosystem is the squirrel-sized, gold-hued monkey, the golden lion tamarin, which faced imminent extinction only a few years ago. The golden lion tamarin is unusually appealing as a pet, yet it is this quality that was partially responsible for the near-extinction of the species. Although selling golden lion tamarins as pets was outlawed in the 1960's, their demise seemed inevitable because of vast amounts of logging, farming, and other destruction which had nearly annihilated the lush forest home of the tamarin.

When the endangered status of the golden lion tamarin was discovered, the Brazilian government and the National Zoo in Washington, D.C., as well as several other zoos worldwide, created the Golden Lion Tamarin Cooperative Management Committee (GLTCMC). This committee was dedicated to the preservation and propagation of the remaining golden lion tamarins. Extensive field research was done to understand the social, genetic, and medical tendencies and makeup of the species. At the same time, a program was developed to educate people about the golden lion tamarin, in an effort to recruit global help.

Several individual golden lion tamarins were taken to zoos around the world, and captive breeding of the golden lion tamarins was attempted and encouraged by the GLTCMC. At the time, the plan was to provide the best possible care for the tamarins in captivity and propagate the species there, so that the species would be saved from extinction, if only in zoos. The Cooperative Research and Management Agreement was established to guarantee the internationally cooperative restoration and management of the captive golden lion tamarins. In order to ensure the survival of the captive population, steps were taken in genetic management. Some individuals were taken out of the breeding pool through various methods; genetic engineering was used to an extent to maintain genetic diversity; and limits were placed on the number of individuals to be found in the captive population (Benirschke, p962-3). The golden lion tamarin population was rescued from extinction and taken to a level of moderate stability in a captive environment. While there were only around 70 individual golden lion tamarins in 1972, there were nearly 400 in 1984 as a result of the successful captive breeding program (Box, p207). With education closely following each step that was taken, people became more and more aware of the plight of the golden lion tamarin, and they began to join the fight against extinction. The wild population of golden lion tamarins began to grow. Yet the wild population was unstable. There was less genetic diversity found in the wild population than the captive population, and it did not look as if the wild population would survive (Tudge, p151).

Benjamin Beck and Devra Kleinman, both research directors at the National Zoo in Washington, D.C. developed an extensive plan to save the species. With the help of the Brazilian government and local participation, the Rio de Janeiro Primate Center was established in 1974. With contribution from zoos around the world, this center designed a plan for a program that would involve breeding golden lion tamarins in captivity, then reintroducing them into their natural habitat. Benjamin Beck took charge of the Golden Lion Tamarin

Conservation Program, and one of his development strategies was "animal learning," or "learning how the animals learn" (Ackerman, p36). The Poco das Antas Biological Reserve was set up as a place for the reintroduction process; it includes field studies of the tamarins and their habitat, education programs for humans, and training programs for the reintroduced golden lion tamarins (Benirschke, p959). James Deitz, a biologist at the National Zoo in Washington, D.C., stressed the importance of "developing the techniques to manage the population genetically until the population is large enough" to support itself (Miller, p389).

In the spring of 1985, fourteen captive-bred golden lion tamarins were reintroduced into their natural habitat in Brazil. Eleven of them died or had to be removed from the environment for their own protection. Three offspring were born, and the tamarins were watched and their development and adjustment was measured for one year (Benirschke, p971). Further development took place in the program, and statistics and hopes for the golden lion tamarins began to improve. According to Benjamin Beck, thirty five of the ninety reintroduced golden lion tamarins were still alive in the wild in 1991, yet they were at many different stages of development and adaptation (Ackerman, p52). Nearly one hundred golden lion tamarins have been born to reintroduced tamarins, but the process has been exceedingly expensive (Sunquist).

There have also been setbacks. Allegedly started by an illegal hunter, a fire wiped out approximately 30% of the Poco das Antas Biological Reserve. Given the chance to develop, even for a mere fifteen more years, this region might have been able to house one hundred more golden lion tamarins (Deitz, p14). Now, there is a new problem; the Poco das Antas Biological Reserve can support no additional golden lion tamarins. The area is neither large enough nor biologically rich enough for the survival of the golden lion tamarins. Furthermore, it has become clear that strategies must be designed for:

- 1--genetic exchange between wild and captive populations through reintroduction, translocation, and pinpoint genetic intervention.
- 2--increasing carrying capacity of the Reserve through rehabilitation of degraded tropical forest habitats, and
- 3--developing a conservation education strategy that would insure public support for the protection and expansion of remaining forest blocks outside the Reserve (Benirschke, p964).

Now, the difficulty is in slowing the growth rate of the population while maintaining the genetic diversity necessary for the survival of the species. Without additional land, the survival of the species cannot be effectively maintained.

The golden lion tamarin is particularly difficult to maintain in captivity because there are some specific health and medical complications in the genetic makeup of the tamarins themselves. In some captive environments, psychological stimulation and development is considered less important than some physical needs, like the tamarins' high need for vitamin D, and the skeletal difficulties that can arise as a result of this.

In other cases, a particular virus has caused a problem. Only a few days before a particular group of golden lion tamarins were to be reintroduced into the wild, the callitrichid hepatitis virus (CHV) was discovered in one of the tamarins. Apparently originating from a single feeding, the virus had not been seen in wild populations of tamarins. Callitrichid hepatitis (CH) is fatal to tamarins, and although it is not apparently transmitted primate-to-primate, it can be transmitted from a mother to her unborn offspring if she is pregnant (Montali et al, p949). Had this virus been released into

the wild by way of the infected golden lion tamarins, it could have meant the complete destruction of the wild population. With all of the species in close contact in zoos, the chance of infection with any common disease found in zoos is very high. But captive-bred tamarins, who have been exposed to these diseases, have also been exposed to the cures for them. Wild tamarins have had no exposure to the diseases or the cures, so if by chance, the disease were to strike a wild population, total decimation could occur.

In some cases, genetic diversity is lost due to inbreeding. This problem is not to be taken lightly, for genetic uniformity can destroy the viability of the offspring (Benirschke, p962). It is absolutely vital that the effects of inbreeding be monitored closely, so that inbreeding can be stopped before genetic damage is done (Feidler and Jain).

In captivity, golden lion tamarins breed very well, but they breed most successfully in family groups and monogamous pairs, the latter of which are controlled by the biological and social suppression of offspring, and involves the breeding of only one dominant male and one dominant female in the group. Each member of the group contributes to the care for the young, even the elder offspring as they develop. Any disturbance in the family structure of the golden lion tamarin can be damaging (Benirschke, p962). The breeding female golden lion tamarin dominates all other females. Unlike other callitrichids, the golden lion tamarin does not suppress ovulation, but uses social influence and manipulation instead, to prevent other females from reproducing (Box, p292). Highly aggressive in nature, especially during ovulation, the breeding female takes out her aggression on any female tamarin that crosses her path, whether from within her family group, or an intruder.

Golden lion tamarins have some innate responses towards different stresses. For example, a fear of predators flying overhead, and an inclination to gather when danger is in the air, shows an innate will to survive. Unfortunately, there are many things which captive-bred tamarins must be taught. Preparation for any reintroduction program of golden lion tamarins involves social training, feeding training, danger avoidance training, and locomotion training (Benirschke, p974). The monkeys have become so pampered in their captive environment, that they don't know how to climb trees in search of food, peel or eat fruit, obtain insects from hard to reach places, or face disappointment when the food is not readily available. Research has shown, however, that young golden lion tamarins can be taught more easily than older tamarins, and males are harder to teach than are females. (Miller, p389).

The transition from captivity to the wild is a difficult one, and without the proper training, golden lion tamarins which were bred in captivity will soon be disoriented and unable to survive in the wild. The contrast between the secure and predictable world of the zoo and the wild dangers and unpredictability of nature is not easily masked. There is so much in the golden lion tamarin's natural habitat that is foreign to the captive bred tamarins, that they struggle to adapt to the new means of food attainment, the new sounds, the real predators, and the natural climate. That is why it is so vital that captive breeding programs enable the species to retain as many natural tendencies as possible (Box, p221). According to Benjamin Beck, the tamarins "just react. Their genes and hormones and experience tell them what to do" (Ackerman, p50). But if facing the reality of life in the wild and the difficulties and complications therein is not in the experience of the golden lion tamarins bred in captivity, how can they survive in the wild?

Beck's biggest concern with the way captive environments are currently maintained is that they do not address the real life issues of the golden lion tamarins:

Zoos need to rethink their philosophy. At the moment, it's to protect every individual animal and spare it stress, spare it hunger, spare it climatic extremes. We also carry with us this notion that the wild is somehow a romantic paradise, but look around you. The wild tamarins are half-starved; they're infested with parasites; they don't have veterinary care; they don't have reliable food sources; they're subjected to wet and cold; there are predators stalking them every minute. It's not paradise at all. And zoo-born animals are ill equipped to deal with these kinds of challenges (Ackerman, p51).

#### IV. CONCLUSION

With all of the genetic controlling, the captive pampering, and the training required for reintroduction, the evidence is clear that the species which emerges from a captive breeding preservation program is not the same as the species which was endangered. The golden lion tamarin illustrates the genetic and demographic complexities, the social intricacies, the delicate balance of health, and ultimately, the mutability of an endangered species. Any attempt to propagate the endangered species, without the proper concern for the preservation of the natural habitat, will allow for the propagation of a species unlike the original. Perhaps then, the only feasible option for preserving endangered species, is "in situ conservation--the breeding and management of endangered species within their natural environment" (Anderson, p89). This method of species preservation maintains one of the keys to the preservation process, and that is the need to preserve entire ecosystems as much as possible.

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# The Miller's Letter

by Kyle Munson

Chaucer

Dr. Mary Stark

Assignment: Create a persona from our class readings.

Dear ol' Barney,

How's the dog? How's the wife and kids? Do you still get 'em all mixed up? (Ha, ha!) I'll take it that you're reading this at our favorite table in the "Sir Osis Pub", wondering just where in the hell I am. (That's why I addressed this letter there instead of your home, ha, ha!) You won't believe this, Barley — whoops!, I mean Barney —, but I've fallen in with one of those holier-than-thou pilgrimages to Canterbury! Don't ask me what's there, but I think it has to do with this Sam Beckett character. He didn't object to several knights slicing his head off — in his own cathedral! — and so now folks believe him holy for that choice. I don't understand either, Barney.

Anyway, I fell into this spring-time ritual at the Tabard Inn: several days ago I awoke on its doorstep. As far as I can remember, I was traveling back from a grain deal, stopped to whet my whistle, and found a truly worthy wrestling opponent — or so I thought. I can't recall his name, but he lasted less time than it takes to drain your pint. Afterwards he was jovial and kept me supplied with ale the remainder of the night.

Suddenly, the next day, a collection of saints and rogues descended upon us, and all they seemed to talk about was "pilgrimage, pilgrimage, pilgrimage!" After a while, I got the jist of it and thought, "Wait a minute, I could twist their holiness and make these stiffies have some fun!" None of the other pilgrims discovered this, but I bent ol' Harry Bailly's ear — he's the owner of the Inn — and convinced him to make a contest out of telling tales, the winner collecting from the Tabard a feast with unlimited ale! I told him to take credit for the idea and serve as judge, because this way I'll get to win! You know me, Barney, and nobody gets 'em rollin' at "Sir Osis" like I do!

But it's not all fun and games, Barney. Many of these pilgrims are truly a pain in the ass to deal with! If this group is a fair sampling of our kingdom, I can finally understand all of its problems. There's far too many of these so-called pilgrims to describe them all — if I could remember —, but there's a couple that stand out.

The Knight, for instance, is one of those typical glorified tin cans with an ego to match his array. You'd go bleary-eyed talking to him, having to sit through endless accounts of his crusades, battles and such. It's a wonder his head fits into his helm! Having a Squire and Yeoman at his bidding for dirty work — a couple of annoying little gnats they are! —, all the Knight must do is sit on his horse and look puffed up! And his tales! You'd think the world turns upon chivalry, honor, and all that crap! I made sure one of my little ditties came after his, just for contrast. God forbid you should have any fun in life, eh? The thing about the Knight that gnaws at me the most is this: I know I could better him in a fair fight, but I have to bow and scrape 'cause he'd bring in all that honor bull and hide inside his armor and behind his lance.

But at least the Knight gets about in the world, experiencing life. It's this skinny, prissy little Clerk on the

trip that turns my stomach. I accidentally sneezed on him this morning, and I thought he and his horse would blow over! I bet one sip of ale in his belly would have him seein' God! It's no surprise that he's so meek and weedy. Every damn time I spy him he's buried in some book about logic by one of those long-dead authors from a long-dead kingdom. If the Knight's not preaching chivalry upon my left, then this stick-man's pouring over Aristotle to the right! If that learning was worth anything, their kingdoms would still be around, wouldn't they? At least he doesn't talk much.

Well, that's all I'm going to write now, Barney. Sock everyone in the gut for me there at the Pub, and be so kind as to watch over my mill for a while. Don't let any of those simpletons weasel by with a fair price! (Ha, ha!) I think I'll serenade the pilgrims with my bagpipes again soon, but only after I find some more ale to clear my throat. Hope to see you soon, you loveable bastard!

Your dear friend,  
Robin

P.S. Tell that wench behind the bar that if she so much as smiles at another man I'll give her a pilgrimage of pain! (Then wink while you grab her! Ha, ha!)

# Peter Grimes

by Cory Springhorn

Opera & Oratorio

Dr. David Williams

Assignment: Choose an opera and focus on a character or scene.

Benjamin Britten (1913-1976) was one of the greatest British composers of the 20th century. His most famous opera, *Peter Grimes*, was a milestone in the history of British opera. As Philip Brett writes, "Not since the time of Purcell and Handel had the country heard such a brilliant new work in the theatre from one of its own composers."<sup>1</sup> Thus, it is ironic that when the British composer discovered the British poetry which was to become the source for his British opera, he was in the United States.

Britten and his partner, Peter Pears, had come to America in 1939, at least partially due to their pacifistic beliefs and the increasing certainty of war between Britain and Germany. It was in California in 1941 that Britten was introduced to the writings of George Crabbe (1754-1832) through a reprint of a broadcast talk about Crabbe by E.M. Forster. Crabbe had lived in the east English coastal town of Aldeburgh, not far from Lowestoft, where Britten was born. Britten later recalled, "I did not know any of the poems of Crabbe at that time, but reading about him gave me such a feeling of nostalgia for Suffolk, where I had always lived, that I searched for a copy of his works, and made a beginning with 'The Borough'.<sup>2</sup> "The Borough" is an 1810 poem made up of 24 Letters which tell the stories of several inhabitants of "The Borough", which is presumably based on Aldeburgh. The 22nd of these Letters tells the tale of Peter Grimes, and it was this story which most captured Britten's imagination. Almost immediately upon reading the poem and Forster's article, Britten and Pears began to discuss turning the story of Grimes into an opera, although it was not at the time economically feasible for them to do so.<sup>3</sup>

In 1942, Britten and Pears returned to Britain, and by this time, Britten had a commission from American conductor Serge Koussevitzky to produce an opera based on Crabbe's poem. Britten and Pears presented their story treatment of Peter Grimes to poet and novelist Montagu Slater, who had collaborated with Britten on two earlier projects. By the end of 1943, Slater had completed a draft of the libretto for *Peter Grimes*, but Britten continued to ask for changes and revisions. Britten began composing the score in January of 1944, and had completed it by February 1945.

On June 7, 1945, *Peter Grimes* premiered in London on the stage of the Sadler's Wells Theatre, marking the reopening of that theatre after the conclusion of the war in Europe. Peter Pears played the title role. The response to the opera was largely positive, with the detractors all but drowned out by those who emphatically praised this great new national opera. Leonard Thompson, who played Grimes' doomed apprentice in the original production, recalls of opening night:

When the curtain came down, for I imagine something like—well, it seemed like minutes, but it must have been about thirty seconds—there was *nothing*. Absolutely nothing. And then it broke out. And it went on and on. I think there were something like fourteen curtain calls.<sup>4</sup>

Among the critics who spoke favorably of the opera was *The New Statesman's* Desmond Shawe-Taylor. In his

review, Shawe-Taylor makes the following recommendation to those going to see the opera:

Neglect Crabbe. If you have not just been reading "Ellen Orford" and "Peter Grimes", you will find it much easier to see these characters from the composer's standpoint; and you will be able to appreciate the libretto for the very skilful piece of work it is.<sup>5</sup>

As Shawe-Taylor indicates, the character of Peter Grimes did not walk unaltered from Crabbe's poem into Slater's libretto. By the time Grimes stepped onto the Wells stage, many changes had been made in his actions and motivations, some out of dramatic necessity, and some for the sake of creating a story which could explore the themes which interested Britten. It is fortunate that Britten made these changes, because if he had not, the Peter Grimes of the opera would have been a far less complex and interesting character.

Crabbe's Peter Grimes was loosely based on an actual citizen of Aldeburgh, a fisherman named Tom Brown whose apprentices had an unfortunate habit of disappearing.<sup>6</sup> Crabbe created a fictional history for this fisherman and turned him into the cruel and sadistic Peter Grimes, whom Crabbe called "untouched by pity, unstung by remorse, and uncorrected by shame."<sup>7</sup>

Peter Grimes, as portrayed in "The Borough", is hateful and abusive to his pious father. Following the death of his father, Grimes is free to behave as badly as he chooses and becomes a gambler and a thief. Grimes becomes enthralled with his own wretchedness and desires to inflict pain on a boy, presumably as a substitute for his dead father. From the poem:

But not success could please his cruel soul  
He wish'd for one to trouble and control;  
He wanted some obedient boy to stand  
And bear the blow of his outrageous hand;  
And hoped to find in some propitious hour  
A feeling creature subject to his power.<sup>8</sup>

Having acquired an apprentice boy through a workhouse, Grimes proceeds to treat the boy miserably, beating him for pleasure and sport. Although Crabbe presents no evidence of any redeeming values in Grimes, he shows that the citizens of the Borough share responsibility for the fisherman's crimes, since they are aware that Grimes is mistreating the boy, but they do not intervene:

But none enquired how Peter used the rope,  
Or what the bruise, that made the stripling stoop. . .  
None reasoned thus—and some, on hearing cries,  
Said calmly, "Grimes is at his exercise."<sup>9</sup>

Eventually, the boy dies as a result of the abuse suffered at Peter's hands. Peter acquires a second apprentice, who meets the same fate. Peter's next apprentice receives more pity from the townsfolk, causing Peter to abuse him less, but the boy dies at sea. At this point, Peter is censured and shunned by the Borough. Peter's feeling of being alienated from society, which was revealed even before he took on the first apprentice ("And as these wrongs to greater numbers rose/The more he look'd on all men as his foes")<sup>10</sup>, is now reinforced. The portrayal of Peter Grimes as a lone man at odds with an unfriendly society holds more dramatic potential than does Grimes as simply a creature of evil, and it is this aspect of Peter's personality which provides the basis for Britten's opera.

Forbidden to have another apprentice and hated by the Borough, Grimes succumbs to his own darkness and loses his precarious grip on sanity. Although Crabbe has

said that Grimes is untouched by remorse or guilt, it is the haunting memories of his dead father and apprentices which drive Peter mad and ultimately lead to his death.

Britten's Peter Grimes is not nearly the villain that Crabbe's Grimes is. Christopher Headington identifies three reasons for this: first, Britten and Pears wanted a title character for whom the audience could have at least some sympathy; second, Britten had a more positive view of human nature than did Crabbe; and third, Britten and Pears identified with Grimes as an outsider in society.<sup>11</sup> Pears explains that "Peter Grimes moved away from unrelieved villainy to a more interesting and complicated character—a frustrated person with imagination enough to aspire to a better condition."<sup>12</sup> Britten himself further explains:

A central feeling for us was that of the individual against the crowd, with ironic overtones for our own situation. . . I think it was partly this feeling which led us to make Grimes a character of vision and conflict, the tortured idealist he is, rather than the villain he was in Crabbe.<sup>13</sup>

Grimes, as he is portrayed in Slater's libretto, seems not to be just an outsider from society, but a victim of a society more cruel than he has ever been. The libretto begins with Grimes standing accused of the murder of an apprentice who died at sea (under circumstances similar to those which caused the death of the third apprentice of the poetic Grimes). As there is no evidence to counter Peter's testimony, the court rules that the apprentice died in accidental circumstances, but Peter knows that in the minds of the Borough's citizens, he has already been branded guilty. Yet, apart from the death of this one apprentice, we are provided with no reason why the people should pass such harsh judgement on Peter. No reference is made to the elder Grimes, to any earlier absence of any other information, we can only assume that the Borough's hatred of Peter is a result of its own cruelty rather than his.

Such a radical departure from Crabbe's presentation of Peter Grimes apparently did not occur to Britten immediately. An early plot scenario for a Peter Grimes opera, which Britten and Pears wrote while traveling back to England by sea in 1942, included a prologue which did not appear in the final opera, in which Grimes' father appears on his deathbed cursing Peter, and a drunken Peter enters, behaving rudely to his dying father.<sup>14</sup> However, it does seem that Britten decided early on that Peter Grimes should not be as reprehensible a character as Crabbe had made him, since Britten first envisioned Peter Grimes as a baritone role, which symbolically places his character between the traditional heroic tenor and villainous bass.<sup>15</sup> (Ultimately, Britten decided to make Peter Grimes a tenor, allowing the role to be sung by Pears.)

With no explicit reason given for the Borough's treatment of Peter, an explanation must be sought between the lines. The key may be in the fact that Peter is not content to be a poor fisherman, stuck on the bottom rung of the ladder of Borough society. As Peter Pears explains, "Grimes sees no way of escaping from his wretched hut other than by vindicating himself in the eyes of the Borough, making money, and becoming respectable."<sup>16</sup> Grimes' hope is to catch a record shoal of fish and with his new wealth to marry the schoolteacher Ellen Orford and set up a household and shop. He dares to dream of rising above his station, and Philip Brett speculates that it is this quality of Peter's character which sets the Borough against him:

His difference of nature—proud, aloof, rough and visionary—poses some sort of threat to the narrow

ordered life of society struggling for existence against the sea, and therefore he is subjected to persecution.<sup>17</sup>

In the prologue, Peter reveals the peculiar logic of his plan to us. Warned by the court not to take on another apprentice unless he gets a woman to help him take care of the boy, Peter says, "That's what I want—but not yet—not till I've stopped people's mouths." Although Peter has little use for the people of the Borough, his pride demands that he prove his virtues to them, perhaps an impossible feat. Ellen Orford's duet with Peter shows that she is willing to stand by him to help him fulfill his dream, but he is wary of trusting even her, responding to her offer of help by saying, "Until the Borough hate/Poisons your mind."

Peter's isolation from the community is further demonstrated in Act I, Scene I, when Peter remains outside as a raging storm approaches, as the rest of the town huddles for safety in the Boar pub. Balstrode, the kind sea captain who is one of the very few in the Borough who will give Peter the benefit of the doubt, encourages Peter to marry Ellen at once, to raise his standing in the town's eyes, but Peter rudely rebuffs the captain. Peter's treatment of Balstrode, along with his words to Ellen in the prologue, show us Peter's tragic flaw: he is so accustomed to being the enemy of all that he can't respond appropriately to those who would be his friends. This flaw will lead to Peter's fateful confrontation with Ellen in Act 2. First, however, is an important scene in which we begin to see how heavily the memories of the past weigh on Peter's mind. Peter ventures inside the Boar to sing his "Great Bear and Pleiades" area, in which he asks, "Who can turn skies back and begin again?"

With Ellen's help, Peter takes on a new apprentice, but when Ellen discovers a bad bruise on the boy's shoulder, Peter's last hopes for redemption begin to unravel. It is by no means certain that Peter has inflicted the bruise on the boy; Peter says the boy was bruised in the "hurly burly" at sea, but he clearly feels threatened by what he perceives as Ellen's lack of faith in him. Peter becomes desperate when Ellen suggests that their plan to redeem him in the eyes of the town has failed, and that the plan may have been wrong. Peter responds by singing: "Wrong to plan? Wrong to try? Wrong to live? Right to die?" In his anger, Peter strikes Ellen and flees with the boy, as the townfolk exiting church watch. Thus begins Peter's final downfall, as he has shown that he can't even keep peace with the woman he loves.

Back at Peter's hut in Act 2, Scene 2, Peter is becoming unbalanced. He tries to blot out his ever-present, ever-increasing feelings of guilt by creating an illusion of happiness for himself. In spite of what has just happened, he tells himself that he will marry Ellen and make a home for them, but the memories of his dead first apprentice haunt his dreams. As Peter dissociates, a mob of townfolk descend upon his hut, concerned for the boy's safety after the scene with Ellen. The paranoid Peter pushes the boy outside to the cliff, to climb down to the boat and escape the posse, but the boy slips and falls to his doom. Peter panics and sets out to sea.

Act 3 occurs three days later, and there has been no sign of Peter or the boy. When Ellen finds the jersey she knitted for the boy washed onto shore, the Borough correctly deduces that the boy has died, and upon hearing that Peter's boat has docked, they set out to make Peter pay for his supposed crime. When we next see Peter, he is obviously demented. He hears the townfolk angrily calling his name, and he knows that they will never believe that this apprentice's death was an accident as well. There is no longer even the slightest hope of redemption for Peter, and this knowledge is too much for

him to bear. Act 3, Scene 2 is a portrait of a broken man, beaten by the cruel fates which have conspired against him, and as Peter hallucinates, we see the full extent of his pain. As Peter Pears explains, "His frustrations, his guilt, his longings, his inadequacy, his resentment—all now find expression."<sup>18</sup> While Peter battles with his memories, the two people whose kindness Peter spurned—Ellen and Balstrode—reappear to offer him one final way out. Balstrode tells Peter to take his boat out to sea and sink it, to escape the vengeance of the Borough. Balstrode's words find their way through Peter's madness, and Peter does what he is told. Peter has finally succumbed to the Borough's hate, but in so doing, he has also escaped it.

The tragic story of Peter Grimes is summed up by Hans Keller:

Peter Grimes is the living conflict. His pride, ambition, and urge for independence fight with his need for love; his self-love battles against his self-hate. Others too, he can (sometimes) love as intensely as he can despise them, but he cannot show, let alone prove his tenderness as easily as his wrath. . . Thus he is determined to seem worse than he is, and not be as good as he feels.<sup>19</sup>

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#### ENDNOTES

- 1 Brett, Philip. "Breaking the ice for British opera: 'Peter Grimes' on stage" Brett, Philip, ed. *Benjamin Britten: Peter Grimes*. p. 95
- 2 Headington, Christopher. *Britten*, p.2
- 3 Carpenter, Humphrey. *Benjamin Britten: A Biography*, p. 157
- 4 Carpenter. p. 222
- 5 Shawe-Taylor, Desmond. "Peter Grimes': a review of the first performance". Brett. p. 158
- 6 Forster, E.M. "Two essays on Crabbe". Brett. p. 21
- 7 Headington. p. 3
- 8 Forster, E.M. "Two essays on Crabbe". Brett. p. 12
- 9 Carpenter. p. 156
- 10 Brett, Philip. "'Peter Grimes' in progress". Brett. p. 55
- 11 Headington. p. 3-4
- 12 Pears, Peter. "On Playing Peter Grimes". Palmer, Christopher. *The Britten Companion*. p. 105
- 13 Headington. p. 4
- 14 Brett. "Peter Grimes' in progress". Brett. p. 50-51
- 15 Brett. "Peter Grimes' in progress". Brett p. 56
- 16 Pears, Peter. "Neither a hero nor a villain". Brett p. 151
- 17 Brett, Philip. "Britten and Grimes". Brett. p. 185
- 18 Pears, Peter. "On playing Peter Grimes". Palmer. p. 107
- 19 Keller, Hans. "Peter Grimes': the story, the music not excluded". Brett. p. 105



# Beatrice's Instructions to Virgil

by Deb Forssman

World Literature, Beginning to 1600

Dr. Mary Stark

Assignment: Create a persona from our class readings.

Virgil,

"It is I, Beatrice, who send you to [Dante]" (line 70, canto II) because he "has strayed onto a friendless shore and stands beset/ by such distress that he turns afraid/ from the True Way, and news of him in heaven/ rumors my dread he is already lost" (lines 61-65, canto II).

On the Friday before Easter, I ask you to go to Dante. You will find him alone in a dark wood on a crooked path. "Fly to him and with your high counsel, pity, and with whatever need be for his good/ and soul's salvation, help him, and solace me" (lines 67-69, canto II). I trust that your own ability to reason helps you to see that the only way for Dante to rise to new understanding and knowledge, is for him to fall down into the depths of Hell. I am entrusting him to your care because you can provide the virtue and human reason needed for the perilous journey. While I am the symbol of God's Divine Love, you represent the image of separation from that love. Be his "guide through the sad halls of Hell," steering him down and climbing back out with him (line 106, canto I). You must help Dante reach the path of the "True Way" (line 12, canto I). Then through me, because I am "a worthier spirit," my Master will continue to guide him, hoping his curiosity to know more spurs him on; your human reason cannot completely explain the light (line 116, canto I). Together, we offer an inside-outside experience of God's Love.

At first in Hell, Dante will observe involuntarily because of shock but later as he descends further, he will choose to look out of curiosity and out of the need to understand. As a virtuous pagan, you will give him reassurance. Fear will block his descent. Go and offer to strengthen him with the promise of hope after delving into the dark. As you descend with Dante, he will doubt his worthiness of the vision you help him to see. Continually, he may question himself and the scenes he encounters because of fear and the grotesqueness of the sinners and their punishments. Although we do not want Dante to become disheartened, self-questioning will help him clarify his vision. Be prepared to encourage and counsel, but never allow or inspire Dante to wallow in pity or compassion for sins and sinners that God has judged. If necessary, reprimand Dante for daring "to sorrow at God's judgement" (line 30, canto XX). Dante must learn to stiffen his sensitivities to evil or he will be blinded by darkness, unable to see the true light. When the sinners interrogate you about his presence in Hell, you must be prepared to tell them that "Death has not come for him, guilt does not drive/ his soul to torment" (lines 46-47, canto XXVIII). The sinners must fear him and wish for his return unharmed to the upper world; Dante is the promise for rekindling their memory among the living. For Dante, God has granted this special privilege of

experiencing the dark and then the light while he is yet alive so that he can comprehend his errors and be led to correct his ways.

Besides reassurance, you, as his guide, will also be his protection, traveling with him through Hell. When you approach Cerberus, the salivating three-headed hound of Hell in circle three, you must supply the clever wit and craft in outsmarting the beast or you will endanger Dante's life. If you must use Geryon, "the prototype of Fraud," as a means of transportation in descending to circle eight, be sure you put yourself, out of love and virtue, in the more precarious position near the stinging tail to shield Dante from Geryon's poison; you, already in death, have nothing to lose (line 7, canto XVII). And if by chance at Cocytus, you find yourself in the palm of Antaeus the Giant's hand, hold Dante in your embrace. You alone are responsible for safely leading "this living man from pit to pit/ to show him Hell" (lines 95-96, canto XXIX). Only by showing him, will he see the way to the straight path.

By leading him down through Hell, we wish to reveal the differences between God and the corrupt world, particularly the ways of living which are intolerable and unacceptable to Him. Eventually, Dante must reject the earth's evilness and in doing that, he will conversely reaffirm how he must act in the world. A reaffirmation is Dante's only resurrection. At the start of his journey through Hell, he will encounter an experience and an environment which are foreign to him. But slowly by seeing with his own eyes, he will begin to know and gain the means of understanding them both. Dante needs assistance from you and from me in his human learning about God's love. Metaphorically, as poet, you may prefer to envision his descent as God's way of deepening Dante's thought.

Divinely yours,

Beatrice

# The Beast From Within

by Matt Harmston

American Literature 1875-1930

Dr. John Miller

Assignment: Write a 4-6 page original analytical paper on an author in this unit of the course.

Throughout his writings, Henry James deals with the psychological aspects of his characters. "The Beast in the Jungle" illustrates how the personality traits of John Marcher and May Bartram can inhibit the development of a relationship. John's selfish personality makes him an unlikable sort. Because of her tendency to be dependent on John (427), May takes on the responsibility of serving and catering to every psychological need that John has. He decides that he must try not to be totally selfish, even though he wants to (428). Unfortunately for both John and May, he never succeeds in eliminating his selfish tendencies.

Selfishness can be defined as undue concern for one's own person. This can be carried to the point of obsession. John is obsessed with the beast. This beast is a psychological construct that turns out to be the recognition of his inability to love. Because he does not know what the beast is until the very end of the story, his life cannot change until he realizes its nature. May points out the extent of his preoccupation with the beast by saying, "The beast has done its office. It has made you all its own" (442).

The beast has a purpose in John's life: it gives him meaning. Because of it, he has gotten May to commit her life to him, as well as obtained a significant preoccupation for himself. John's life never has a dull moment, for much of his time is spent dwelling on the beast (425).

Preoccupation with his fate climaxes with John becoming obsessed with the beast. This result is unavoidable because John becomes so focused on trying to determine what the beast may be that he tunes out many other aspects of his life, the most important of which is the development of friendships. This point is illustrated at May's funeral when John "seemed to feel unattended" (444). John realizes that he truly is on his own. He is alone in the world for the first time since he and May made acquaintance at Weatherend.

John's blindness affects his life further by preventing his own salvation from the beast. Even when presented with May's design to conquer the beast, John remains blinded by his obsession. This is illustrated when May tries to free John from the beast by indirectly telling him that she loves him and to get him to love her in return (449). All John can do with May's plan for deliverance is "...stupidly stare at the escape she offered him" (449). If John could only see the world without his vision clouded by obsession with the beast, he might have been able to avoid it.

Though John's personality contributes greatly to the formation and realization of the beast, May also plays a role in promoting the development of the beast. She hints that she has loved John since they first met near Naples: "...If I had only thought you foolish," she explained, "the thing I speak of wouldn't so have remained with me..." (424). Later, May is bolder in showing her love by saying that "I would live for you still--If I could" (444). Had she

not loved John, he would never have realized what he missed out on. For reasons that will be addressed later, May cannot directly tell John of her feelings. Her way to subtly make her intentions clear is to cater to nearly every psychological demand that John encounters.

A major problem with catering to someone's whims is that eventually one partner needs the other to provide most of the meaning in life and assumes minimal responsibility in the search for life fulfillment. A dependent relationship develops. May's dependence on John is particularly strong, as she is in a bad situation that is compounded by her having a dependent personality (427). Dependency is unhealthy in their relationship because May and John don't allow themselves to grow spontaneously. John lives in a state of fear all of his life because he leans on May rather than facing his fears and overcoming them (438). Fear stunts emotional growth.

Personal growth can be looked at as an assertion of individuality. But, societal rules keep May from revealing her feelings. The solution to this predicament is to drop subtle hints to John in hopes that he will then realize her feelings. One of May's clues comes forth when John asks how he can repay her for her concern and kindness. She replies "By going on as you are" (434). She apparently appreciates him for who he is, thus illustrating that she loves him.

The tragic irony in the story is that even though May feels very strongly about John, his tunnel vision keeps him from noticing the extent of her emotions. Even so, their relationship has a strong bond: co-dependency. Co-dependency is when a partner in a relationship needs the other person to need her. This is a very unhealthy link between the two, as John (being selfish) takes advantage of May's dependence and ends up using her for his own benefit (449). The nature of this use is "...giving him a constant sense of being admirably spared" (428).

May might realize that this relationship is getting nowhere, but she cannot get out of it. May needs John to need her, much as an enabling spouse of an alcoholic supports the maladaptive behavior out of the need to be needed. This illustrates another reason why May cannot tell John of her love for him: to rock the boat may make him less dependent; thus, he would not need to depend on her. She would outlive her usefulness to him. For May, not being essential in John's life is unacceptable because her life revolves around his: "...she did watch with him, and so she let this association give shape and colour to her own existence" (430). May would still be "alive," but she would be completely numb to the world around her.

"Numbness" is helpful in explaining how John relates to May. He seems to exist only for the beast, rather than for May. Almost as retribution for his blindness to her needs and desires, May will not tell John what the nature of the beast is. She leaves the discovery up to him.

Several years pass before John realizes what form the beast has taken. In the final few pages, John meets a fellow mourner at the graveyard. When he looks into the other gentleman's eyes, he sees the pain of loss. The man is grieving for a loved one. John suddenly looks into the eyes of the beast: he can never love another person (449).

By failing to love May, John remains chained to the beast. In a sense, he is an emotional slave. His subjugation can only be terminated by loving May. Now that she is dead, John realizes that he has missed his chance. To John, all hope seems lost.

John's acknowledgement of May's feelings is a metaphor for tapping into repressed emotion. Henry James understands that keeping powerful thoughts inside can have negative effects if they surface all at once, rather than in a gradual, orderly fashion. The result of John repressing all of the important emotions in his life is

the anguish and devastation he feels at the tomb when he realizes the truth about the beast.

The manner in which May deals with the truth of the beast is characteristic of the society, and one can see that James is effective in illustrating the perils of such behavior. As evidenced by John's obsessive personality, his function in the story is not to portray a normal person under common circumstances, but to make an example of individuals who become too focused. John's cultural symbolism can be generalized to bankers, big businessmen, etc. The point of the symbolism is that if society stresses too much specialization, a person may be excellent in one fact of being, but not be able to relate to the more important aspects of life, such as interpersonal relationships.

A holistic perspective on life is necessary if a person is to be integrated into society adaptively. Without it, one may fail to know one's self as well as others and therefore not understand society. Society and personality control one's life. Developing a society that supports the individual and that produces a good self image in its citizens is the only way to avoid long term emotional suffering.



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