

THE LEHIGH REVIEW



A Student Journal of the Liberal Arts

VOLUME ONE

SPRING 1992

THE LEHIGH REVIEW



A Student Journal of the Liberal Arts

VOLUME ONE

SPRING 1992

Each year, Lehigh University publishes *The Lehigh Review*, a student journal of the liberal arts. Every issue contains some of the best writing by Lehigh students.

Any scholarly articles, creative essays, or book reviews may be submitted. The *Review* does not ordinarily accept fiction or poetry.

All submissions should reflect the breadth and depth of the liberal arts. We are especially interested in submissions that draw from the content or methodology of more than one discipline. The *Review* expects students to submit well-researched work that exceeds mere synthesis of existing resources. Submissions should demonstrate imagination, original insight, and mastery of the subject.

Faculty Steering Committee

Norman Girardot, *Religion*
Richard Jenseth, *English*
Benjamin Wright, *Religion*
Nicola Tannenbaum, *Anthropology*
Rosemary Mundhenk, *English*
John Lule, *Journalism*

Faculty Associates

Ian Duffy, *History*
Elizabeth Fifer, *English*
James Frakes, *English*
Steven Krawiec, *Molecular Biology*
Judith Lasker, *Sociology*
Edward Lotto, *English*
Richard Matthews, *Government*

Student Editors

Timothy Falconer '92
Kristopher Takacs '95
Court Harson '93
Stacy K. Stainbrook '93
Melissa N. Rozenwald '95
Fredrik O. Jonsson '95
Chris Ware '95
Jeffrey Bohrer '93
John Hassi '94
Brad Foss '94
Rosalie Torres '93
Juhi Gupta '95
Jeremi Roth '94
Dana D'Arienzo '93
Amy Mulligan '94
Joshua Feldman '92

All submissions and queries should be addressed to: The *Lehigh Review*
c/o Religion Studies Department, Maginnes Hall, Lehigh University, Bethlehem, PA 18015

Lehigh University



Peter Likins, President

Alumni Memorial Building 27
Bethlehem, Pennsylvania 18015

July 2, 1992

To the Board of Editors
The Lehigh Review

Colleagues: -

Sixty-five years have raced by since President Richards gave his blessings to the establishment of the *Lehigh Review*, and both the world and our campus have known many changes.

There are certain constants in life which endure, however, and the value of a forum for student expression is surely timeless. I am very pleased with your plans to produce the *Lehigh Review*, and wish you every success. As President Richards said in 1927, "We do not like to see any worthy Lehigh enterprise fail."

In 1992, as in 1927, your achievement will be measured by the commitment of our students. They are worthy of your challenge, and I look forward to reviewing the product of their response.

Sincerely,



WHY THE LEHIGH REVIEW?

An Inaugural Statement

As Groucho, in frantic exasperation, once said: "Not 'Why a duck?' . . . but 'viaduct!'" That's "viaduct," not "quacking feathered fowl" but, as all good engineers know, "a long bridge consisting of a series of short concrete or masonry spans supported on piers or towers." Now just as some may not always appreciate Groucho's magnificently absurd word play, so also it may be that many will simply not get the point of something so apparently peculiar as a student journal of the liberal arts at Lehigh University.

Such a doubting response to the *Lehigh Review* is suggested by the fact that an earnest literal mindedness – in contradistinction to foul punning, intellectual waggishness, and plain cultural literacy – has often had an honored place at this institution. Thus it is no secret that Lehigh had, for many years, a special fondness for the burly ethos, manly methods, and applied focus of operational thinking – a state of affairs that was celebrated in the famous Monty Python chorus of "We're all lumberjacks, engineers, and captains of industry and we're OK. . . ."

But for those of us who have come together to produce this publication, it is our conviction that Lehigh was never just another pretty polytechnic place. In more of a polymorphously perverse sense, we believe there is strong evidence for affirming Lehigh's status as an university – that is, as a place where the bracing questions of "Why a duck?" and "Viaduct?," the effete metaphorical fowl of the humanities and the sweaty empirical fauna of scientists and engineers, are impossibly and necessarily bound together in an eclectic common enterprise known as the liberal arts. Further documentation of this institution's liberal academic heritage comes from the welcome discovery that we have only resuscitated an older tradition that, in 1927, produced the first *Lehigh Review*. Indeed, since a documented remembrance of times past is the very stuff of a historical consciousness and conscience, we have taken this opportunity to republish a short, though piquant, article from the first *Review* (i.e. James Rather's plaintive "Engineers and Writing").

This incarnation of the *Lehigh Review*, a cooperative student and faculty enterprise, is part of a larger national movement in undergraduate research and writing seen in such publications as the *Wittenberg Review* and Stanford University's *Techné*. Like them, the *Lehigh Review* is designed to be a forum for scholarly essays and reviews which highlight the breadth of subject matter, the interplay of ideas, and the interdisciplinary cross-fertilization of interpretive methods seen in student research and writing throughout the humanities and the social and natural sciences. In this sense, the rationale for the *Lehigh Review* is simply that it records and makes public the lively diversity of intellectual life and scholarly reflection at this University.

The response to our "call for papers" was extraordinary and led to a flood of submissions from a broad spectrum of students representing various departments and

disciplines. The acceptance of papers for publication in this first issue of the *Review* proved, therefore, to be very competitive and has given life to what, we feel, is a surprisingly interesting and multifarious collection of articles. These results, as well as the overall number of submissions, testify to a degree of student interest, intellectual curiosity, and writing ability that is truly encouraging.

Of course, getting a new publication started would be impossible without the support of various offices and people. We would like to express our gratitude to Dr. Patti Ota and the Provost's Office, Dean James Gunton and the College of Arts and Sciences, and Professor Edward Gallagher and the English Department for their generous financial support. Our thanks also go to Professor Chava Weissler and Nancy Sutton in Religion Studies for the use of the Departmental Commons Room as an *ad hoc* office and for administrative support, to Professor David Pankenier and Victor Zabolotnyi in Modern Foreign Languages for the use of their computer facilities, to Philip Metzger of the University Libraries for archival research, and to Professor Ricardo Viera of Art and Architecture for design support. We must also acknowledge the special expertise of Timothy Falconer, our Tao-Meister of computer layout and design, for his heroic efforts in producing this journal. Finally, we pay homage to the fact that when the going became tough, it was the pithy poignancy of Alfred Packer's memory that kept us going.

This first fascicle of the reconstituted *Lehigh Review* has been dubbed "experimental" at various stages of its protracted gestation and birth. We hope that the quality of the essays and reviews in this issue will serve as an example of the kind of scholarship that Lehigh students can do and are doing. Most of all, we hope that the *Review* will become a regular forum for the very best student writing at this University.

Faculty Steering Committee

July, 1992

CONTENTS

LEGO: Not Just a Toy <i>Peter G. Leis</i>	1
Engineers and Writing <i>James B. Rather, Jr.</i>	9
Letter To Jack Kerouac <i>Timothy Falconer</i>	11
"LECHAIM!" Understanding Cholesterol <i>Maureen Dunn</i>	17
The Sabbatian Movement: Seventeenth Century Apocalypticism In Crisis <i>Nora Beidler</i>	25
When God Was A Woman <i>Tammy Hillebrand</i>	33
Eduard Shevardnadze's Reasons for Resigning <i>Joshua Feldman</i>	37
Aeneas' Game, Rome's Fame, Vergil's Aim: The Irony of War as the Basis of Roman City Founding <i>Kristopher J. Takacs</i>	45
Head Down, Ears Back <i>Jeremi Roth</i>	49
The Mongol War Machine and the Russian House of Straw: A Military Assessment of the Mongol Conquest of Russia <i>Michael W. De Nie</i>	57
Said In His Heart: The Murders in Richard Wright's <i>Native Son</i> <i>Scott T. VanDuzer</i>	65
What the Holland Tunnel Did For New York <i>Patrick Horan</i>	69
Brain and Brawn: The Struggle To Coexist <i>Melissa N. Rozenwald</i>	73
The Tao of <i>Who?</i> <i>Timothy Falconer</i>	77
Modern Art and the Mathematical Sublime <i>Paul G. Beidler</i>	79

"Peter, you want LEGO¹ for your birthday *again*!?" That request was heard by my parents for over a decade. LEGO building brick toys were by far the most important single recreation in my childhood, for both mental and social development. LEGO is, without a doubt, a noteworthy but neglected influence of technology on society. Technology has had a significant impact on the development of LEGO, but for many decades, LEGO has had an overwhelmingly large impact on the development of children. What is LEGO?

LEGO Systems, Inc. is the producer of LEGO building bricks, which are the basis for a huge collection of plastic interlocking toy pieces of varying dimensions, colors and applications.² The key to LEGO is that the dots on top of each piece (LEGO Systems calls them *studs*) and the hollowed out area underneath make the pieces stackable and interchangeable.

The LEGO Systems company, now located in Enfield, Connecticut, was founded in 1932 in the Danish village of Billund by Ole Kirk Christiansen, the grandfather of the current president, Kjeld Kirk Kristiansen. The first plastic pieces were introduced into the toy market in 1949, as the use of plastic became much more practical after World War II.

In 1958, the company, then under the direction of Ole's son Godtfred, introduced a brick with studs on top and tubes underneath. These advancements added versatility and building stability, which dramatically increased sales. As the 1960s and 1970s progressed, so did LEGO. The LEGO wheel was created during this time, as was the LEGO TECHNIC system, which included gears, wheels, pulleys, pumps, and battery-powered motors. Also at this time DUPLO Preschool Toys were born, which are simply a larger version of LEGO (about four times bigger). As every LEGO product is made to fit together within a system, even DUPLO pieces integrate with the standard LEGO bricks.

How is LEGO Fabricated?

LEGO has undoubtedly benefited from refined technological advancements. LEGO Systems explains the production of LEGO in this manner: Each LEGO brick and DUPLO block is a precisely crafted product made from 13 types of plastic material, mainly ABS (*acrylonitrile butadiene styrene*). All plastics used must be non-toxic, durable and colorfast. The brick's property of fitting together, known in the trade as 'clutch power,' comes from a meticulous manufacturing process that has earned a legendary reputation in the toy industry. To achieve a high standard of clutch power, the allowable variation in the diameters of studs and tubes is only .02mm. or about .0008

inch. The molds, manufactured in Germany and Switzerland, are fashioned of hardened steel and polished to a high sheen with diamond dust.³

LEGO Systems' high standard of quality and detail extends far beyond the design specifications. As the company continues to develop, it seeks adherence to several foundational standards set for each LEGO product. For example, the company tries to ensure that LEGO will provide unlimited play potential for both boys and girls, regardless of age. Furthermore, the availability of extra sets guarantees that the value of the toys will increase with the quantity. Lastly, they want a product that fosters childhood development, imagination, and creativity in conjunction with year-round, healthy, quiet play.

LEGO and Child Psychology

Clearly, many of the LEGO System objectives and standards are aimed at producing toys that positively enhance a child's growth experiences. The various LEGO 'environments,' such as the Basic sets or the Pirate Worlds, are targeted at a specific age range. With the possible exception of DUPLO, most of LEGO is appealing to the ages that correspond to a particular growth stage as defined in the 1950s by the Swiss developmental psychologist Jean Piaget.

Piaget's theory of cognitive development defines the *concrete operations period* to be roughly from 6 or 7 years to 11 or 12 years of age. In this period, children "become able to manipulate mentally their internal representations, much as they earlier became able to manipulate physical objects. These operations, or *internalized actions* as they are sometimes called, make children's thinking much more powerful."⁴

This stage of development encompasses most of LEGO's target group. By examining the introductions to the assorted LEGO 'Idea Books,' it is clear that they are promoting the development of these 'internalized actions' at various ages. For example, the basic *Idea Book* says the book has "lots of good building ideas, but it's really only a beginning. . . . LEGO is the toy that's new every day. You'll come up with your very own inventions. In fact, you may build things that have never been built before."⁵ Through this simple yet inspirational literature, it is clear that LEGO assists in and supplements the development of children in the operations period. Playing with LEGO, therefore, is not only a diversion, but an essential vehicle for development.

The Importance of Play

Not only does LEGO intentionally conform to Piaget's stages, it fits into general models of play as well. Play, however, "is by no means a trivial and simple set of behaviors," the authors of *Play Interactions*, point out. "It is a complex multidimensional sequence of behaviors that changes considerably in process and morphology."⁶

There are numerous types of play, and LEGO provides a healthy catalyst for many of these types:

There is *exploratory play* in which the infant or child examines via manipulation the characteristics of objects. *Functional play* involves sensorimotor practice or what may be called playful repetition. In *constructive play*, the young child attempts to create something, such as pictures, forms, or objects. . . . *Object-orientated play* may involve single object, multiple objects, and comminatory object play. . . .⁷

Furthermore, the importance of LEGO and other such toys as a means to aid in play is further outlined in *Play Interactions*:

Play is a special interaction with the environment for young children. It is a unique way to learn about the world and a creative way to express their knowledge, enact their representations of experiences, and display psychological advances in many domains. . . . Evidence indicates that play is related to children's social and emotional development. . . . It is also an index of children's imagination, curiosity, motivation, preferences, interests and persistence.⁸

Play is an intrinsically motivated activity in humans, and LEGO has been an integral addition to child development. As LEGO is one of the best toys that builds competence, confidence, and develops categorical relations, it has become the pinnacle of the toy industry. The positive influence of LEGO as an effective toy can be demonstrated concretely.

LEGO, LEGO, Everywhere!

LEGO is not just a toy in childhood, but a captivating and educational learning tool. LEGO has had a far more profound influence on many children than just keeping them out of trouble. I believe, for example, that my character beneficially reflects my long history of LEGO playing. There are several particulars that contribute to positive experiences (mine included) both with LEGO and as a result of LEGO playing:

- LEGO is a self-esteem builder; it only takes a few minutes to learn the basics of LEGO building, thus providing immediate satisfaction.
- The books that come with the LEGO sets are extremely well compiled. They are calibrated for the differing levels of experience, and they are expertly illustrated. For example, the depictions created for the simplest levels of building have lines superimposed between the pieces in a model. Thus, the child has clear guides for building composite designs.
- As the experience level increases, so does the difficulty of reconstructing a particular model. More pieces are needed to complete a stage of building (for the models that have step-by-step diagrams), and more models are shown that have

no 'answer keys.' The TECHNIC sets are far more complex, omitting intermediary steps and thus adding a further challenge.

- LEGO building forces multi-dimensional thinking. When attempting to emulate a two dimensional illustration, the child must not only discern what he or she is seeing, but also what the model will look like from all angles. When constructing a model from a mental picture, the child learns to create symmetrically (when called for), and to orchestrate the physical reproduction of that mental model.
- LEGO fosters resourcefulness and creativity; thus, the child develops powerful problem solving techniques. If a particular piece is not available, or if the original design has a flaw that a mental model could not foresee, the child must find alternatives. Also, he or she learns how things impact and alter each other, especially when using the TECHNIC sets of gears and axles. This process of cause and effect, trial and error, or constant design revision is one which is clearly applicable to many tasks that an adult faces.
- LEGO facilitates real world learning. When a child builds an airplane, he or she will wonder how a real airplane works. Furthermore, the educational employments of LEGO are limitless. Many schools have tapped this resource: "available to schools only, LEGO DACTA sets offer a natural progression of complexities, beginning with the construction of elementary working models, to the construction of more technical motorized models" that can be controlled through a computer.⁹

A College Senior?

Patrick Dean Manning, a May 1992 Lehigh graduate in Mechanical Engineering, has been playing with LEGO since the age of six. Like me, he always asked for LEGO on his birthday, and he still turns to LEGO for an occasional entertaining diversion.

His favorite LEGO System was (is) the Space Environments because "the Space Sets are totally unbound. When you build a car, for example, you must adhere to certain limitations – like having wheels. But the building options for a space ship, on the other hand, are limitless. There are no constraints whatsoever."¹⁰

Manning feels the foremost advantage of LEGO is the creativity it fosters. One can constantly create new inventions from the same pieces, and thus LEGO is never boring; imagination continuously translates into a physical creation. Furthermore, Manning credits the origin of his group dynamic skills to his 7th grade team LEGO efforts in which he and his friends would create an entire kingdom and week-long adventures to match. Through these experiences, he claims he learned improved communications and negotiation skills (you can't always get the piece you want from a friend, but you can work out a deal), as well as sharing and cooperation skills.

LEGO's influence on Manning did not wither soon after 7th grade. Not only did he write his college entrance essay about LEGO, but it still has an influence on his work as a Mechanical Engineer; his specialization is in CAD/CAM¹¹ work and design. In many of his projects, he must start with a block composed of a material such as iron, and then he must decide what tools or methods to use in order to design alterations of the block in order to produce a functional and useful product.

Manning explains that "although LEGO is just a non-academic diversion for me now, growing up it was a huge and positive influence on me and my friends. LEGO is a very valuable toy for kids. They should be encouraged to use anything that expands their minds and imagination, and LEGO does just that."¹²

Education, Technology and LEGO

Lehigh University President Peter Likins recently spoke about the method of learning that education, specifically engineering, should use. "Learning – *real learning* – requires research because science is something that you should *see and feel*."¹³ LEGO initially fosters that kind of desire to get a 'hands on' education. Manning agrees with this, adding that LEGO makes children learn spatial relations and building, thus providing valuable design experience at an early age. Interestingly, one student at MIT reported that LEGO is highly recommended as the medium of choice for the engineering projects she is required to construct.

When a child plays with LEGO, especially the TECHNIC sets, he or she is informally learning concepts that are essential foundations of scientific and technological advances. Two such concepts are those of *kinematics*, which deals with the study of relative motion, and *kinetics*, whose concern is with the action of forces on bodies.¹⁴ Although the application of these ideas may be complex, the foundations thereof can seep into an inquisitive child's imagination at a very early age.

Limitless Imagination

The LEGO company is still guided by the philosophy of the founder, O.K. Christiansen:

The world of the child is as limitless as his imagination, as colorful as his dreams. Let a child create and he will build a world much richer and more fantastic than any grown-up may think of.¹⁵

Guided by these words, LEGO Systems, Inc. has been very successful as a positive influence on children's development, particularly in Piaget's concrete operations period, and as a perfect vehicle in healthy play. Many attest to the beneficial influence of LEGO, as well as to its role as a catalyst in fostering resourcefulness and creativity.

"Toys [such as LEGO], which are integral and important vehicles of play, and technological changes in society and education, have a substantial impact on children's play interests and activities."¹⁶ Technological advancements in the earlier history of

LEGO, combined with firm guiding principles, allowed LEGO to become successful. That success is clearly more than monetary, however. "People don't all speak the same language, but everyone can enjoy building with LEGO bricks."¹⁷ Over 11 billion LEGO pieces are sold each year in 118 countries. More than 300 million children all over the world have played with LEGO. Although I am just one of that 300 million, I feel that LEGO, which comes from the Danish words *leg godt*, meaning "play well," was appropriately named.

NOTES

¹ LEGO®, DUPLO®, DACTA®, LEGO® System™, and the LEGO® logo are exclusive trademarks of INTERLEGO AG. © 1991 the LEGO Group.

² The dimensions of a single brick are 32mm long x 16mm wide x 10mm tall. Each dot (or *stud*) has a height of 2mm and a circumference of 5mm.

³ *The LEGO Story Unfolds*, LEGO Systems.

⁴ Siegler, 34.

⁵ *Idea Book*.

⁶ Brown and Gottfried, xvii.

⁷ Brown and Gottfried, xvii.

⁸ Brown and Gottfried, xviii-xix.

⁹ *The LEGO Story Unfolds*, LEGO Systems.

¹⁰ Interview, Patrick Dean Manning.

¹¹ CAD/CAM is an advanced Computer Aided Design and Manufacturing process in which a programmer can create complex images on computer and electronically send the results to an automated machine for building, thereby avoiding blueprints and potential inaccuracies.

¹² Interview, Patrick Dean Manning.

¹³ STS 11 Class Notes.

¹⁴ Erdman and Sandor, 2.

¹⁵ *The LEGO Story Unfolds*, LEGO Systems.

¹⁶ Brown and Gottfried, xviii.

¹⁷ *Idea Book*.

REFERENCES

Children's Thinking, Robert Siegler, 1986.

Cognitive Science: An Introduction, N. Stillings, M. Feinstien, J. Garfield, E. Rissland, D. Rosenbaum, S. Weisler, L. Baker-Ward, 1987.

Idea Book: No. 2, LEGO Systems, Inc., Enfield, CT, 1977.

Interview, Patrick Dean Manning, Senior Mechanical Engineer, Lehigh University.

The LEGO Story Unfolds, Public Relations Department, LEGO Systems, Inc., Enfield, CT, 1991.

Mechanism Design: Analysis and Synthesis, Arthur G. Erdman and George N. Sandor, 1984.

Play Interactions: The Role of Toys and Parental Involvement in Children's Development, Edited by Catherine Caldwell Brown and Allen W. Gottfried, 1985.

"Technology and Human Values" (STS 11), Class Notes, 12/3/91, Dr. Likins, President of Lehigh University, member of President Bush's Council of Advisors in Science and Technology (PCAST).

Engineers and Writing

James B. Rather, Jr.

Reprinted from the *Lehigh Review*, Volume IV, 1931

The tendency of the average young undergraduate engineer to mock the Arts or Business man, who when answering a quiz question, slings what is called in well-known college jargon, the bull, has become a well established custom at Lehigh.

You cannot get along in engineering, he will invariably remind his non-technical colleague, by throwing the bull. Then he will grin. The grin, of course, means that he thinks most Arts and Business men to be past masters of the art of bull throwing. We are trained to use the fewest possible words, he will continue. We have no use for unnecessary padding. With that parting comment, he will generally drop the subject.

On the whole the harmless razzing by the engineer is justified, but sometimes it is carried too far. Then there is danger ahead. Far too many engineers are forgetful of the importance of knowing how to write well. A few realize that to be successful in today's engineering world, one must possess an aptitude for the writing of letters and reports. But even those aware of that fact actually have the secret belief that because they have mastered the demon calculus, they will be able to pick up that ability to write good business letters without difficulty. A professor at the New York University School of Commerce addressing his class in Business English this summer, declared that it is a well known fact that most engineers are notoriously poor letter writers. Despite the efforts of many engineering universities to tighten up on their courses in English, a technical man in one of our large oil companies made a similar statement recently. In my experience, he commented, of employing young engineers from the various college classes for the past thirteen years, I can find no improvement. All but a few still remain incoherent writers.

Why does the world at large continue to think that it is only natural for engineers to be poor writers? It is not natural for any educated person to be a poor writer. Writing is largely a matter of experience, but engineers do not bother to obtain that experience. Too many of our bright young engineers are pleased to think of themselves as men of few words. Consequently, many of them are in a quandary when they find that they have to answer a letter which requires diplomatic language, soft soaping and perhaps a little padding.

Of course a man can be an engineer without having to write letters, but then there will be reports to write. Certainly one cannot hope to be an executive engineer without being a moderately good writer. However, there are engineers who have no desire to be executives. These need not worry about writing.

The purport of this article is not primarily to boost publication work as a valuable extra-curriculum at Lehigh. Nevertheless, in the opinion of the author it will do no harm to say a little on that subject. At Lehigh most men could learn how to write well by taking an interest in publication work. For engineers particularly, it might well be their main extra-curriculum activity; but only a few are interested. The feeble support and lack of attention given to the various publications is deplorable. Too many of the men now doing publication work have been railroaded in by their fraternity leaders. Most of these leaders do not care about supporting a publication. They do not explain to the new men the value of that type of work. What they want is points for their house. They want their brothers to flourish keys and charms.

It is evident, considering present conditions at Lehigh, why engineers are graduated year after year without knowing how to write proficiently. It is because the majority of them are not interested enough to obtain the necessary experience. If more engineers would go out for publication work, while at college, they would assist in removing the stigma which has been long attached to them. At Lehigh the situation is even worse than it is at other institutions. Even the Arts and Business men are not particularly interested in activities pertaining to writing. Instead of being recognized with the athlete and politician as student leaders, Lehigh's journalists are almost unknown. Every year the student body is astonished when one or two of the more fortunate ones are tapped by Omicron Delta Kappa or Sword and Crescent. How did he 'worm' his way in, they murmur. Then they learn that the dark horse is the editor of this or that publication. Only another grafter, they think and let it pass.

Many engineers could learn to write successfully by being reporters on the *Brown and White* or contributing Editors to the *Lehigh Review*. In the past only a few have taken advantage of that opportunity. The student attitude towards writing in general is typified in the relentless razzing of Lehigh's newspaper. Some hurl criticism at it because it is subsidized. Only a few consider facts which make a subsidization plan necessary. These know that Lehigh is divided into a comparatively small number of living groups. They realize that if the paper were not subsidized it could not exist because the fraternity houses would purchase only one or two papers each. But what do they say? Most of them say, well if it is absolutely necessary to have a subsidy, why have a paper? Then they will no doubt comment that one can not expect much interest in journalism at an engineering college, anyhow.

The whole attitude is there in a nut shell. Most engineers will always be miserable writers until experience teaches them that to take an interest in writing will be to their advantage. It seems inevitable that until that time comes, Lehigh's publications will continue to use crutches.

Letter To Jack Kerouac

Timothy Falconer

Midnight after reading *Lonesome Traveler* and walking back on jagged stairs through Trembley rise and fall, and looking down thru springtime still bare skinny trees and wet gray moonlit mist, past the dark down beaten bare bonecold empty southside railyards, at the twinkling across the river "boy isn't this charming, I hope the tourists come" northside lights, and the clock tower sounds its twelve bongs, my black just-bought sneakers, and should-be washed gray coat with every pocket assigned to familiar items (clock pen, dictionary, tiny umbrella, cigs, lighter, wallet, keys – my walking purse), I'm solid and comfortable, thinking toward this, the much thought about all-out attempt to address you, your life, your art, and perhaps in doing so, myself, the world, and people.

Now thru the wall come regular and more frantic now squeaks of my friend's loft, not built for the silent pounding he's giving his girl. She's moaning out her real or imagined enthusiasm, just after me thinking they may as well scream, there's nothing more constraining and inwardly frustrating than coming like the world's end, grand all across the valley nuclear blast, but with pursed lips so as not to let on to grandma that sex is real and didn't die with grandpa, who always did his duty in the quick mechanical way he counted the stock items at his everyday monotony grocery loading dock. She'd count his staccato plunges, never move or change her breath, he'd finish in the usual minute, turn over and straightaway they'd sleep.

My friend's finished, and there is something to the word *lonesome* in this title, being now in this perfume smell long leg black stocking land of mostly strangers.

Lonesomeness is its own reward. It heightens my link to things, to the water running through the walls, and the cricket chirping motor of the frig with my juice and tea and so many rotting things my friends hope will go away. Lonesomeness lets me linger and leaf thru my memory, of my years in Florida and the summertime all-hell-and-fury rainstorms, thickquick with lightning blasts I'd listen to, hiding out across town in my parent's newbuilt palace, all clear and spacious and many windowed, with ceilings high and every metal surface flashing from the flash, then the quickefter cougar yell building crash thunder, not rolling but *on* me, making me jump and look around. One time I walked out into the large vaulted lanai and around the tiny pool, the walk-in bathtub, where the rain from above was cut into a fine mist by the closely spaced screen holes of the lanai, and could smell a burning smell, but not a flaming tree in sight.

There was another time, on the phone with a girl of no little obsession, who changed her mind about me as quick as these Florida summerstorms, and her now in a mood, and me now too, talking to her, as a storm hits and I'm trying to explain that we're meant to be, but her not convinced, "how can you tell," and me saying listen to God and intuition and sure signs but her still being deaf to it, with now the storm raging and I say again listen to God, but her not budging and finally I slam down the phone, just as one mother of a vengeantful thundercrash shakes our little town with me thinking "God sounds pretty loud."

And with mean fate and the thunder rumbling, or the memory of it rumbling, or me rumbling, I walk over and sit at the stool-height island bar in the large large immaculate bright clear kitchen to first a cigarette and then vodka poured from an immaculate bright clear Absolut bottle, and probably half a joint nearby, and brood on how it is she's always over to see me in a flash when I get a bag and borrowing, while with her being frigid accusing outright miserly when it's her dime, and me always giving, always again and again, like endless waves to a rocky cold shore never responding, and wondering why I put up with her bitching, but somehow then a light flicks on, and understanding seeps through me in a wordless way that *builds*, the power builds, and (sunlight now) I see her clearly, with compassion.

Without the possibility of any other outcome my hand moves on its own to the everpresent pen and I open my journal to an immaculate bright clear and full of all possibility page and write and write and write and write. Always in pen, no mistakes, *alla prima*. With no thought on why or where to, the words arrive and I duly record them. This I understand about you, Jack Kerouac, your duty on earth. I understand and appreciate telling a tale for no other reason than companionship. Very strange to ask, "Why write? What for?"

I've read the accounts of your life. The whole story, and it tied to your work, and especially the big-bad ever-expectant accusing fame-mongering critical commentators of course vastly missing the point, mostly cause they so needly sought one, and one that could be tidy and well-remembered by the many many strangers who wanted the synopsis tagline to go with the now well known name. "*That's not writing, it's typing,*" says Mr. Capote with a blindness that becomes him.

People say fame did you in. That's a tagline too. I know you better. I know what it's like to be born with a cross as big as the Empire State, and the moon and back to carry it. *Love, work, and suffer*. Fame was the convenient escalation of the all-the-time-there path to martyrdom for you.

You're born with the suffering of the world and feel it more keenly than most grimy offwork dying & desperate men all around because you can *see* and have an artist's compassion for things. And amidst all the deaf to God thunder, eyeshut, just do your job, never mind the glory, that so completely fills this world, you watch and live and in you builds a landscape, a vision for detail, an immense more than Niagara's endless

rushing *need* to let it flow out of brain onto page, line by line by line, meanwhile cursing the slowness and quietness of the task when inside you it's exploding.

BLAST IT OUT....capture the mood & image as it's fresh, a novel in three days. This I also understand about you, Jack. There's nothing as sad as a beauty fixed up over time, some liposuction here, and a nose job later, and on and on the plastic surgeon editors erase whatever in the work was real and true and conveyed the need for it.

The writer's need. That's what's missing from these histories of you, the public myth. Often I've wondered if you read Rilke, and what you'd have made of a line like: *The only possible judgment of writing comes from it arising out of need*. All the fame-mongers go to hell, I'm writing to write, with no expectation, because there's no other way.

How could they understand the life or deathness, the very tied to your soul necessity, of expressing and remembering and living? You seek because there are details to glory in. You write because you can't possibly keep it all in your head. There's no other way. Your enthusiasm for living things straight out and then bringing them again to a new sort of more enduring life in words is a joyous thing. I'm glad you were alive.

But there's a dark side to this writer's need, the one that *really* did you in, and many others like you: the martyrdom side of need. Like you, I over time found that the need, the compulsion, the sense-making writer's reflex, was strongest when emotions ran high and trouble loomed large. Soap opera circumstances arose and gave apparent direction strength and power to my writing. I learned to like it.

We martyrs live the sort of life that drives this compulsion, meanwhile half aware that we're doing it deliberately. We live to extremes and milk every fight every worry every fear for every drop of truth and leave no-longer-patient lovers frantic because they can't follow us and don't see why or as has happened often say things like "You're blowing things up just so you can write your goddamned book."

Things become immense only, grand-scale, including the habits that kill, that killed you, that lead very obviously though unseen and ignored toward too soon extinguished an end to a bright bright flame. A martyr's death, and each day of drinking is penance for the everpresent sin of being a worthless ass never quite able to fully express or be what we see and hear.

Living the binge and purge, seeking extremes, crazywild people and scenes, and pulling stunts, and then *OUTING* it all in one huge orgasmic justifying write of passage, and afterward the slump, the emotional hangover and deadness and depression till again the compulsion, and another bar, more people, more scenes, to begin again the cycle, each time more out of control, with us loving it.

For the last five years I've lived the martyr's life, and while in it, the *life*, each moment was mine, exalting and spiraling, or mired down and dismal dark. And by writing, the grand saga unfolding always, it all had a purpose and a plan. Rebel for a cause, I saw no real reason to slow down.

Until, yes you guessed it, last October, when after long pinstripe blackshoe work hours, off early, I'm alone at a bar downing my first wicked strong Zombie, now relaxing and ready for trouble and calling all over, sweet bartender lady giving me more and more quarters, while making another very lethal death drink, and me with an empty stomach.

I convince a guy and his girl to join me, though I'm way ahead and loud, they leave and I follow, argue argue in the parking lot, then I'm off driving alone, this mix tape I made blasting and me slapping the steering wheel, and I drive past my turn cause there's more still to do, and the road is straight and dark, and suddenly spinning crunch wetness smash swirl all hell imploding dark upside down and then stop. Settling hiss. *Slow dripping.*

I rolled the car several times off the road into a swampy field miraculously missing every nearby solid thing and me not dead. The windows were open and now mud over the entire Lincoln Continental interior and my things and my suit and me. In a daze, both drunk and scared senseless, I climb out and walk to the road, where people are talking, amazed I'm alive, then ambulance lights, hospital room, mean cop, and morning waking backache on hard & cold jail cell floor.

All day that day talk and talk and bumming smokes from cell mates, \$10,000 bail and me in mudcaked business suit and ribs blaring painful but no one listening, me a criminal. The car dead, no insurance, I lose my job, thousands in lawyer money, my family all worried, fair weather friends all critical and nowhere around, and me all alone for one last month of runwild reckless drinking blackout did we fuck whose glass is this whose he what happened last night smoke smoke smoke not caring.

Then off to rehab to please the judge and get off easy, and every night there write the novel, and during the day learn the secret about my martyrdom, and learn how much better the writing is, more clear consistent worthwhile exuberant while sober, something I wouldn't have thought possible, so long I'd been the drink-to-death dedicated describer of detail.

And here now, back at school, and five months clean and dry, with death no longer the semiconscious prize I'm after, but now work, and balance, and loving life thru and thru. During these months I read your work, Jack, and learned your life, especially the last years of it, which clearly would be mine as well if not for that Florida swamp and the sweet bartender and the Zombies.

Now outside the morning light and springtime birds chirping, and me the only soul awake and glad to see the morning come, whereas once long nights I closed curtains shirking to my vampire bed to lie awake drugged, teeth chattering till noon.

Glad to see the light and glad to know somehow I saw the secret and have broken away from the artist binge and purge, the martyrdom, and can now expect to live, and not regret things and quickly watch my art turn into self-inflicted bitterness and

paranoia, and then someday no warning, click, the light goes out, no fanfare, no winning lunge, just *hello death*, I've been expecting you, where've you been?

And glad to know of Kerouac, the language of water, now met. I among the thousands after who've read your words and felt the urgent GO, and learn to look more closely because of you, can only offer this letter, and my respect sympathy admiration and jealous twinges in return.

A blade of grass jiggling in the winds of infinity, anchored to a rock, and for your own poor gentle flesh no answer.

This is my answer. May your oil lamp burn on in infinity.

"LECHAIM!" **Understanding Cholesterol**

Maureen Dunn

"LECHAIM!" The bat mitzvah had begun as a celebration of love and life. Mr. Silverman looked around the room at his family and friends. "TO LIFE!" he shouted again. "Everyone please enjoy the dinner and help our family celebrate this momentous day!" After a year of preparing for the event, it was finally time to sit back and enjoy the festivities on a day his youngest daughter would never forget. It seemed like only yesterday that Marla, his oldest daughter, was thirteen and now she is twenty-one. But looking back, not much had changed. It seemed impossible to believe these times could ever change. Attempting to converse above the harmonious buzzing of laughter and music, the Silvermans remarked proudly on the strength and vitality of the family unit. A piercing scream drew the quieting crowd to the dance floor.

Marla Silverman awoke to the smiling face of a very white man standing in a very white room. Not only did this man wear a white shirt and white jacket, he was close to an albino with white hair and a beard to match. Heaven was the only option that Marla could dream of. Wait . . . of course, a dream! Now this explanation was supported by a continual and annoying beeping noise that was sure to be the alarm clock. The one problem, however, was Marla's inability to move in order to stop the terrible noise. The man kept looking, smiling and moving his mouth until the whole scene went white once again.

Marla awoke a second time to more smiling faces. They almost looked relieved. These faces were a norm in Marla's life. The parents, the grandparents, the aunts and uncles . . . yes they were all here in Marla's bedroom. It must be another one of those family gatherings. But why relieved faces, especially in her bedroom? Mama was the first to speak. "Marla, darling, you will be just fine. Please lay still and don't fuss. The doctor will be right back. We are all here with you."

From nowhere, the white man reappeared. Ah, the doctor, he was back and had hardly exchanged pleasantries before the family sat in silence and listened about this "condition" as the doctor called it. "There is a high possibility of a genetic disorder. We must run some tests . . ." As the word sunk in, Marla realized they were talking about her "mild heart attack."

April 6

Dear Diary,

Today I was released from the hospital. It was such a wonderful feeling to be in my own room after the scary and cold atmosphere of the hospital. I was surprised that I was released after only two nights, but Dr. Thornton assured me that even those patients with multiple heart attacks are released after only a few days. Upon my dismissal, Dr. Thornton stressed the severity of my condition. Even though I had only had a mild heart attack, my cholesterol level was around 500 mg/dL, well above the acceptable level of 200 mg/dL. My entire lifestyle and diet must change. He went on to tell me that medication might be needed at a later date to reverse the effects of high cholesterol in my blood. The tone of Dr. Thornton's voice really made me believe that this situation was life threatening. With my cholesterol pamphlets and suitcase in hand, I headed for the door wondering how exactly I could change my entire lifestyle.

Until later,
Marla



April 7

Dear Diary,

I just returned from dinner at Grandma and Grandpa's. I was trying to convince them of the importance of a cholesterol test. If there are genetic disorders in my family, everyone should be tested. It's true, though, that it is hard to teach an old dog new tricks. Even with the horror that the family felt just last week, they are convinced that they are immune to any harm. Grandma told me that she just got off the phone with Mrs. Simon who knew for a fact that all of this talk about cholesterol was just a passing fad! Of course, Mrs. Simon didn't really know a lot about genetic diseases, but both Mrs. Simon and Grandma decided that if a heart attack had not killed her by now, it surely never would. I could hardly believe my ears! Heart attacks were the number one killer in America. High cholesterol was no passing fad. In fact, heart disease has been a leading cause of death in the United States since 1920.¹ Since the 1970's the recommended fat intake for an adult was reduced from 40% to 30% of daily calories. Americans, however, have increased the actual amount of fat intake from 32% in 1909 to 42% in 1980.² The national campaigns to educate the American public on heart diseases have helped to lower many American's cholesterol levels. I went on to tell her that previously it was believed that men were mostly at risk, but new statistics showed that women also were at very high risk, especially those later in life.³ I showed Grandma a pamphlet that Dr. Thornton had given me to explain genetic disorders, specifically Familial Hypercholesteremia.⁴ Not only are there other genetic disorders, but heart attacks caused by improper eating also will contribute to an estimated 500,000 deaths in 1992. This topic of conversation proved to be an unpopular one, and I decided to abandon the subject as we sat down to dinner. In the back of my mind,

however, I made a mental note to read about cholesterol and heart attacks so I will be able to present a convincing argument to my family. The dinner Grandma prepared

Until later,
Marla



April 8

Dear Diary,

Today I had a meeting with Barbara Bielska and Gene Nau. They are two researchers who are interested in studying a person with cholesterol disorders, and I felt it was a perfect opportunity to learn something about the current research on cholesterol's effects on the body. I am still having a hard time understanding exactly what my body was going through.

Dr. Thornton believes it is important to certify that genetic disorders are present and to test all members of my family since Familial Hypercholesteremia is the most probable genetic disorder affecting my family. Since Barbara and Gene are studying genetic disorders, Dr. Thornton thought they would be interested in running some tests on my blood. It will be interesting to get to know them better as I learn about their research.

Gene and Barbara began by informing me that they were studying cholesterol metabolism in normal adults as well as those individuals who have genetic defects or those individuals who have defective metabolism due to a poor diet. They began by explaining that LDL stood for low density lipoprotein, a type of cholesterol. They quickly became aware that I was unfamiliar with cholesterol and brought out three vials containing very different samples of blood. The first vial was a deep red color, characteristic of normal LDL metabolism in the blood. The second was a bright orange, characteristic of excessive amounts of LDL; the third looked like a strawberry milkshake. It was cloudy white due to the excessive amount of fats (triglycerides) in the blood. The level of LDL in the blood is linked to the risk of heart disease. In a healthy person, the body produces enough receptors to keep LDL bound and therefore unable to form hard plaques which might cause a heart attack. Once the LDL is bound to its receptor, it is brought into all types of cells in the body and used for many different purposes. Even though I had always thought cholesterol was a negative word, the cells in our bodies need LDL to function and grow.

Barbara and Gene questioned me about my life history and health. I told them I was an average 21 year old. I drank occasionally, did not smoke, exercised about four times per week and ate an average diet. "Average diet? On that note, we'll begin the next interview and decide just what is an average diet!" Gene joked. Dinner at Grandma's

made me wonder. . . did I really eat right? I always thought I did. I ate like everyone else I knew. . . .

Until later,
Marla



April 15

Dear Diary,

By now I am feeling much better. I was looking forward to my second interview with Barbara and Gene. I had done some reading on LDL and the different ways in which cholesterol can affect one's body. Over the past week I wrote down what I had eaten, hoping to prove both to myself and to Gene and Barbara that I ate a well balanced diet.

"Yes, it is a well balanced diet in the fact that all four groups are represented," Gene said. "But it is the extra condiments that can really make or break one's cholesterol level as well as the amount of food that one eats. If I were to give you a piece of bread, would you butter it?" "No, I would MARGARINE it!" I answered confidently. Gene pulled out a big piece of bread and some margarine, and I began to prepare. I put the margarine on, satisfied that I was being healthy. For as long as I remembered, the TV advertisements were drilling into my head that margarine was "heart-smart." As I was about to settle back with my healthy snack, Barbara shouted "NO!" I knew she was a woman of few words, but that outburst seemed very out of character! She went on to say that margarine was even being questioned about its healthiness in respect to cholesterol.³ She suggested that maybe some new TV advertisements should promote eating a low fat diet instead of switching from one fat to another, and that maybe I should try putting honey on my bread instead of a variation of fat.

So, even though my diet looked acceptable on paper, there were parts of my diet that I should examine more closely. They gave me a sample diet which included a lot of fruit and vegetables, high fiber and low fat, including low fat oils like olive oil but no tropical oils. I am very excited to show the sample diet to my Grandparents. I think they will be shocked to find the hidden downfalls in their diets.

Until later,
Marla



April 22

Dear Diary,

This week I went to visit Barbara and Gene's lab. As I walked in, Barbara was finishing up an experiment. As she explained her experiment, I realized that I really

was interested in the project also. Both Gene and Barbara had a way of making biology come to life. Before, I had always pictured researchers as a group of lonely individuals who worked quietly day after day by themselves. Obviously, I was wrong.

I expressed my concerns today about my family's risk of heart disease. I had read an article about the concern over the validity of cholesterol testing, and I was interested to know exactly how a cholesterol test was performed.

Barbara explained the procedure of measuring cholesterol, both LDL and HDL (high density lipoprotein) in the lab. It really sounded quite easy. First a blood sample is taken and the lipoproteins are separated from the serum by an ultracentrifuge, which acts a lot like a washing machine on the spin cycle. After the LDL is labeled with a dye, samples are collected, and from them, a cholesterol test is performed. A small amount of each sample is added to a small amount of cholesterol reagent, and after twenty minutes the samples are ready to be read by a spectrophotometer. Instantly, the cholesterol level is available. However, since HDL is good for the body and LDL in excess is bad for the body,⁶ the ratio of HDL to LDL is much more important than a number representing total cholesterol. Therefore, the test must be performed again once LDL is separated from HDL.

Gene explained that even though this test was easy to perform in a lab, the cost of the equipment used in the test totaled over \$50,000! Gene photocopied an article for me about a new home cholesterol test which has not been put on the market yet. This home test is accurate, cheap and simple to use.⁷ If only I could convince my family how easy, but essential, these tests were!⁸

Until later,
Marla



April 26

Dear Diary,

Yet another week has gone by and I still haven't succeeded in testing my grandmother's cholesterol level. I have made some impact, however, on my grandmother's cooking habits. I noticed that "light" olive oil had replaced butter as a cooking oil.⁹ A fruit salad was served in place of potato salad with mayonnaise. (When Grandpa complained about the missing potato salad, I suggested trying a low cholesterol mayonnaise.)¹⁰ Everything looked so delicious that I couldn't help but take this opportunity to point out that our weekly Sunday night dinner had not lost any of its flavor, and the whole family could walk away feeling lighter and healthier.

Until later,
Marla

April 29

Dear Diary,

Gene and Barbara were surprised to see me again so soon. They had said they would call if they needed more blood samples, but I enjoyed talking to them about how to decrease my chances of another heart attack. I walked into the lab during a lively conversation on Transcendental Meditation. Gene explained that he became interested in TM some time ago as a method of relaxation. Meditation in any form will help to reduce stress by lowering oxygen intake. In fact, meditation is a great exercise for patients with hypertension.¹¹

Gene and Barbara had just finished the tests they had run on my blood. Familial Hypercholesteremia was the culprit, resulting in the primary cause of my LDL problem. Because my body only produces half the number of needed receptors, a lot of LDL remains unbound. Gene explained the process by reading an article, "Coronary arteries feed oxygen into the heart muscle. If [unbound] LDL is oxidized en route, it gets trapped in the artery walls and becomes the source of damage that gives rise to diseases of the heart and arteries."¹²

Until later,
Marla

May 1

Dear Diary,

Since Barbara and Gene were certain that I suffered from FH, and my cholesterol level was increasing even with a new diet, Dr. Thornton has decided that certain drugs are necessary to reverse the effect cholesterol has on my body. There are several drugs to choose from. A new drug, Lovastatin, was just released last November and has been shown to reduce plaque from the arterial wall almost magically with practically no side effects. Dr. Thornton said that to most people Lovastatin would be the obvious choice, but the drug was too new for his liking, and he preferred to stick to the "old standbys." Lovastatin has not been written about in any medical journal yet. With other drugs, he knew exactly what the long term effects were, and there were no sudden "discoveries" that could endanger my life twenty years down the road.

The "old standbys" had a few minor side effects. Cholestyramine, for example, caused "constipation and bloating."feldman

¹³ Dr. Thornton also told me that oral contraceptives led to an alteration in triglyceride metabolism which may result in another heart attack since I am already in such a high risk group. He also mentioned that both my mother and grandmother, if their cholesterol levels were high, were at an increased risk during menopause.¹⁴

"However," he added in conclusion, "your mother and grandmother were both tested today for high cholesterol, and luckily for them, they are both within the normal range." He put down my chart, smiled and asked "Now, are there any questions?" "No," I replied and meant it. All of my reading and researching of cholesterol with Gene and Barbara's help had really paid off. Not only could I control my chances of another heart attack, but I had convinced my relatives of the importance of good health and low cholesterol. I had succeeded in teaching an old dog new tricks. I had changed my life style as well as my family's, and grandmother finally realized, even at 80 years of age, that no one can escape the perils of cholesterol. As I left Dr. Thornton's office, I felt so relieved and so alive. LECHAIM!

NOTES

¹ Neville, Janice N. 1990. "On Matters of the Heart: Past, Present and Future," *Journal of the American Dietetic Association* 90:211.

² Welsh, S. O. and R. M. Marston. *Journal of the American Dietetic Association* 81:120.

³ "One in seven women aged 45 to 64 has some form of heart disease, and this escalates to one in three over age 65. Heart disease is the second leading cause of death for women by age 40 and assumes the lead by age 67. Overall, about 10.4 million women of all ages suffer from heart disease, and 1.4 million have hardening of the arteries. More than 25 million women have high blood pressure. The prevention of cardiovascular disease, therefore, is a pressing personal concern for every woman" (Neville).

⁴ Three genetic disorders result from hypercholesteremia: Familial Hypercholesteremia, Familial defective Apo B-100 and type III hyperlipoproteinemia.

Familial Hypercholesteremia is a dominant trait which results in the absence of some or all of the LDL receptors needed for proper cholesterol metabolism. Familial Hypercholesteremia can cause heart attacks even in childhood.

Familial defective Apo B-100 also is characterized by defective binding of the LDL molecule to its receptor. However, this disorder is more frequent in patients with "moderate" hypercholesteremia (250-300 mg/DL).

Characteristically, type III hyperlipoproteinemia patients do not have a high level of LDL in their blood. Rather, there is an elevation of remnant lipoproteins.

⁵ Elaidic acid, a type of unsaturated fat, has been discovered to be as detrimental to cholesterol levels as saturated fatty acids. Any fat that is chemically constructed in a "trans" configuration will increase the cholesterol level of a normal subject. Trans fatty acids are found in dairy products and certain types of margarines, margarine based products, shortenings and fats used for frying. "Cis" configurations are found in most natural fats and oils. Cis configurations have less of a chance of contributing to high cholesterol.

⁶ A high level of HDL is symptomatic of very efficient metabolism. High metabolism or a quick turnover rate allows for little chance of toxicity by oxidation. Since LDL does not metabolize quickly, it is more likely to be oxidized resulting in atherosclerosis (hardening of the arteries).

⁷ Podolsky, Doug. "A Self Test for Cholesterol," *U.S. News & World Report*, December 30, 1991, p. 64.

⁸ Chem Traks AccuMeter and Crystal Medical's Clinimeter are still waiting to be approved. After pricking a finger, the blood is used to measure the cholesterol level within 5% accuracy. The test is very fast, only taking about 15 minutes and has results that are comparable to a laboratory test which can take well over several hours.

⁹ Kleiner, Susan M. 1991. "Have Your Cake and Eat It Too," *The Physician and Sportsmedicine* 19:15.

"Trying to save calories or fats by eating products touted as 'lite' or 'light' requires consumer caution, since advertising in this regard is poorly regulated. Terms such as these have a variety of meanings, from 25 percent less fat than the regular product, in the case of bologna, to lighter color or texture, in the case of some other products."

¹⁰ Dayton, Leigh. 1991. "'Doughnut' molecule puts healthier food on the market," *New Scientist* 130:28.

Australian researchers are currently working on an affordable "doughnut-like" polymer to which cholesterol is attracted. Once attracted, the cholesterol molecules fit inside the doughnut's hole. The food is centrifuged, and the parts which contain the polymer and cholesterol doughnut are separated from the rest of the food. This technique can be carried out at low temperatures which prevents spoiling and the growth of microorganisms.

¹¹ Orme-Johnson, David W. and John T. Farrow. 1977. *Scientific Research on the Transcendental Meditation Program*, Maharishi European Research, University Press, Livingston Manor, N.Y.

¹² O'Donnell, Michael. 1990. "Consult a Greengrocer," *International Management* 45:78.

¹³ Silberner, Joanne. "Old Heart Drug, New Value," *U.S. News & World Report*, December 30, 1991, p. 64.

¹⁴ Caggiula, Arlene W. and Rena R. Wing. 1989. "Menopause and risk factors for coronary heart disease," *The New England Journal of Medicine* 321:641.

The Sabbatian Movement: Seventeenth Century Apocalypticism In Crisis

Nora Beldler

For centuries, Jews have had a fairly consistent streak of bad luck, despite their title, the “chosen people.” They have been oppressed, outlawed, conquered, and discriminated against as a minority in the Gentile world. It seems a wonder that they have remained together over the centuries, but they have always found workable explanations for their various plights. One justification during the sixteenth and seventeenth centuries was the belief in a final judgment day. On that day, the messiah would come, and those righteous and pious people who had been patient, namely the Jews, would be delivered from their misery. In times of great trial and crisis, messianic ideas were at a high, and people searched for a savior to deliver them from their afflictions. If they found the proper savior, often there was enough momentum to start a mass messianic movement. As in any organization, though, pure inspiration is not enough to get a movement off the ground. Brains and organizational powers are also necessary for the success and coherence of the group – a leader, *not* necessarily the messiah himself, to speak for and to the group. In a messianic movement, that leader frequently took the form of a prophet:

... in the preliminary stages before a movement has cohered, there may be no prophet at all – just a series of apparently impulsive activities accompanied by inchoate ideas, feelings, and emotions. Only when the inchoate ideas have begun to cohere into new assumptions may a prophet emerge to articulate them, show them forth, make them explicit. (Burridge 12)

Although many messianic movements took place during the sixteenth and seventeenth centuries, few gained the following or the influence that the Sabbatian movement did in the mid-seventeenth century. Rarely would such brilliant organizational powers come together with a populace so ripe for messianism.

The late fifteenth century had seen mass expulsion of Jews from Spain and Portugal, leading the Jewish people into the new century with fresh zeal for messianic tendencies. Jews everywhere anxiously awaited the coming of the Messiah to deliver them from the cruel treatment they were being forced to endure.

The new messianism took a bit longer to catch hold in Poland, for some positive things were finally happening. The Catholics and Calvinists were especially tolerant of the Jews at this time, though mainly in order to exploit their economic knowledge. The Jews were even allowed rights in self-government, and royal charters had been issued

ensuring their rights to preserve traditional ways of life and worship (Schweitzer 148). But these few blissful years were nothing more than a calm before the storm. Before long, new Polish leaders had oppressed the Jewish people once again:

... the freedom, prosperity, and intellectual sophistication of a golden age had given way to persecution, poverty, and degradation. Viewed against this background, it is not surprising to find Jews ardently expecting the coming of the Messiah and seizing desperately on almost any self-styled one that came along. (Schweitzer 152)

But in a world where people searched, instead of waited for, a savior, the conditions were ripe for frauds. With so many claiming to be the Messiah, it was impossible, naturally, for the masses to figure out which truly deserved the people's attention as their savior. Some skeptics had foreseen the predicament, and responded accordingly. One of the more extreme of these skeptics, Maimonides (1135-1204), for example, put together straight from the Torah a series of tests for the alleged Messiah to pass. To be "presumed" the Messiah, it was necessary, among other things, to be a descendent of the House of David, to follow the laws of the Torah impeccably, to win over all of Israel as followers, and to "fight the battles of the Lord." But to be validated and approved as the savior, a candidate must both rebuild the temple in Jerusalem and "[gather] in all the exiles" successfully (Scholem 13). These attempts at a selection process proved futile, however, for once the masses had picked out their savior, no written document would be potent enough to remove him from the people's hearts.

The movement started by the followers of Sabbatai Sevi was one of the most intriguing and perplexing of all the seventeenth century messianic movements, because of the peculiar circumstances in which it continued. Sabbatai Sevi was captured by the Turks in the peak of his glory, but chose conversion to Islam rather than death by torture. Logically, forsaking his god would be the one act no messiah should commit. Given the choice, one would expect a messiah to die a martyr rather than live as an apostate. One would also expect such a blatant act of infidelity on the part of Sabbatai Sevi to end the movement promptly and completely, and its followers, disappointed, to move on in search of another, more reliable, messiah. But that did not happen – Sabbatians continued to exist in surprisingly large numbers for 150 years after the death of its messiah.

The one insistent question is: How can such a huge mass of people justify loyalty to a man who could not even remain loyal to his own religion? The methods of denial that the Sabbatians incorporated and the excuses they made all fit together and help to paint a picture of the difficult transition the group had to undergo from one *with* to one *without* a legitimate lord and king.

Sabbatai Sevi was born in 1626 in the city of Smyrna, in the Ottoman Empire. The son of a prestigious family in a town that valued its Jews for their intellectual and economic knowledge, he studied the Torah throughout childhood but matured into only a "mediocre" rabbinic scholar. Gershom Scholem says:

Sabbatai was undoubtedly a well-educated and competent, though in no way outstanding, scholar. His intellectual capacities were developed but by no means extraordinary. He was not intellectually creative or original, and he was completely devoid of literary talent. (158)

Sabbatai's personality had many strange quirks. He was subject to severe mood swings. He would fluctuate almost regularly between fits of the highest ecstasy, in which he had his notorious visions and inspirations, and moods of the deepest depression. In either state, Sabbatai was given to performing shocking and strange deeds. Sabbatai was banished from one of the cities he visited because he invited all the highest rabbis to a banquet and conducted a wedding ceremony between himself and the Torah. The rabbis were appalled and "would not be reassured by his mystical explanation that every lover of the Torah could be considered her bridegroom or husband . . ." (Scholem 159). In 1665, on a visit to Jerusalem, Sabbatai was expelled by the rabbis for eating forbidden animal fat (Sharot 87).

There has been considerable debate over the causes of Sabbatai's odd character traits. Gershom Scholem, whose work on the Sabbatian movement is considered by most scholars the most thorough and least disputed examination of a messianic movement (Sharot 86), concludes in his research that Sabbatai almost certainly "suffered from a manic-depressive psychosis, possibly combined with some paranoid traits" (Scholem 126), the condition that resulted in his strange behavior.

In approximately 1651, at the age of twenty-five, Sabbatai was banished from Smyrna (Scholem 149) and began traveling around the empire to places such as Palestine, Egypt, and Turkey. On a trip to Palestine, he befriended a young scholar named Nathan Ashkenazi of Gaza, who became the organizer of the Sabbatian movement. Nathan would later use the influence of rabbis who accepted him as a prophet to help gain momentum for the movement (Sharot 92). Inspired and won over by Sabbatai's powers of charm, Nathan had a vision in 1665 that revealed to him not only that he himself had been chosen by God as a prophet, but also that Sabbatai Sevi was the Messiah. Nathan wrote of his vision:

... and I saw visions of God all day long and all night, and I was vouchsafed true prophecy like any other prophecy, as the voice spoke to me and began with the words: "Thus speaks the Lord." And with the utmost clarity my heart perceived toward whom my prophecy was directed [that is, toward Sabbatai Sevi], even as Maimonides has stated that the prophets perceived in their hearts the correct interpretation of their prophecy so that they could not doubt its meaning. Until this day I never yet had so great a vision, but it remained hidden in my heart until the redeemer revealed himself in Gaza and proclaimed himself the messiah; only then did the angel permit me to proclaim what I had seen. I recognized that he was [the] true [messiah] by the signs which Isaac Luria had taught and not one thing faileth of all that he has taught. (Scholem 204)

By mid-1665, Sabbatai had accepted Nathan's prophecy, and the Sabbatian movement was underway. The two men made a perfect team, each complementing the other's personalities and motives. For despite all his eccentricities, Sabbatai possessed an amazing way with people, a "very real personal charm . . . an air of nobility about his dealings with people, and a very winning kindness" (Scholem 204). Nathan, on the other hand, lacked the magnetic charm of his partner, but was a brilliant writer and scholar and also a natural leader. Scholem says:

Sabbatai was a poor leader. Devoid of willpower and without a program of action, he was a victim of his illness and his illusions. But his paradoxical personality inspired Nathan and provided him with the impetus for his actions and ideas It is certain that only the encounter of the two gave birth to the Sabbatian movement. (208)

The recipe was perfect: a magnetic man and a brilliant leader promising to deliver a world of people searching for someone to deliver them. The conditions could not have been better, and in no time, the movement spread all the way to Central Europe as well as all over the Ottoman Empire. The Jews had found their Messiah, and would be soon delivered from their suffering. Sabbatai would right all previous wrongs, take the crown from the Sultan and become their king.

The Turkish Sultan, however, was also aware of the plan, and did not wish for Sabbatai to take over his crown. In 1666, on his way to Constantinople, Sabbatai was apprehended by the Turks and imprisoned in Gallipoli. Later that year he was summoned to Adrianople to the Sultan's private council (Scholem 674) and was threatened with death by torture if he did not convert to Islam. He chose conversion (apostasy), and emerged from the meeting no longer as Sabbatai Sevi, but as the Islamic Mehemed Effendi. The Sultan valued him as a convert for his widespread fame, and hoped to keep him on as a missionary (Sharot 115), so he was given the honorary position of *kapici bashi* (keeper of the palace gates) with a royal pension of 150 aspers per day (Scholem 681). Sabbatai, however, kept a dual front for the rest of his life, Muslim in his dealings with the Turks, but also keeping up with his Jewish followers (Sharot 115). He died in 1676 in exile in Albania.

Following the apostasy, the world of Sabbatai's followers was turned upside down. Many condemned the act of their master, and left the movement promptly. Others, although shocked and disappointed, defended Sabbatai and searched for explanations of his strange behavior. Why had he abandoned them, their beliefs, and his own?

Many Sabbatians believed the explanations that attempted to alter the facts of the apostasy. These accounts, perhaps modeled after the story of Christ, alleged that the meeting with the Sultan's council had not taken place, but that the Messiah had passively allowed himself to be handled by the authorities (Scholem 682). More likely, perhaps, was the account of the apostasy by Baruch of Arezzo that told a romantic tale of bravery and suffering; Sabbatai *was* present at the council meeting but was to have

accepted the terms of the apostasy in exchange for the safety of his people. Baruch wrote:

Our Lord made a request before the Sultan for the Jews to reverse the letters of wrath and anger which he wrote to destroy all the Jews in Constantinople . . . and no Jew suffered any harm because of this. (Scholem 683)

Nathan of Gaza, co-founder and the brains behind the movement, held that the apostasy had been predestined all along. This group searched the Bible and other religious literature and through allusions and references, “convinced themselves that all the religious writings pointed to the apostasy of the messiah” (Sharot 118). God does, after all, work in mysterious ways, they thought. Some things were just worth waiting for, and salvation was going to have to be one of them. They had done their part, and perhaps the next generation would reap the rewards of their ancestors’ loyalty. As Max Weber says in his studies of messianic groups,

. . . only the descendants of the pious could behold the messianic kingdom, as a consequence of their ancestors’ piety. If it perhaps appeared necessary to postpone one’s own experience of salvation, there was nothing strange in this. (139)

Many viewed the betrayal of their lord and king as a test of piety. If they would remain faithful and deal with whatever God had in store for them, then somewhere along the line, things would get better for posterity. With the proper faith, redemption would not be too far away. Could not God simply be showing his people what *not* to do, rather than giving them an example of behavior that they should emulate? Sometimes, “a prophet’s ‘mistakes’ are often fertile mistakes which move men to action” (Burridge 155), and perhaps God intended the apostasy to do just that.

In various precarious ways, then, the followers of Sabbatai Sevi did have justifications for the sudden betrayal of their master. They needed to have explanations, for renouncing their messiah was equatable with renouncing their God. In the interest of their faith itself, no matter who that faith was in, they could not reject him completely simply because he had appeared to change his faith. If God was indeed testing their piety, they could not let Him down. Stephen Sharot lists some ways in which groups will deal with the failure of their savior, all of which the Sabbatians did:

One way is to simply discard the belief that has been disconfirmed, but this may be too painful if the commitment is very strong. Another way is to deny or ignore the event that has disconfirmed the belief. . . . A third response is to find a reasonable explanation that will reconcile the apparent failure of the prediction with the belief system. If this is done, it is possible for the believers to become more convinced than ever of the truth of their beliefs. (116)

In addition to the various explanations made to excuse Sabbatai’s apostasy, the Sabbatians could also appeal to the paradoxical nature of the movement, and of

Sabbatai Sevi himself. Sabbatai's strange behavioral tendencies had prevented him from obtaining a small group of disciples that knew him well (Scholem 158). Very few knew of his strange fits of ecstasy and depression, and they kept their distance. During the movement, Sabbatai's behavior was not widely known, and it was not until after the apostasy that the knowledge became widespread (Sharot 92). It is quite conceivable that the leaders of the movement chose to make the details of Sabbatai's behavior public at this particular time to establish that the apostasy was not the first peculiar thing he had ever done. They had believed in him through all his other idiosyncrasies, and this conversion business was just another one of those. With this hindsight, virtually nothing Sabbatai could have done would have surprised his followers. When he apostatized to Islam, then, his followers were shocked and hurt, but would they really have put it past him? They had called him their messiah for two full years, why stop now? The oddities of Sabbatai had become commonplace, and possibly even rubbed off on the followers. In the words of Vittorio Lanternari,

There is probably no known religious phenomenon in which the dialectical interpretation of relationships between personality (the individual personality of the prophet) and culture (the social personality of the group) becomes more obvious than it does in regard to messianic cults. (304)

It is now visible *how* a messianic group can justify loyalty to a failed messiah. But still a bit shady is the question of *why* a group would remain loyal to that messiah. The most likely answer is that the Sabbatians wanted to maintain the honor of the group. Admitting that their messiah had deceived them would cause a loss of self-respect for the group, and loss of credibility in the eyes of non-Sabbatians. The Sabbatians had devoted considerable time to this man – where would they go from here? Admitting that he was a false messiah would be admitting to two wasted years. It was easier to try to justify the mistake than to admit that the whole movement was wrong and try to continue on. After the apostasy, though, Sabbatians certainly did continue on. “Sectarian Sabbatianism was born when many sections of the people refused to accept the verdict of history, unwilling to admit that their faith had been a vain illusion fondly invented” (Scholem 690).

And so the Sabbatian movement was born again, and did not die for 150 years. Although it is hard to imagine how it all happened, we have to realize and appreciate that it did happen. An entire mass of people watched their chosen messiah desert them for another god, and kept on believing in him even when his presence on the earth did not culminate in any sort of deliverance of the Jewish people. The group went against logic, society, even plain facts, all to offer an explanation and to deny the concrete evidence that they had been forsaken. Fear of the day of judgment is inherent in the psyche of the Sabbatians and perhaps the incentive that ultimately kept them pushing in their losing battle against reality. The sense of the imminence of the end times must have been very real in that age, if they could struggle against reality in hopes of being chosen on the imminent judgment day. The illustration of the Sabbatian movement

provides a very vivid image of just how tense the messianic tensions in the seventeenth century were.

REFERENCES

- Burridge, Kenelm. *New Heaven, New Earth: A Study of Millenarian Activities*. New York: Schocken Books, 1969.
- Lanternari, Vittorio. *The Religions of the Oppressed*. Trans. from Italian by Lisa Sergio. New York: Alfred A. Knopf, 1963.
- Lewis, Bernard. *The Jews of Islam*. Princeton: Princeton University Press, 1984.
- Scholem, Gershom G. *Major Trends in Jewish Mysticism*. New York: Schocken Books, 1946.
- _____. *Sabbatai Sevi: the Mystical Messiah 1626-1676*. Princeton: Princeton University Press, 1973.
- Schwarz, Leo W. *Memoirs of my People Through a Thousand Years*. Philadelphia: Jewish Publication Society of America, 1943.
- Schweitzer, Frederick M. *A History of the Jews Since the First Century A.D.* New York: MacMillan, 1972.
- Sharot, Stephen. *Messianism, Mysticism, and Magic: A Social Analysis of Jewish Religious Movements*. Chapel Hill: University of North Carolina Press, 1982.
- Twersky, Isadore and Septimus, Bernard. *Jewish Thought in the 17th Century*. Cambridge: Harvard University Press, 1987.
- Weber, Max. *The Sociology of Religion*. Boston: Beacon Press, 1963.
- Yinger, J. Milton. *The Scientific Study of Religion*. New York: MacMillan, 1970.

When God Was A Woman

Tammy Hillebrand

When God Was a Woman by Merlin Stone. New York and London:
Harcourt Brace Jovanovich, 1976.

After reading *When God Was a Woman*, many would label the sculptor, amateur historian, and author Merlin Stone a radical feminist, a woman who has made "absurd" connections between the "pagan Goddess cult" and the Jewish and Christian religions. These readers are the traditionalists in our society who are, according to Stone, imbued with patriarchal attitudes reflected in the biblical story of Adam and Eve. It is these people Stone wants to reach with her book. As stated in her introduction, she does not want to revive the Goddess tradition, but to make both women and men aware of this ancient tradition and how many of our patriarchal attitudes were created in reaction to it. The book traces the Goddess from Her glorious beginnings, through Her metamorphosis during the time of the northern invaders, and finally to Her demise at the hands of our Jewish and Christian forefathers.

Stone first shows us that the Goddess has a long history that begins in the Upper Paleolithic period (c. 40,000 B.P.). During the Neolithic (after c. 8,000 B.C.E.), She existed throughout the agriculturally-based village communities of the Near and Middle East. While Stone focuses her attention on these traditions, M. Gimbutas and others document the fact that the religion (or religions) of the Goddess was much more widespread. Despite being known by many names, the Goddess was strikingly similar in all of these cultures. She was "Mother of the Universe" which is, according to Stone, understandable in relation to cultures which had no knowledge of conception and saw the female as the sole "creator." This is admittedly a controversial issue, but Stone makes a convincing case.

The importance of the Goddess is clearly seen in the great abundance of Goddess figurines uncovered in early Neolithic archaeological sites, especially the smaller figurines which, as Gimbutas suggests, might have been part of ritual activity in the home. These small female statuettes, referred to as Venus figurines, were often discovered close to the remains of the sunken walls of what were probably the earliest human-made dwellings (p. 13).

It seems that in these cultures women had a much different role in the home than the one later patriarchal society assigned to them. Stone gives us a good description of what it was like to be a woman during the time of the Goddess. This was the most intriguing (although certainly controversial) section of the book for me – one which corroborated my thoughts on the lives of females during this time. Stone therefore

maintains that gender roles were mostly the exact opposite of what they are today. Women held special power in society in relation to property ownership and the exercise of authority. Most importantly, women were the givers of ancestry. In these matrilineal societies, the mother's name was given to the children and an emphasis was generally placed on female kinship. The role of men in these female-oriented cultures was probably summed up best by Diodorus of Sicily, whom Stone quotes as saying, "Men looked after domestic affairs, reared the children, and did as they were told by their wives" (35). While Stone believes in the existence of an ancient, matriarchal society, most experts (although most of these are male experts) feel that the evidence suggests a system where women and men lived in a kind of egalitarian society.

Stone then introduces us to men very different from the above mentioned Diodorus. These men were the so-called "northern invaders," – the Indo-European warriors who quickly and violently conquered the people of the Goddess traditions just as their male, mountain and sky father god overtook the Goddess. The overthrow of the Goddess was aided by the fact that She was always associated with a male consort. Stone shows how the Goddess' young male consort, who at one time played the role of a lover to the Goddess, was transformed into a dominant figure who eventually kills the older female deity. This battle is witnessed in many cultures and generally depicts a triumphant father god who destroys an evil female deity portrayed as a serpent or a dragon. Contrary to what is suggested by Stone, this transformation is not necessarily due to the external invasion of the Indo-European warriors. It may also result from changes due to internal factors within the Goddess traditions, as suggested by the archaeologist Colin Renfrew.

In an especially controversial section of her book, Stone connects the tradition of the northern invaders with the Luvians and the Levites, two groups associated with the ancient Hebrew religion. The Luvians were a part of the Hittite people who had been dominated by the Indo-European warriors, and Stone believes that the Luvians were possibly the ancestors of the Levites, the law-making tribe of Israel. Even though her theory is weakened by a lack of information on the Luvians, it does seem probable that the ancestry of the Levites is traceable to the northern invaders. Stone argues her point by documenting many similarities between the beliefs of the Indo-Europeans and the Levites. They both, for example, believed in mountain gods and seven-day creation stories, and Yahweh battled the serpent Leviathan, just as the Indo-European god defeated the serpent Goddess. It is true, of course, that similarities do not prove an actual historical connection, but the parallels are provocative.

It is clear, however, that the Levites' male-dominated religion did not go uncontested. This makes perfect sense when we consider that the original Israelites who were delivered into Canaan entered a land which, as Stone suggests, was dominated by the Goddess traditions. Stone easily finds many passages in the Bible which indicate the Israelites' continuing affiliation with the religion of the Canaanite Goddess Asherah. For example, she points to many incidents in the book of Judges

where the Israelites were commanded to cut down asherah poles erected as shrines to the Goddess.

After examining Stone's arguments, I am persuaded that the patriarchal attitudes which permeate our society emerged out the transformation and destruction of the Goddess traditions. The Levites (the law makers) seem to have had the biggest hand in writing the first books of the Bible, especially the P or "Priestly" sections. According to Stone, the Levites created the Torah in order to draw their confused "congregation" away from the more popular religion of the Goddess.

Stone also opened my eyes about the biblical creation stories in relation to the common threads of sexuality, the serpent, and the tree. We learn through many examples that these three themes, so prominent in the story of Adam and Eve, also played crucial roles in the Goddess traditions. It seems obvious that the writer(s) of the biblical creation stories made a great effort to condemn important aspects of the Goddess, especially the aspect of sexuality. As Stone thoroughly discusses, it is the Goddess' sexuality which is continually attacked in the Bible. In the matrilinear Goddess traditions, women's sexuality was free and the basis for ancestral authority, whereas the Levites, in order to stress the importance of paternity among the Israelites, wrote laws to suppress women and make sex the original sin. Stone argues that these very laws still shape our ideas of sexuality and are the foundation for the inferior status of women in society.

As a woman in today's society, I greatly enjoyed reading Merlin Stone's *When God Was a Woman*. As a student of the Old Testament and prehistoric religion, I found it easy to see many of the connections presented by Stone. I have learned to read the Bible as a symbolic document and to see that many of the early stories were created in order to establish the law of the father god. After reading the biblical creation stories, it was already clear to me that the status of women was related to the image of Eve and the mythic story of her evil doings. In this sense, Stone did an excellent job of tracing the heritage of the Goddess and Her probable presence in the biblical creation stories. My favorite part of the book was a very small thing – her capitalization of "goddess," "her," and "she," just as every noun and pronoun for the male Jewish and Christian God is capitalized.

The major problem I had with Stone's book was the lack of complete information provided for some of her arguments, especially those which she supported with biblical passages. An example of this is her linking of Abraham with the Hittites, as when she quotes Genesis 23 to the effect that the Hittites call Abraham a mighty prince among them. What she forgets to include is the previous passage which contradicts her argument – Abraham's declaration that he is a stranger and an alien among the Hittites.

All in all, I feel Stone's book was very thorough and well-written and, most importantly, her book made me consider a woman's place in society today. I now see one of the foundations for the patriarchal attitudes I have been questioning for the past few years. The book also made me question just how different my life would be if the Goddess traditions had survived. This is especially interesting to think about as a

female senior, trying to find a job in the field of mathematics, and really feeling the pressures of our patriarchal society. I can only hope that both women and men will read this book and realize that it has not always been a male-dominated world. Perhaps if we appreciate and understand some of the ideas from the ancient Goddess traditions, we will begin to judge women (especially women in areas like mathematics that are almost exclusively dominated by men) on the basis of their actual talent and ability.

Eduard Shevardnadze's Reasons For Resigning

Joshua Feldman

The unsuccessful coup attempt by Soviet hard-liners against then U.S.S.R. President Mikhail Gorbachev in August of 1991 and the subsequent disintegration of the Soviet Union have radically changed the world. For many the coup attempt was a complete surprise. Eduard Shevardnadze, however, had sent a strong warning to the world about the danger of a right-wing takeover almost exactly eight months earlier when he resigned as Soviet Foreign Minister. Shevardnadze, addressing the Fourth Congress of People's Deputies, announced on December 20, 1990, that he was resigning as a "protest against the onset of dictatorship."¹ Shevardnadze was reacting to what he viewed as the growing strength of the reactionary right in the Soviet Union. He saw the manifestation of the reactionaries' influence in the increased attacks on him and other liberals, the false rumors spread about his plans to send Soviet troops to the Persian Gulf, the Soviet military's attempts to circumvent the Conventional Forces in Europe Treaty, and Gorbachev's refusal to denounce the far-right. Shevardnadze also perceived that government's shift to the right would lead to repressive actions for which he would be responsible because he was part of the government.²

In late 1990, Shevardnadze and other democrats in government were being successfully attacked by reactionaries. The far-right *Soyuz* (Union) group, which consisted of about 470 members of the Congress of People's Deputies, most of whom were part of the military-industrial complex, targeted individual liberals in the government for criticism and systematically had them removed from power. An example is the firing of Vadim Bakatin, the liberal-minded interior minister who was dismissed by Gorbachev a few weeks before Shevardnadze resigned. The right wing had been critical of Bakatin because he was unwilling to crack down on the independence-seeking Baltic republics.³ Gorbachev dismissed Bakatin and replaced him with the hard-line Boris Pugo to pacify the conservatives. Janis Jurkans, the Latvian foreign minister, supported the theory that Bakatin was fired for being soft on the Baltic republics. Jurkans said that in November 1990, hard-liners gave Gorbachev a list of "democrats," including Shevardnadze, to remove from office or risk losing the right's support.⁴ In fact, after Bakatin was sacked, the *Soyuz* group took credit for his dismissal and announced that Shevardnadze was next on its hit list. After Shevardnadze resigned, Aleksandr Yakolev, the architect of *perestroika* and a member of Gorbachev's Presidential Council, insisted that Shevardnadze's decision to resign was a result of the "onslaught of a vindictive and ruthless conservative wave."⁵

An alternative theory for Shevardnadze's resignation, put forth by Colonel Nikolay Petrusenko, a leader of the *Soyuz* group and one of Shevardnadze's most vocal critics,

said Shevardnadze resigned to deflect the criticism of his foreign-policy mistakes. Petrushenko specifically cited the agreement on the reunification of Germany and the Bering Sea treaty, which divided up spheres of influence in the Bering Sea between the Soviet Union and the United States, as having been signed to the Soviet Union's detriment.⁶ Another "foreign-policy mistake" reactionaries blamed on Shevardnadze was his alleged plan to send troops to the Persian Gulf. In fact, Shevardnadze never had any plans to send Soviet forces to the region, except when Iraqi President Saddam Hussein was preventing the evacuation of Soviet workers in Iraq. Shevardnadze warned Hussein that Soviet troops would be used to protect the lives and freedom of Soviet citizens abroad.⁷ The Soviet Union's rapid withdrawal of troops from Eastern Europe was another "foreign-policy mistake" that the *Soyuz* group attributed to Shevardnadze. After Shevardnadze resigned, Colonel Viktor Alksnis, a leader of the *Soyuz* group and a People's Deputy, said he supported Shevardnadze's resignation and challenged him to "visit the tent cities set out on the snow in which the servicemen hurriedly withdrawn from East Europe are now living."⁸ Alksnis made this statement despite the fact that the Ministry of Defense and the Soviet Union's top leadership had approved the timetable for the troop-withdrawals.

It is clear that the criticism of him by Alksnis, Petrushenko, and the rest of the *Soyuz* group bothered Shevardnadze because he singled them out in his resignation speech, referring to them as "lads . . . in a colonel's shoulder-straps," and questioning who was supporting them to give them the courage to attack so vehemently a government minister.⁹

Another reason Shevardnadze resigned was to express his concern that hard-liners would oust Gorbachev after he had consolidated power. Vladimir Chernyak, a Ukrainian economist, said Gorbachev was unintentionally creating the legal basis for a dictatorship.¹⁰ Moscow Mayor Gavriil Popov compared Gorbachev's situation to Nikita Khrushchev's before he was removed from power. "As the number of forces around [Khrushchev] that supported him diminished, he became more vulnerable to removal," Popov said. "At some stage the question of his removal had become a technical one."¹¹ One attempt to remove Gorbachev occurred near the beginning of the Fourth Congress of People's Deputies when a hard-liner called for a vote of no-confidence in Gorbachev. Although the motion failed 1,288 to 426, Shevardnadze was deeply troubled by the attempt.¹²

Shevardnadze wanted his resignation to unite the segmented democratic forces. "[Democrats] have scattered. Reformers have gone to seed. Dictatorship is coming," Shevardnadze said in his resignation speech.¹³ He also indirectly criticized the Baltic republics for refusing to participate in the national political process. Shevardnadze believed that it was impossible to achieve anything at the republic level before solution was found at the national level.¹⁴ Having watched the right's assault on *perestroika*, Shevardnadze said he thought that "both *perestroika* and the new political ideas can be saved if our society really wants that and if democratically minded people here in the Soviet Union join their forces together."¹⁵

Another key factor in Shevardnadze's decision to resign was the Soviet Union's attempt to evade the Conventional Forces in Europe (CFE) treaty. Shevardnadze explains in *The Future Belongs to Freedom* how the Soviet Union moved a lot of its military hardware from Eastern Europe across the Ural Mountains. The treaty, negotiated and signed by the Soviet Union and 22 other countries in November, 1990, was an agreement to reduce dramatically conventional forces in Europe. The treaty called for the destruction of all military hardware left in Europe, after the treaty's ratification, that was above the agreed-upon quotas. Shevardnadze placed much importance on being honest in negotiations with his American counterpart, Secretary of State James Baker. Shevardnadze felt that his relationship with Baker was compromised when the Ministry of Defense and the General staff hid thousands of tanks behind the Ural Mountains to circumvent the treaty.¹⁶ In addition, three ground forces motorized-rifle divisions were repainted in Navy colors and put under the command of the Navy, which was exempt from the treaty.¹⁷ Shevardnadze was upset with the maneuvers and was forced to try to justify them when confronted by Baker. Shevardnadze assured Baker that he would try to rectify the situation and lodged a protest with General Sergei Akhromeyev, one of Gorbachev's advisers. Akhromeyev responded with a memo justifying the legality of the moves.¹⁸ Later Shevardnadze said,

The issue is not that the transfer was made – in legal terms, this was not at variance with the provisions of the treaty. The point is how it was done – in secret from our partners in the negotiating process, which slowed that process, undermined trust in our country's foreign policy, and weakened our position.¹⁹

Shevardnadze could not accept that those in power thought tanks were more important than the Soviet Union's good name.²⁰ Shevardnadze alluded to the Soviet Union's attempts to evade the CFE treaty as a reason for his resignation when he said after he quit, "What is most important to me is remaining honest with my friends and my people, with the peoples and partners with whom we cooperated."²¹

Shevardnadze also resigned as a result of his frustration at Gorbachev's unwillingness to denounce the attacks and sabotage attempts against him by the right-wing. One example of Gorbachev's failure to support Shevardnadze occurred when Shevardnadze sent a draft of the German reunification treaty to the Supreme Soviet in mid-September of 1990 for its approval. Anatoly Lukyanov, chairman of the Presidium of the Supreme Soviet, waited until October 3, the last possible day, to present the draft to the Supreme Soviet. According to Shevardnadze, Lukyanov did this in concert with the *Soyuz* group to make it appear that the Foreign Ministry viewed the Supreme Soviet as unimportant. When Shevardnadze was criticized, Gorbachev, although he learned what had happened, refused to absolve the Foreign Ministry of blame publicly. This lack of support particularly upset Shevardnadze.²² Another example of Gorbachev's unwillingness to support Shevardnadze occurred on October 15, 1990, the day Gorbachev was accepting a Nobel Peace Prize. At the same time Gorbachev was

receiving the award, Shevardnadze was being forced to justify the Soviet Union's foreign policy against attacks by reactionaries in the Supreme Soviet. When Shevardnadze later asked Gorbachev to defend publicly his foreign policy, his request was ignored.²³ *Izvestia* political columnist Albert Plutkin, writing about how Gorbachev did not protect Shevardnadze from attacks by the right wing, said,

[Gorbachev] followed what seems already to be a tradition of naming no names and saying nothing about the actions of certain individuals involved in the outright hounding of one of his most loyal supporters and kindred spirits.²⁴

Nursultan Nazarbayev, president of the Kazakhstan Republic, thought that Shevardnadze had resigned because Gorbachev had not been defending him against the conservatives' attacks.²⁵

Another reason Shevardnadze quit was to dissociate himself from the government's future repression that he saw as inevitable. The day before Shevardnadze resigned, Gorbachev had raised the possibility of imposing a state of emergency to control independence-seeking republics. Explaining his decision to resign, Shevardnadze said,

Unfortunately in many people's minds discipline and order are associated with the use of force. I am not sure that direct presidential management and any other punitive sanction, no matter what its objective, can really become a tool for resolving the present problems. It is very difficult to resign myself to the idea of violence, arbitrary acts, and vendettas being permitted against the background of the democratization process.²⁶

Shevardnadze, a Georgian, felt strongly about the increasing reliance on force to control the republics because on April 8, 1989, Soviet troops killed more than 20 people when they attacked a group of peaceful demonstrators in Tbilisi, Georgia. At Shevardnadze's urging, a commission was set up to investigate the attack and punish those responsible. When the Second Congress of People's Deputies ignored the report in December of 1989, Shevardnadze offered his resignation to the Politburo.

²⁷ That time, Gorbachev was able to convince him to remain on the job. In December of 1990, Shevardnadze saw that the growing nationalistic separatist movement in Georgia made it increasingly likely that Georgia's government would again clash with Moscow. Shevardnadze resigned because he did not want to be part of a government responsible for any more bloodshed in his home republic of Georgia.

The reactions to Shevardnadze's resignation varied greatly. Gorbachev condemned the move and said that "to leave now is unforgivable."²⁸ Russian Republic President Boris Yeltsin said Shevardnadze had made "a mistake,"²⁹ and Yegor Ligachev, a former member of the Politburo, denounced Shevardnadze's warning of an approaching dictatorship as "a myth."³⁰ Moscow Deputy Mayor Sergey Stankevich, however, disagreed, saying Shevardnadze's decision was "a serious, well-thought step." He added that it was Shevardnadze's "last chance to draw attention to the dangerous

course of events."³¹ Anatoly Sobchak, the mayor of Leningrad, said Shevardnadze's resignation was courageous.³²

Shevardnadze's dramatic resignation achieved mixed results. Though it served as a warning to the West and many democrats in the Soviet Union, it did not persuade Gorbachev to take any steps to halt the increasing power of reactionaries. Shevardnadze's resignation may have strengthened the influence of the right wing. Gorbachev said he had intended to nominate Shevardnadze as vice-president,³³ but after Shevardnadze resigned he selected Gennadiy Yanayev, a hard-line Politburo member. It was Yanayev who later declared himself president during the August, 1991 coup attempt.

Shevardnadze resigned because he saw the approach of a dictatorship as inevitable. Having tried and having failed to get Gorbachev to denounce the reactionaries, Shevardnadze decided that the best way to get Gorbachev's attention was to resign. Unfortunately, Gorbachev was oblivious to the dangers of a take-over by the reactionaries until hard-liners staged a coup in August, 1991. Shevardnadze also intended to use his "self-immolation" as a rallying point for democratic forces. Foreign Ministry spokesman Vitaliy Churkin explained Shevardnadze's motivations well when he said Shevardnadze decided to "make this sacrifice to save the democratic gains and the embryo of the new democracy."³⁴ Shevardnadze quit because it was morally unacceptable to him to continue to be part of an increasingly hard-line regime, which tried to deceive its negotiating partners. For Shevardnadze, protecting his honor was more important than obeying orders.³⁵

NOTES

¹ "E. A. Shevardnadze: 'I Resign'," *Sovetskaya Rossiya*, Dec. 21, 1990, p. 1, *FBIS*, January 4, 1991, p. 49.

² "Military Officer Says Army is Being 'Provoked'," Vienna ORF Television Network, Dec. 21, 1990, *FBIS*, Dec. 26, 1990, p. 38.

³ "Wanted by the Police," *Komsomolskaya Pravda*, Dec. 4, 1990, p. 1, *CDSP*, vol. 42, no. 52, p. 18.

⁴ "Next a Crackdown - or a Breakdown?," *Newsweek*, Dec. 31, 1990, p. 23.

⁵ "After the Resignation Announcement," *Izvestia*, Dec. 21, 1990, p. 1, *CDSP*, vol. 42, no. 52, p. 14.

⁶ "Further Reactions Cited," *Moscow TASS*, Dec. 20, 1990, *FBIS*, Dec. 20, 1990, p. 15.

⁷ "Shevardnadze's Undelivered Speech About the Situation in the Soviet Union and Moscow's Foreign Policy of the 1990's," *Frankfurter Rundschau*, Dec. 22, 1990, p. 5, *FBIS*, Dec. 24, 1990, p. 14.

⁸ "Tape Recorder in the Auditorium," *Moscow Komsomolskaya*, Dec. 21, 1990, p. 3, *FBIS*, Dec. 21, 1990, p. 12.

- ⁹ "E. A. Shevardnadze: 'I Resign'," *Sovetskaya Rossiya*, Dec 21, 1990, p. 1, *FBIS*, Jan. 4, 1991, p. 48.
- ¹⁰ "Next: A Crackdown - or a Breakdown," *Newsweek*, Dec. 31, 1990, p. 24.
- ¹¹ "Popov Comments on Shevardnadze's Resignation," *Moscow Television Service*, Dec. 21, 1990, *FBIS*, Dec. 24, 1990, p. 91.
- ¹² "Broadside from the Right," *Newsweek*, Dec. 31, 1990, p. 25.
- ¹³ "E. A. Shevardnadze: 'I Resign'," *Sovetskaya Rossiya*, Dec. 21, 1990, p. 1, *FBIS*, Jan. 4, 1991, p. 49.
- ¹⁴ "Baltic Role Seen in Shevardnadze Resignation," *Tallinn Domestic Service*, Dec. 20, 1990, *FBIS*, Dec. 21, 1990, p. 49.
- ¹⁵ *Mainz ZDF Television Network*, Feb. 12, 1991, *FBIS*, Feb. 13, 1991, p. 24.
- ¹⁶ Shevardnadze, Eduard. *The Future Belongs to Freedom*. (New York: Freedom Press, 1991). p. 214.
- ¹⁷ "What is Behind Shevardnadze's Resignation?," *Komsomolskaya Pravda*, January 3, 1991, p. 1, *FBIS*, Jan. 8, 1991, p. 13.
- ¹⁸ *The Future Belongs to Freedom*, p. 214.
- ¹⁹ "Shevardnadze sees threat to democracy," *Komsomolskaya Pravda*, Aug. 3, 1991, p. 3, *CDSP*, vol. 43, No. 31, p. 13.
- ²⁰ *The Future Belongs to Freedom*, p. 149
- ²¹ *Mainz ZDF Television Network*, Feb. 12, 1991, *FBIS*, Feb. 13, 1991, p. 24.
- ²² *The Future Belongs to Freedom*, pp. 211-212.
- ²³ *Ibid.*, p. 212.
- ²⁴ Political Diary: Firing at Solitary Targets, *Izvestia*, Dec. 22, 1990, p. 1, *CDSP*, vol. 42, no. 52, p. 16.
- ²⁵ "Following the Resignation," *Izvestia*, Dec. 22, 1990, p. 1, *FBIS*, Dec. 24, 1990, p. 69.
- ²⁶ "Visiting Eduard Shevardnadze," *Moskovskiy Novosti*, Jan. 3, 1991, p. 2, *FBIS*, Jan. 7, 1991, p. 23.
- ²⁷ *The Future Belongs to Freedom*, pp. 195-196.
- ²⁸ "Gorbachev Speaks on Shevardnadze's Resignation," *Moscow Television Service*, Dec. 20, 1990, *FBIS*, Jan. 4, 1991, p. 50.
- ²⁹ "Yeltsin calls Shevardnadze's Resignation 'Mistake'," *Moscow TASS*, Dec. 22, 1990, *FBIS*, Dec. 24, 1990, p. 17.
- ³⁰ "Ligachev Eyes Domestic Effects," *Moscow Radio Rossiya Network*, Dec. 24, 1990, *FBIS*, Dec. 26, 1990, p. 41.
- ³¹ "Deputy Major Denies Popov Resignation Plans," *Moscow TASS*, Dec. 24, 1990, *FBIS*, Dec. 24, 1990, p. 91.
- ³² "Military Officer Says Army is Being 'Provoked'," *Vienna ORF Television Network*, Dec. 21, 1990, *FBIS*, Dec. 26, 1990, p. 38.

³³ "Gorbachev Speaks on Shevardnadze's Resignation," *Moscow Television Service*, Dec. 20, 1990, *FBIS*, Jan. 4, 1991, p. 50.

³⁴ "Minister's Decision is Final," *Izvestia*, Dec. 22, 1990, p. 10, *FBIS*, Dec. 24, 1990, p. 1.

³⁵ "Shevardnadze Does Not Fear a Military Dictatorship But . . . Gorbachev's Excessive Power," *Paris Match*, Jan. 3, 1991, p. 49, *FBIS*, Jan. 2, 1991, p. 31.

REFERENCES

The Current Digest of the Soviet Press. Selected issues 1990-1991.

Foreign Broadcast Information Service. Selected issues 1988-1991.

The New York Times. Selected issues 1990-1991.

Newsweek. Selected issues 1990-1991.

Prokhorov, A.M. *The Great Soviet Encyclopedia*. (New York: Macmillan, Inc., 1982). Third Edition in English Translation.

Shevardnadze, Eduard. *The Future Belongs to Freedom*. (New York: The Free Press, 1991).

Soviet Analyst. Selected issues 1989-1991.

Time. Selected issues 1990-1991.

**Aeneas' Game, Rome's
Fame, Vergil's Aim:
The Irony of War as the
Basis of Roman City
Founding**

Kristopher J. Takacs

War is Hell, they say, but is it also Heaven? For the Romans in Vergil's *Aeneid*, it certainly was both since it was an integral part of their society. One might even go so far as to state that the ideology of war and warfare itself were at the very root of their civilization. Surely Vergil, the First Century B. C. E. poet, would have agreed; in his epic tale about the establishment of the city and civilization of Rome he spends much time developing a theme which is innately ironic. Throughout the epic he consistently depicts war as the antithesis of city-founding; however, he simultaneously constitutes both war and city-founding as the primary objectives for the *Aeneid*'s plot. It is precisely this subtle juxtaposition, that between the constructive facet of city-founding and the destructive facet of war, that delivers Vergil's message of irony in the *Aeneid*. Through biplanar presentations of events such as the Trojan War, Anchises' prophesy of Aeneas' destiny, the war with the Latins, and the Aeneas-Turnus battle, the author employs Aeneas' quest to establish a city and all the irony that accompanies this "game" as devices to comment on the product of Rome's eventual fame. Thus, Vergil's aim is to reveal the intrinsic controversy that is the basis of Roman society.

According to Greek and Roman legend, Aeneas was a Trojan prince, the son of Anchises and the goddess Venus, who narrowly escaped from the ruined city of Troy after its siege by the Greeks during the Trojan War. The Romans expanded this myth by adding that Aeneas wandered around the Mediterranean Sea for several years, much like Homer's character of Odysseus, but finally landed on the Italian Peninsula where, as the gods had decreed, he settled a camp at a place called Latium. After a fiasco of initially attempting to befriend the Latins but then battling them, Aeneas and the Trojan remnant achieve the right to merge with the Latin civilization. The result is the founding of the city of Rome. Vergil saw in this myth two main themes: (1) the destruction of a city through warfare and (2) the establishment of a city by warriors through warfare. From this legend of irony comes his message in the *Aeneid*.

Vergil forces readers to accept the duality of Aeneas' mission from the beginning of the epic which, appropriately, commences with "I sing of arms and of a man . . . many sufferings were his in war – until he brought a city into being . . ." By setting the stage immediately, the author clearly announces that the epic is about both war and city-founding and that each of these themes functions in its own manner in order to contradict the other; consequently, he suggests that readers note the apparent irony:

"... [F]rom [the warriors of Troy] have come the Latin race, the lords of Alba, and the ramparts of high Rome" (I, ll.11-12). These statements on the very first page imply the author's purpose is to define the source of Rome, both literally and figuratively. Clearly, Vergil desires his audience to search for the connection between the mission of Rome in its present time and that of her founder, to draw a parallel between destruction and construction.

Readers initially meet the idea of destruction in seeing Aeneas flee the ashes of Ilium (Troy). Aeneas, telling a tale of how he had to escape from his homeland, reveals the quintessential truth of war. A prince and famed fighter himself, even he disregards the cold air of bravado typical of a Greek warrior and becomes humanized, such as in his wailing in sorrow over having to leave Troy without his wife Cruesa. Her ghost addresses him by saying

O my sweet husband, is there any use
in giving way to such fanatic sorrow?
For this could never come to pass without
the gods' decree (II, ll.1146-9)

Vergil's allusion to the humanizing effects of the Trojan War on Aeneas enables readers to realize that, as in any traditional war, destruction, pain and resentment are unavoidable. In the Trojan War, Achaean (Greek) victory inevitably meant utter demolition of Ilium while Trojan victory would have meant complete defeat and expulsion of the Greeks. Under any circumstances, the Trojan War signified total and unconditional defeat and destruction for the loser. As such, Aeneas departs from his homeland undoubtedly aware of this truth and feeling its pain, yet he does not grow from the experience! Readers see later that in founding Rome Aeneas remains the same static warrior as before. Vergil wants us to see this as seriously ironic; Aeneas has the opportunity to start from zero but the destruction does not influence his perception of and actions towards construction. It merely leads to it.

Before Aeneas reaches Latium, he stumbles across the alleged entrance to the Underworld at Cumae. Upon descending he meets the soul of his deceased father Anchises. His prophesy to Aeneas serves as additional evidence that supports Vergil's wish for readers to be aware of irony. Anchises' comments on the future of Rome constantly vacillate between how great and structurally expansive the empire will be and how aggressive and feared its warriors will become. Anchises tells his son, "for you they will construct . . . [cities] that are now nameless lands" and then later:

. . . yours will be the rulership of nations,
. . . these will be your arts:
Debellare superbos et parcere subietis
(to annihilate the proud and to spare the conquered).
(VI, ll.1134-6)

Anchises is in fact saying that Rome is to be built by warriors for warriors for the purpose of producing warriors. Construction and destruction certainly merge within

his statement, this time blatantly. With hindsight we know now, as Vergil knew before, that Rome was truly a military-based society. Yet it is still extremely ironic that it was founded by warriors, for in antiquity warriors simply did not establish cities – military garrisons, yes, but not cities. The result of this particular city, ironically, was a civilization that would forever change the course of the Western World which, of course, Vergil knew. Thus he screams, “Irony!”

A third example of evidence for deliberate juxtaposition of construction and destruction appears in the war between the Trojans and the Latins. Aeneas had originally planned to marry Lavinia, the daughter of the Latins' king Latinus. This would have allied the Trojans with the Latins and allowed them to settle at Latium. Unfortunately, Lavinia's suitor Turnus strongly objected to this political maneuver, and therefore a war was fought. In this war one can easily observe a change in the soldiers' motivation for fighting. Initially Vergil makes us aware of the Trojans' patriotism. For example, Aeneas expresses his joy and commitment to his new homeland, exclaiming,

... Welcome, my promised land!
 This is our home and country. . .
 Remember in your weariness to hope
 for homes, to set your hands to building dwellings
 and raising walls around them. (VII, ll.153,161-4)

Obviously the warriors fight with their hearts, for patriotism surely represents here a constructive ambition. There is devolution of sorts, however, as the warriors' motivation for fighting noticeably changes. For example, Vergil later compares Aeneas to Aegaeon, a hundred-headed giant who warred against the gods, “so does Aeneas rage on, victorious, across the field, once blood has warmed his blade!” (X, ll.778-784). Emphasis shifts away from their original commitment to a patriotic war towards one that glorifies battling for its own sake, an echo of the ancient Homeric hero's motivation. The war-lust exhibited by the Trojans in slaughtering the Latins reveals nothing but a destructive fury.

A final example surfaces in the subplot that Vergil develops with Turnus and Aeneas, a personal battle between two well-matched warriors. As previously stated, Aeneas sets out to fight the Latin prince primarily because he needs to win the hand of Lavinia in order to open the door to city-founding. However, Vergil again manipulates the motivation, this time on a personal level. When Aeneas finally fights Turnus, he, like his army, disregards the logistic objective for constructive war and yields to the self-glorifying ambition of *Debellare Superbos*, or to annihilate the proud Turnus. Aeneas kills Turnus not because the Latin would not have permitted his victory but because personal emotion from an altered motivation in fighting gets the best of him. That which appeared patriotic and constructive again becomes self-glorifying and destructive.

Vergil spends much time and effort developing a theme which is innately ironic by juxtaposing the constructive facet of city-founding and the destructive facet of war. His

handling of this theme reveals his careful consideration of how he wanted readers to react to the entire *Aeneid*. The overall picture that the author wishes to paint becomes clearer if one steps back and looks at the several ironies from two different perspectives, that of Aeneas' contemporaries and that of the author's contemporaries. Only then can Vergil's message of irony in the *Aeneid* be delivered.

Vergil knew that the destruction of a city is not only physical but symbolic. Although buildings are demolished and valuables looted, one psychological consequence remains inevitable; when the troops march away they leave behind a destroyed civilization, an undefined society and a dissolved social order. This is the tool that Aeneas is given! Not only does Aeneas come from a destroyed city, Troy, but he uses destruction as his tool to found a city. His mission in this perspective is a game of construction through destruction. Aeneas' contemporaries would feel this awe of destruction; destruction is now, and Aeneas, for them, is the present.

Contemporaries of Vergil most certainly would see Aeneas' mission in a different light. Rather than the product of a defeated, destructed Troy, an end-result so to speak, the protagonist becomes revered in an historical context. To the Romans Aeneas represents not merely a salvaged remnant of Troy but rather a seed containing at its core the Greeks' civilization, which gives Rome instant credibility by connecting her civilization to the Trojan one. This "Aeneas-seed," as it germinates, grows into a new plant and blossoms as the Roman Empire. As such, the Romans of Vergil's day would feel this awe of growth, of construction. Therefore, since the Romans attribute their fame and success to Aeneas, the hero that founded their civilization, we see that to them construction is key.

The difference in the perceptions of Aeneas' mission, also, highlights the same irony that runs throughout the *Aeneid*. From one perspective the hero's mission is seen as a game of destruction, while from another perspective it is regarded as a destiny for construction. The perceptions contrast, but both are legitimate. Can the two opposing ideas both be correct and coexist? Yes. This is the irony of the *Aeneid*.

In effect, Vergil sets out to expose in the *Aeneid* the irony of war as the basis of Roman city-founding. Through Aeneas' mission and the associated irony of the function of war in his time, the author actually ends up by commenting on his own society. By juxtaposing construction with destruction effectively and often, Vergil deliberately exposes them as simultaneously antagonistic and cooperative. Readers are bombarded with the apparent antithesis that even though construction and destruction are polar opposites, they are really one in the same, much like the intrinsic controversy that lies at the core of the Roman civilization. Thus is Vergil's aim: Aeneas' game truly does justify Rome's fame.

REFERENCE

- Publius Vergilius Maro, *The Aeneid of Vergil*, verse translation by Allen Mandelbaum. New York: Bantam Books, 1971.

Head Down, Ears Back

Jeremi Roth

From the beginning we have contrived to retain our ignorance in order
to enjoy an almost inconceivable freedom, lack of scruple and caution,
heartiness and gaiety of life – in order to enjoy life!

Beyond Good and Evil, 24

The last thing I should promise would be to 'improve' mankind. No new
idols are erected by me; let the old ones learn what feet of clay mean.

Ecce Homo, 217

Nietzsche's most famous theory is probably that of the *Übermensch* ("overman"). It is almost universally misunderstood, central to his work, enigmatic, and hard to nail down. Perhaps uniquely among philosophers, Nietzsche goes to great lengths to avoid enunciating a plan for "the good life." He is in the business of attacking ideals, and is not about to create ones of his own. To do so would be fundamentally against his mission to expose morality as life-denying. Rather than create his own morality and sell it to us, he tries to convince us that we need to create one for ourselves and tells us how. The *type* of person who could do this, however, is fairly well defined. There are some characteristics that Nietzsche seems to respect consistently. If we also review the development of this concept throughout his literary life, we can come up with a fairly accurate depiction of the overman. But first, we will turn to one of his marvelously extended metaphors for a focal point.

Nietzsche was a brilliant philosopher, and a magnificent writer. His thought is disturbing but, partly due to the power of his prose, also exciting. The medium is inseparable from the message. It is not surprising then, that we find one of his central ideas articulated in a metaphor – light and shadows. One need only to look at the titles of his books to confirm that such images are important: *Daybreak*, *Twilight of the Idols*, *The Wanderer and his Shadow*. But what is a shadow?

Let us turn to *Twilight of the Idols*. In the section entitled "How the 'True World' Finally Became a Fable," he traces the progression of the real world/apparent world distinction from its past into the future. Beginning with Plato and developing towards Kant, the true world, once attainable for the wise and the virtuous, moves beyond man's grasp. With positivism, which states that the 'true' world, though *unattained*, may be *attainable*, he remarks: "Gray morning. The first yawn of reason" (TI, 485). For now, it looks as though the *light* metaphor is simply the easily recognizable one of *enlightenment*. However, as we follow this 'history,' the metaphor assumes new meaning, and when, with the "pandemonium of all free spirits," the true world is

abolished, he loudly proclaims: "Noon; *moment of the briefest shadow*; end of the longest error; high point of humanity; INCIPIT ZARATHUSTRA." Why does he take care to say "moment of briefest shadow"? If we are careful to regard the *body* of his work, significant meaning can be given to such a literary device. Again, what is a shadow?

When there are no shadows, a man cannot, in a sense, see himself. He is one who does not, cannot scrutinize himself. Such a man would act without the hesitation and self-doubt that accompanies such scrutiny. He is one who acts on instinct, without consulting a code of behavior to see if he measures up; he does not need to look at himself, because he is being what he is. There is, for this kind of man, no alternative. He accepts himself completely. This kind of instinctive man, I claim, Nietzsche heralds. I claim further that shadow imagery quite often accompanies descriptions of such a man and can be regarded as a signpost for further interpretation.

We first encounter such an individual in *The Birth of Tragedy*. Here, the synthesis of the Greek gods of art produces the metaphysical comfort that is the answer to life's agony. On the one hand, there is the Olympian Apollo who is characterized by the dream-like *principium individuationis* and is associated with sculpture and epic poetry. Dionysus, on the other hand, is a Titan, characterized by intoxication, music, and lyric poetry. He is possessed of an overfull love of life, coupled with the agonizing knowledge that it must end.

The synthesis is a very complicated concept, but it basically holds that the uncontrollable drive of Dionysus is tempered and given form by the individuation of Apollo. The characteristics of a man controlled by these tendencies are striking. He is not the introspective, contemplative type so often deified by philosophers. He is a man given *joyfully* to his instincts, a man rushing headlong into life, heedless of all that would slow him. He would make an excellent warrior and a brilliant poet, but probably not a very good priest. He would be, using one of Nietzsche's keywords, *life-affirming*, oblivious to depression or the threat of death. He is a human animal, one unafraid of and true to the forces that drive him, standing alone, not needing to wait for the next life to really live. See, for example, *Homer's Contest*: "When one speaks of *humanity*, the idea is fundamental that this is something which separates and distinguishes man from nature. In reality, however, there is no such separation" (*Homer's Contest*, 32). He praises the Greeks here for their "purely instinctive genius," intimating that this is the way man should be.

While Nietzsche later repudiates parts of *The Birth of Tragedy*, some of its ideas continue to be important to him. He repents of his belief in Schopenhauer's metaphysical comfort. He can no longer find a place for it. The new formulation, which is in a sense more raw, needs no mitigation. The synthesis is eventually abolished, and he throws his lot in with Dionysus completely, albeit a somewhat different conception of him. The upwelling will of life continues to be valued, and the new Dionysus is "a creative striving that gives form to itself."¹ One cannot help recalling the description of style found in *The Gay Science*.

One thing is needful. 'Giving style' to one's character – a great and rare art! It is exercised by those who see all the strengths and weaknesses of their own natures and then comprehend them in an artistic plan until everything appears as art. (GS, 290)

The self is something we must become. Thus, the farther we are away from our "true self," the more distinctly we can see it. As we *become* it, form ourselves like it and step inside it, we lose our awareness of it; we become actuality, doing, affirming! We do not suppress certain elements of our nature and cultivate others; rather we must reconcile ourselves to all that is there, affirming and accepting what we are. We do not question our nature; we question that which suppresses our nature.

From the beginning we have contrived to retain our ignorance in order to enjoy an almost inconceivable freedom, lack of scruple and caution, heartiness and gaiety of life – in order to enjoy life! And only on this solid, granite foundation of ignorance could knowledge rise so far. (BGE, 24)

Man's self-awareness and his capacity for self-inspection are seen as handicaps, faltering and unsure, hampering the truly joyful and boisterous life that is possible for us. The significance of the shadow metaphor begins to take shape, and the reader can begin to apply it with confidence in interpreting other works of Nietzsche. Turning to *Thus Spoke Zarathustra*, we find perhaps his most comprehensive description of the Dionysian man. Considering him as this kind of instinctive being, some of his attributes become more explicable.

One of the most intriguing elements of Zarathustra's sermons is his insistence that pity (Z, 352) and revenge (Z, 179) are for the weak. It is puzzling, in a way, that someone 'heartless' enough to heap scorn upon the idea of pity would also suggest that revenge is contemptible and weak. Pity certainly seems to be something that would be promoted by "mealy-mouthed Christians," but so would forgiveness. These two tendencies (forgiveness and *lack of pity*) do not seem to belong in the same mindset. But the "great man," rushing forward recklessly and furiously, *being himself* completely and fully, would not be concerned with revenge and would not be capable of pity. Neither concern would have any power over the instinctive human animal. He would not really be *pitiless* or *forgiving* in the traditional, morally-laden senses of the words, but neither would he succumb to weak feelings of guilt or concern. Let us turn, for example, to "Zarathustra's temptation," where we find an enticing clue to the nature of the instinctive man. In *Ecce Homo*, Nietzsche writes:

The overcoming of pity I count among the *noble* virtues: as "Zarathustra's temptation" I invented a situation in which a great cry of distress reaches him, as pity tries to attack him like final sin that would entice him away from *himself*. (EH, 228)

Pity attempts to lure him from that *style* he has forged. The actual passage in *Zarathustra* offers further enlightenment. The "tempter" is Zarathustra's old friend the

soothsayer. Perhaps he is a nihilist, bringing with him the nausea of the abyss. Perhaps he is an emissary of the spirit of gravity, the bringer of black melancholy. It is hard to separate the tendencies he embodies. At any rate, he is described as "the proclaimer of the great weariness" (Z, 353), and he very nearly destroys Zarathustra's joyfulness. What is significant for us is that he appears just when Zarathustra is *tracing his shadow on the ground!*

If we again view the metaphor of the shadow as self-awareness or introspective thought (and it does seem reasonable to assume that it is more than a literary device), this scene becomes a powerful warning for those who wish to be possessed by the Dionysian spirit of laughter. The soothsayer is seducing Zarathustra to *pity*, and what is pity if not a halting, abortive kind of guilt? The man overcome by pity feels that he does not deserve to be better off than the object of his pity, and thus tries to ameliorate his sense of guilt by aiding the unfortunate. He sacrifices his greatness for another's weakness. There comes with guilt, if one delves deep enough, a feeling of despair and impotency. The desperate screams, the island in the midst of rising seas, the teaching of the soothsayer that "nothing is worthwhile, the world is without meaning" (Z, 353), all appeal to the hesitation and feelings of guilt that are functions of the soul, that *depth* man acquired with the slave revolt in morality. Zarathustra was looking inward, and the result was the temptation to pity and despair.

The great man must grow above such tendencies. Laughter is not introspective; it is abandonment, a life-affirming, careless joy. We "had better dance before [we] fall" (Z, 355). If Dionysus cannot bring us happiness, we might have to, like the soothsayer, return to the "dead" Christian God and continue to "seek the last happiness on blessed isles and far away between forgotten seas." This is surely no good, "for there are no blessed isles anymore" (Z, 355). To this Zarathustra replies "No! No! Three times no!" Melancholy, pity and the like seem to be the greatest dangers he faces. They do not go away – "in your own cave I shall be sitting, patient and heavy as a block - waiting for you" (Z, 356) – and they *are* capable of shaking his strong spirit. He is, however, not halted for long and soon regains his defiant cheerfulness.

If we look at Nietzsche's biggest targets, his "greatest hits," if a pun may be permitted, there are more clues pointing to this instinctive man. Firstly, there is his stand in opposition to Christianity. He constantly compares Christians – unfavorably, of course – with Homeric Greeks. And is not the chief difference between them the phenomenon of guilt? The Christians felt guilty about their instincts, condemning them as sinful while the early Greeks gloried in theirs, fighting wars and creating contests (*Homer's Contest*, 32). The Christians, governed by slave morality, allowed the ascetic priests to create a soul and a depth, conscience and guilt. The priest, the leader of the sickly, served a valuable purpose in altering the direction of the powerful force of *ressentiment*, turning it inward and creating guilt. The sick were miserable in their sickness, and looked around them for a guilty party. They then heard their priestly shepherd telling them: "Quite so, my sheep! Someone must be to blame for it: but you yourself are that someone" (GM, III, 15). In this way, man was saved and given

meaning. This self-denying and life-denying asceticism, repugnant though Nietzsche thought it to be, closed the door to "any kind of suicidal nihilism" (28). The "will to nothingness" was better than not willing. It was here that the human animal acquired its depth and became interesting.

But this purpose is only a temporary solution; Nietzsche still wants to destroy morality. It is a symptom of the sick, created by the sick in order that they might have power over the strong and healthy. It rescued man from the tendency toward nihilism, and made him interesting, but shackles his life-affirming instincts. The priest eases the pain of sickness, but he at the same time tries to keep people sick and under his power. "He brings salves and balms with him, no doubt; but before he can act as a physician he first has to wound; when he then stills the pain of the wound *he at the same time infects the wound*" (GM, III, 15). The *moment* of moral choice is what Nietzsche wants to destroy. The strong should act, not choose! To choose is to submit to an overarching set of values, to a calculation of utility, or another will. Rather than devoting our energies to interpreting such a code, we should be facing the internal complexities of our soul, so that we can reconcile ourselves to whatever is there, and finally come to the point where we can simply act instead of react. Thus man must escape his conscience and return to his exuberant, instinctive joy of life, forsaking such contrived contentments.

If there is anything that Nietzsche targets as often as Christianity, it is the philosophy of Socrates. It is now easier to understand why he felt so strongly opposed to him. Socrates' credo was "Know thyself." But for him, this was a process of defining *universal* virtues such as courage. Nietzsche simply could not stand a virtue that was taken to be the same for all – it was an ideal to be achieved, a submission to something outside oneself. Nietzsche admired the pre-Socratic philosophers because they did not concern themselves with such chimeras. Socrates was dogmatic. He claimed that the virtues were *concrete* concepts, and though the human being might not be able in this life to completely define them, he must try. He must not succumb to his individual instincts but mold himself into a concept that is the same for all. This is far from instinctive.

There are obvious problems with such a cursory view of Nietzsche's thought on Socrates – the relationship was complex, and indeed, he thought that Socrates was one of the few men who had given style to his character² – but at least part of the "dispute" must have been due to Socrates' destruction of the instinctive man. After Socrates, the Greeks began to look inward more often, did not accept their instincts unquestionably, and thus developed a conscience and lost much of their glory. It was not the end; man could still be saved, but it was the beginning of a downward, if perhaps necessary, slide.

The climb back up, however, Nietzsche very clearly described. Nietzsche's opposition to Socratism and Christianity was due to their creation of the introspective soul. Their proponents taught man to really look at himself, and gave him idols for which to strive. Nietzsche vilifies them because they are weak, servile and self-abasing. But it is important to note that the desire for an instinctive man is not the desire for an

unthinking man – Nietzsche is unequivocally contemptuous of non-thinkers (See Z, “On the Flies in the Marketplace,” “On the Rabble”). Rather, man must undergo a metamorphosis; here a new shade of meaning becomes visible in Zarathustra’s metamorphosis parable (Z, 137). To become the instinctive, innocent, unselfconscious child, guiltless and unaware of guilt, we must move from being humble beasts of burden (the camel) to champions of philosophy who can attack the prevailing notions that limit us (the lion). Then and only then can a man progress to the point where he does not need to rail against the illegitimate authorities by whom he is surrounded. He is the complete man, the overrich man who can only go forward, having no need to look backwards or inwards.

The constant questioning that Nietzsche seems to advocate – “What did I really experience? What happened then in me and around me? Was my reason bright enough?” (GS, 319) – must be understood within the concept of the metamorphosis. These questions are a precaution against beliefs wrongly held or assumed on authority. The lion questions and attacks. Once these questions are answered satisfactorily – once man has become free in spirit, they must be sublimated and forgotten. The answers must become *part* of the man and the questions left behind. The child is not self-aware and does not have any conscious knowledge of the change through which he has come. He has been reborn. The change has been effected, and it is irrevocable.

What are we to say to this child who is so free, this god who is so full of life, this man who is overrich and cannot be wounded or saddened? What *can* one say to Zarathustra, joyfully alone on his mountaintop, exulting in the clear air of the heights, away from the marketplace? The spirit of laughter is something we all desire. To be rich enough to laugh at the snake that bites us, to be sure enough of ourselves to be free of the halting, questioning problems of morality, to be immune to the nausea that nihilism brings would be pure and unending joy. It has been said that “those who read Nietzsche without laughing – without laughing often, richly, even hilariously – have, in a sense, not read Nietzsche at all.”³ But what can we do if our laughter is halting or nonexistent? What if we can only smile? What can we do if we find his path impossible to tread? He has told us: “Be a man and do not follow me – but yourself! But yourself!”⁴

Nietzsche is dangerously close to having created, contrary to all his intentions, a new ideal. He needed to find something to fill the vacuum created by God’s death. To understand the ambition of the response and the significance of the ability to laugh, one must sense the agony behind the words: “What was holiest and most powerful of all that the world has yet owned has bled to death under our knives. Who will wipe the blood off us?” (GS, 125). Is there another way for those of us bound, perhaps irreversibly, by the bonds of morality? Nietzsche would probably scorn those who are, but there are hints that he might not. Following the death-of-God motif to “The Tomb Song” (Z, 222), we witness a brief moment of hesitation,

"There is the isle of tombs, the silent isle; there too are the tombs of my youth. There I wish to carry an evergreen wreath of life." Resolving this in my heart, I crossed the sea. O you visions and apparitions of my youth! O all you glances of love, you divine moments! How quickly you died. Today I recalled you like dead friends. From you, my dearest friends among the dead, a sweet scent comes to me, loosening heart and tears. Verily, it perturbs and loosens the heart of the lonely seafarer.

It seems that perhaps the death of ideals, God being one of them, is not a joyous event. Even after their death they exert influence through their memory. If Zarathustra can pause and wonder at the memory of their sweet fragrance, maybe those of us for whom they have not yet died can claim the respect Zarathustra gave the hermit (Z, 122). Perhaps some of us are great enough and rich enough that Zarathustra can, with reason, worry about stealing something from us. Perhaps we can, like the hermit, help men by carrying some of their burden instead of giving them something.

NOTES

- 1 Walter Kaufmann, (Princeton, 1974) p. 282.
- 2 Kaufmann, p. 399.
- 3 Gilles Deleuze, quoted in Henry M. Sayre, (Chicago, 1989), p. 149.
- 4 Quoted in Kaufmann, p. 115.

REFERENCES

- Citations from *Homer's Contest*, *The Gay Science*, *Beyond Good and Evil*, and *Thus Spoke Zarathustra* are from the Viking Nietzsche Anthology. Citations from *Genealogy of Morals* and *Ecce Homo* are from the 1967 Vintage edition
- Kaufmann, Walter. *Nietzsche: Philosopher, Psychologist, Antichrist*. Princeton: Princeton University Press, 1974.
- Sayre, Henry M. *The Object of Performance*. Chicago: University of Chicago Press, 1989.

The Mongol War Machine and the Russian House of Straw: A Military Assessment of the Mongol Conquest of Russia

Michael W. De Nie

Russia has faced several large-scale invasions in her 1000-year history. All of these great invasions came from Europe, save one, which came from the east. Napoleon invaded Russia, as did Hitler; both failed. Only one group of invaders was ever successful in subjugating the Russian land and people. In the 13th century, the Mongol hordes swept across Russia. Seemingly invincible, they struck terror in the hearts of the population and smashed every Russian army they met. What was it that enabled the Mongol armies to conquer such an expansive country with such relative ease? Why did the Russian princes fail to protect their lands? To answer these questions, one must first examine the campaigns themselves; then both the Mongol and Russian armies must be examined in terms of organization, leadership, and strategic and tactical skill.

In 1234 the Mongol nobility and generals gathered for a great council, a *kurultai*, under the supervision of the new Great Khan, Ugedei. At this council the decision was made to invade Europe on a great scale. The nominal head of this campaign was Batu Khan. However, the real authority lay with Subudei, the chief of staff of the Mongol armies. In the spring of 1236 a great army was assembled, including several corps of Persian and Chinese engineers, roughly 50,000 experienced Mongol soldiers, and a great number of conscripts.¹ Subedei's army may have numbered more than 120,000, including Turkish allies and conscripts. However, he could never field more than 50,000 because of the huge area that had to be garrisoned to protect the Mongols' rear.² Against what one would expect, the Mongols, accustomed to the harsh weather of their homeland, chose winter as the best season to campaign against the Russians.

The Mongol campaign against Russia can be divided into two phases. The first phase, against Northeast Russia from December 1237 to the Spring of 1238, will be discussed presently. Discussion of the second phase, against southwest Russia in 1239-40, will follow.

In the early winter of 1237, the Mongols emerged from the thick forest along the Volga south of the Riazan principality. Subudei planned to drive a corridor through the center of Russia, dividing Suzdal and Novgorod from the lands of Chernigov and Kiev. Then he could turn back on the isolated Suzdal.³ The Mongols converged on Riazan, a weak point on the Russian boundary that lay between Suzdal and Chernigov. The Mongol emissaries arrived at Riazan and demanded immediate surrender and a good deal of the population's possessions. The town chose to resist. The princes of the city

then sent an embassy to Grand Prince Urii of Vladimir and gathered their own meager forces to ride out against the Mongols.

The Mongols charged this force, which quickly broke and returned to the city. The Mongols then erected a wooden palisade around Riazan, blockading it off from any outside supplies or military aid. On December 16 the siege of Riazan began with a bombardment of rocks and greek fire (burning pitch) which lasted five days. On December 21, 1237, the Mongols stormed the city, slaying the populace and burning the city to the ground. The few who escaped were those set free by the Mongols to spread the word of the terror of resisting them.⁴

The Mongols then moved on to the city of Kolomna, where they were met by the belated relief army sent by Grand Prince Urii. The Mongols swiftly dispatched this force and moved on to Moscow, which offered little resistance. When Urii learned of the loss of Moscow he set out from Vladimir to rendezvous with the forces under his various brothers and nephews, leaving his wife and sons in the belief that the garrison in Vladimir could hold out. Urii moved northwest with this army, crossing the Volga river and establishing his headquarters on the River Sit. He planned to take up a defensive position with all the Suzdalian troops he could muster, using the Volga and Mologa rivers as natural defenses to the east and north.⁵

Subudei sent a small detachment to watch Urii's army and then marched on Vladimir with his main army. The Mongols arrived outside Vladimir on February 3, 1238, and began to erect a palisade and survey the area. Subudei then sent a detachment to take Suzdalia, which fell partly because the panicked civilian population prevented the garrison from conducting an effective defense. The victorious Mongols cut back on their wholesale slaughter to take conscripts to aid in the siege of Vladimir. On February 7, 1238, the siege of Vladimir began with a day-and-night bombardment. Scaffolding was built and battering rams were brought up by conscripts from conquered towns and villages. The next day at dawn all four of Vladimir's gates were stormed at once.⁶ Vladimir had a large garrison, but its effectiveness was greatly reduced by the chaotic, panicked civilians. A last stand was made in the Cathedral of the Assumption, where Urii's family hid in the choir loft. When the Mongols could not get them to come down, they set the church afire, killing everyone in it.

After the fall of Vladimir, Subudei divided his army. Subudei himself rode north to destroy Urii's army while Batu rode northeast to keep Novgorod on the defensive and assault it when they were reunited. While Subudei rode north to meet him, Grand Prince Urii did nothing. At first, he could have gathered his army and moved out of Subudei's reach. Then he could have marched down to meet the Mongols on any road they took, choosing the time and place to do battle. However, he did nothing, and every day became more isolated as he waited for help from Novgorod that was not coming.⁷ The harsh winter and huge countryside that defeated and enveloped so many of the Russians' enemies could not stop the Mongols. Towards the end of February, Urii sent out a reconnaissance force which quickly returned to tell him that they were

hopelessly surrounded. On March 4, the Mongols attacked, destroying the Russian army and killing many princes, including Urii.

The first city Batu reached on his way to Novgorod was Torzhok, which stubbornly held out for two weeks, falling on March 5. These two weeks turned out to be absolutely crucial for Novgorod. By the time Batu set out again for Novgorod the spring thaw had begun. The Mongols' winter campaign had afforded them great mobility because the frozen rivers and lakes became, in effect, direct routes to the various cities and towns. Batu now found himself 60 miles short of Novgorod, in farm lands quickly turning to marshes. Faced with the prospect of losing his mobility in the heart of enemy territory, Batu turned back.

In the summer of 1238, the Mongols left the Russian lands to reorganize and rest in the southern steppes. In the spring of 1239 the invasion was renewed. The Mongols began with the capture of Pereiaslavl, which fell in March.⁸ Subudei knew that he would have to neutralize Chernigov before any attack could be made on Kiev; and in the Summer of 1239 he sent an army under Mongke westward across the southern half of Chernigov territory. Mongke surrounded Chernigov in the beginning of October, 1239, and began hurling great stones into the city. Mstislavich Glebovich, the senior prince in Chernigov, led an army out to defend the town. Mongke defeated him and Chernigov fell on October 18.⁹

After Chernigov, the main Mongol host withdrew again to encampments in the steppes and began to send out reconnaissance parties and envoys to survey the Kiev area. The *Ipat'evskiy Chronicle* describes how the citizens of Kiev refused to listen to the Mongol envoys and how the city's ruler, Prince Mikhail, fled to Hungary and was replaced first by Rostisla of Smolensk and then by Daniil of West Russia, who left Kiev to a general named Dmitr.¹⁰ Clearly, this rapid succession of rulers did little to instill confidence in the population of Kiev. They knew by now of the Mongols' pattern: reconnaissance, withdrawal, and attack; and they could only wait for the inevitable.

In the second half of 1240, the Mongols returned to Russian territory from the south. The Mongols encircled Kiev and began to bombard the city, concentrating on its four gates. Once the gates fell the Mongols rushed in with their heavy cavalry and after a day of heavy fighting, spent the night on the city walls. On December 6, the Mongols took Kiev street by street. The Russians made their last stand in the Church of the Virgin, which collapsed from the weight of all the citizens who had climbed on it to escape the Mongols. After the fall of Kiev, the Mongols made short work of the rest of Russia which stood between them and Hungary. The "Mongol Yoke" had begun.

The Mongol army of the 13th century was the best fighting force in the world. Well-equipped, sternly disciplined, rigorously trained from childhood to hunt and fight from the saddle, highly mobile, and endowed with great endurance, the Mongol cavalryman had no equal in Asia or Europe. The Mongol soldiers followed the age-old traditions of warfare of the old steppe nomads brought to perfection under Chingis Khan and his successors.¹¹

The Mongol army was organized on the decimal system. The army under Subudei was divided into 12 to 14 divisions of 10,000 men, each called a *tumen*. These were in turn broken down by tens all the way to units of ten men, which elected their own commanders.¹² Under Chingis Khan, a conscious effort was made to combine different clans into units to make them all loyal to the Mongol state. The captains of all the *tumens* were appointed based on merit by the Great Khan personally.

The Mongol army was based on stern discipline from top to bottom, and all officers were held accountable for the men under them. Officers were appointed for such specialized tasks as planning the disposition of troops, directing movements of armies during campaigns, and locating campsites. The entire establishment was under the Great Khan's personal supervision and inspection. Thus, the Mongols had a well defined chain of command from the individual Bowman to the Great Khan himself. Every link in this chain knew his own duty and to whom he was responsible.

Before each major Mongol campaign a *kurultai* was called to discuss and define the plans and objectives of the war. The captains of all the larger units were present and received their individual instructions. Scouts were sent and those that had returned were questioned. The staging area was also designated, as well as the grazing grounds along the intended roads.¹³ The result of this extensive planning and attention to detail was an organized, efficient, highly motivated war machine.

In battle, the main body of the Mongol army moved into battle in five single ranks. The first two ranks were heavy cavalry: soldiers armed with a saber, a lance, a battle axe, and a lasso and wearing a leather cuirass or a coat of mail.¹⁴ The last three ranks were light cavalry: less heavily armored, carrying composite bows, a few javelins, and a short sword.¹⁵ Well ahead and on the flanks of these ranks rode three detachments of light cavalry. These detachments were the first group to engage the enemy when a battle began.

The Mongols' basic objective strategy was to surround and destroy the main enemy army. To do this, they used the "great chase" device they used in peacetime to hunt game. This chase involved forming a ring and enveloping a huge area, then slowly tightening the ring. This required great skill among the commanders of the individual columns to coordinate with the others to prevent any enemy from escaping. The light cavalry would then ride across the front of the enemy forces, shooting arrows and thinning their ranks. The Mongols would then either attempt a rush and feign a retreat or feign a retreat outright. The Mongols hoped to lure the enemy into chasing them, losing its organization and spreading out their ranks by the time they reached the Mongols. When the enemy reached the Mongol lines they were met by a shower of arrows and then a silent heavy cavalry charge. The Mongols used this technique with great success against the Russians at the Battle of Kalka, for example.

The Mongols also knew the value of psychological warfare and propaganda. Before a campaign, they would dispatch secret agents to cities to try to win over religious dissenters, promising tolerance under the Mongols. The lower class would be assured help against the rich, and the upper class would be assured safe trade routes for their

goods. Above all, the Mongols assured peace and security if a city surrendered, and devastation if it did not. The Mongols often made good on the last promise, slaughtering entire populations and razing cities to make other cities think twice about resisting them.

However, they also knew the value of conscripts, using captured civilians as laborers or even infantrymen in their sieges. Persian and Chinese administrators and engineers were conscripted and absorbed into the Mongol ranks as well. The Mongols were quite skilled at learning from other cultures and assimilating their military knowledge. For example, all of their siege techniques used in Russia and Europe were originally adopted from the Chinese. Indeed, the conscription practices of the Mongols were such that a Mongol army was almost always larger at the end of the campaign than when it began.

Napoleon said that the strength of an army can be estimated by its mass multiplied by its velocity; by this formula alone the Mongol army, moving at more than twice the speed of its enemies, was a match for an army twice its size.¹⁶ Yet the Mongols defeated armies more than twice their size handily. The answer lies in the fact that many of the strategic principles developed and espoused by later military thinkers were already well known to the Mongols. The Mongols clearly exhibited such strategic principles as maintenance of a clear objective, maintaining the offensive, unity of command, concentration of forces, economy of force, surprise, security, and simplicity. These principles were not put fully into use by the professional armies of Europe until the 19th and 20th centuries. In its tactical principles, organization, and training, the Mongol army of the 13th century was undoubtedly a "modern" fighting force.

Against this modern army, the Russians fielded a force thoroughly feudal in character. The Russian cavalry did not exist, and the infantry was little better than a motley group of ill-armed peasants. Not until Peter the Great would Russia begin to see the beginnings of a professional military. The military leaders of the Russian armies achieved their position not by merit but by birth or favor. This, of course, resulted in a direction of the Russian forces that was amateurish in its strategy and tactics. The Russian commanders did not have a fraction of the lifelong military training that every Mongol soldier, from horseman to general, was provided by his membership in the "nation in arms" that was the Mongol state.

What sort of numbers did the Russian princes bring to the field? It is extremely difficult to arrive at any reliable figure because of the vagueness of the chronicles. Little mention is made of the size of armies or garrisons. Furthermore, the population of the towns in 13th-century Russia and the number of troops they could provide are unknown. John Fennell worked out a rough system to arrive at an estimate of this number. He assumed that each of the larger cities could yield three to five thousand men, for a total of 60,000 troops. Add to this another 40,000 from the smaller towns, Polovstian and Turkic allies, and the estimate of the potential Russian army strength is 100,000 men.¹⁷ However, it is unlikely that all the towns sent the maximum amount of troops, or any for that matter. Novgorod, for instance, did not even send troops to

break the siege at its outpost at Torzhok. It is most probable that the Russians never fielded more than one-half of their potential. Thus, after Kalka, it seems the Mongols had the numerical advantage at every battle fought.

The Russian losses can not be solely attributed to numbers. For instance, it is well known that a small garrison in a fortified city can hold off a much larger army. J. J. Saunders attributes the Mongol's conquest to, "the extraordinary fragmentation of political power which dissipated her [Russia's] strength and energies through a dozen mutually quarreling principalities and never permitted, even in the face of acutest danger, a concentration of military force."¹⁸

This analysis holds up to the facts. Subudei knew well and exploited the lack of unity among the Russian princes. He consistently moved his army in such a manner that the princes would not realize his objective until he had advanced far enough to divide them physically. The result of this shrewd policy was that each prince was forced to remain at his home principality or city, lest his land be the first one the Mongols invaded. This is evidenced by the many cities and army commanders that waited for reinforcements that never arrived because they were never sent.

The Russians had no central command, no central army headquarters; there was no unified central direction of their defense efforts. Liaison and communication between towns and principalities were virtually nonexistent. Furthermore, the Russians had no intelligence system, especially compared to the Mongols' extensive, well-developed information-gathering apparatus. The best information a Russian field commander could hope for was the often exaggerated tales of stragglers and survivors of the latest Mongol victory. Even when intelligence was given to them, the Russian commanders often did not appreciate it or put it to use. An example of this error is Grand Prince Urii's failure to take notice of the extremely valuable information on Mongol tactics provided him by the Volga Bulgars.

That the Russians always seemed to be taken completely by surprise is due to the Mongols' great skill as much as to the Russians' unpreparedness. The princes did not learn a thing from their defeat at Kalka. Urii took no steps to prepare his own territory for the imminent attack he must have known was coming. No steps were taken to prepare Southern Russia in the year the Mongols spent reorganizing in the southern steppes after their campaign in the northeast. The Russians were either consistently blind to the facts or incredibly thick-witted.

Above all, Russia was weakened by the lack of unity between territories in the north, the south, and the southwest. In this *appanage* period of Russian history, in which the country was divided into many small dukedoms, or *appanages*, there was no single prince with effective control over all of Russia. This fact may explain why the Russians were always caught off-guard: no one could agree on how a defense should be established. Urii, the Grand Prince of Vladimir, was the most powerful prince of the period of the Mongol conquest. However, his influence covered only the area between the Volga and Oka rivers, where his brothers and relatives ruled.¹⁹ Furthermore, a civil war began in 1235 and left a great deal of Southern Russia isolated and exhausted.

Thus, it is not surprising that the Mongols met no serious opposition in their conquest of Russia. In terms of organization, leadership, strategic and tactical skill, the Mongol war machine was the greatest army since Alexander and would remain unequalled until the 19th century. The Mongols conquered the Russian land and people with a campaign of total warfare that would be mirrored later by Sherman's March to the Sea and the bombing campaigns of the Second World War. Against this modern fighting force fully competent in every facet of warfare, the Russians fielded an unprofessional army paralyzed by its complete lack of unity and central direction. The natural result of such a conflict is echoed throughout military history: the victory of the modern, organized invaders over the inefficient, backward defenders.

NOTES

¹ John Chambers, p. 49.

² George Vernadsky, p. 49.

³ Chambers, p. 72.

⁴ *Ibid.*, p. 73.

⁵ John Fennell, p. 79.

⁶ Chambers, p. 74.

⁷ *Ibid.*, p. 75.

⁸ Fennell, p. 82.

⁹ *Ibid.*, p. 82.

¹⁰ *Ibid.*, p. 82.

¹¹ Vernadsky, p. 110.

¹² Chambers, p. 54.

¹³ Vernadsky, p. 110.

¹⁴ *Ibid.*, p. 113.

¹⁵ Chambers, p. 56.

¹⁶ *Ibid.*, p. 65.

¹⁷ Fennell, p. 85.

¹⁸ J.J. Saunders, p. 82.

¹⁹ Fennell, p. 86.

REFERENCES

Chambers, James. *The Devil's Horsemen: the Mongol Invasion of Europe*. New York: Atheneum, 1979.

Fennell, John. *The Crisis of Medieval Russia, 1200-1304*. New York: Longman, 1983.

Saunders, J. J. *The History of the Mongol Conquests*. London, 1971.

Vernadsky, George. *The Mongols and Russia*. New Haven: Yale, 1953.

Said In His Heart: The Murders in Richard Wright's *Native Son*

Scott T. VanDuzer

Native Son, a powerful novel by Richard Wright, was first published in 1945. Set in Chicago in the 1930's, Wright's novel is more than just a description of an age. It is the story of a small life caught in a tight, cramped, poor, and dangerous place.

Native Son is ostensibly the story of Bigger Thomas and his murder of Mary Dalton. Although the first killing mentioned in the book is the killing of Mary Dalton, this is neither the first nor the most important murder. Wright clearly refers to four different murders or killings performed by Bigger Thomas. Bigger murders Bessie, because she knows he murdered Mary. Bigger's crime did not begin with Mary, however, for "he had killed many times before" (101). And these "murders" themselves were not the first, for they stem from what Wright tells us was Bigger's very first murder: "he had killed within himself the preacher's haunting picture of life even before; that had been his first murder" (264). Bessie's physical murder stems from the physical murder of Mary, which stems from the many killings before, which stem ultimately from Bigger's first murder, the murder of the preacher's haunting picture of life, and this last is the murder the novel is truly about.

The physical murder of Bessie is the most premeditated, the most cold-blooded, and, to Bigger and most of the others, the most unimportant. The murder of Bessie, even before she fully understands what Bigger had done, is never far from Bigger's mind, and a mixture of events and planning on Bigger's part finally brings it to pass. It is, in every sense of the word, premeditated. When Bessie first suggests that Bigger killed someone, Bigger thinks that stopping Bessie, "who now knew too much, would be easy" (163). "He was afraid that he would have to kill her before it was all over" (170). Finally, he realizes that Bessie is a dangerous burden: "Coldly, he knew that he had to take her with him, and then at some future time settle things with her, settle them in a way that would not leave him in any danger. He thought of it calmly" (215). Bigger is coldly and calmly planning nothing less than the murder of Bessie. Once the murder has been premeditated in such a way, it is only a matter of time until it is coldly and bloodily carried out. When Bigger "lifted the brick again and again, until in falling it struck a sudden mass that gave softly but stoutly to each landing blow" (222), he is simply thinking this is the way it had to be and simply feeling that he and the room are cold. But if the murder of Bessie is the most premeditated, and the most cold blooded, it is also the most unimportant. When the coroner deems it imperative that the jury examine one additional piece of evidence to help shed light on the actual manner of the death of *Mary*, he brings out Bessie's body. When Max complains that exhibiting the

body serves no decent purpose, the coroner complains that "it will enable the jury to determine the exact manner of the death of Mary Dalton" (306). "The black girl was merely evidence" (307). Bigger, for his part has "completely forgotten" Bessie, not because he has thought any less of Bessie, but because the meaning of Mary's death has caused him more fear. Though Bigger plans to kill Bessie and coldly does so, the murder of Bessie is important only because of the light it can shed on the death of Mary. Bigger himself has to kill Bessie because she knows about Mary.

If Bessie's death is premeditated, Mary's is spontaneous; if Bessie's is cold blooded, Mary's is done in fear; and finally, if Bessie's is unimportant, Mary's is very important. To think that Bigger has any plans to kill Mary is absurd. The physical death is accidental in every sense of the word. He doesn't even know he kills her. When he is describing Mary's death to Bessie, she asks "You didn't plan to kill her?" "Naw," Bigger replies, "I swear I didn't" (213). It is clear that he didn't. When the smothering actually takes place, he is acting, as the rat in the corner, purely out of fear. From the beginning of the scene to the end, Bigger is fearful: "He stood, holding her in his arms, fearful, in doubt" (83). He is seized by a "hysterical terror" when Mrs. Dalton appears at the door. His fists are clenched in fear, he "waits tensely, afraid to move for fear" (84). Frantically, he catches a corner of the pillow and puts it over Mary's mouth. He holds it there "intimidated to the core by the awesome white blue [Mrs. Dalton] floating toward him" (85), and only realizes later that Mary suffocates. But if Mary's death is unplanned, and even unknown as it is committed, it is also, in retrospect, of great importance. The white people, not knowing, consider it a rape and murder of a white girl by a black man, and this belief gives the death great importance. For Bigger, it is the crime for which he will die. Mary's death caused him the most fear: "not her death in itself, but what it meant to him as a Negro" (306). This murder is the most important physical killing that occurs in the book, but Wright, at this point, leaves physical killing and the public sentiment and courtroom dramatics behind and begins to explain why Bigger killed Mary.

He begins to talk of two less physical, more internal, more important murders, of which the physical murders are only the outward manifestations. "Though he had killed by accident [Mary], not once did he feel the need to tell himself that it had been an accident" (101). As Bigger thinks, the physical reality begins to slip away. It *was* a physical accident, but "in a certain sense he knew that the girl's death had not been accidental" (101). "He had killed many times before, only on those other times there had been no handy victim or circumstances to make visible or dramatic his will to kill" (101). These murders are certainly less physical, having, as Bigger reveals, nothing to make them visible. They are internal and committed perhaps as part of his daily existence, but they are also more important, as he, in contemplating them after he has killed Mary, begins to realize: "His crime seemed natural; he felt that all his life had been leading to something like this" (101). No longer a matter of wonder, the understanding or realization that these murders have occurred reveals to him the hidden meaning of his life. What is this hidden meaning? It is in his thinking about

and developing of this idea of the hidden meaning that he emerges with a new world order. This is important to Bigger, more important than any physical murder he committed: "Things were becoming clear; he would know how to act from now on" (108). But as Bigger contemplates this thought in relationship to the "murder" he has been committing all along, he thinks that "in a certain sense he had been doing just that in a loud and rough manner all his life" (108). Why did he make this connection? It is a connection between what he knows he has been doing, murdering in his mind, and what he has now done outwardly. The two statements, so similar, are verbal expressions of his "new" philosophy on how to live his life. But the question might arise as to why he needs to come up with a new way to live his life. A look at the remaining murder will answer that question.

Wright calls this the first and as the first, the seminal, murder. When the preacher is talking with Bigger, Bigger feels a sense of guilt deeper than even his murder of Mary had made him feel: "He had killed within himself the preacher's haunting picture of life even before he had killed Mary: that had been his first murder . . . to live, he had created a new world for himself" (264). What is the haunting picture of life that he has killed? It is the story that will make "'yo' heart glad'" (263). It is the story of creation, temptation, sin, redemption, salvation, and hope. It is, as Bigger views it, the picture that gives rise to the quiet presence of his mother, "inarticulate and unconscious, making for living without thinking, making for peace and habit, making for a hope that blinded" (102). Once, when Bigger was hiding in the city, he awakened to the sound of singing and shouting. It was music from a church and he tried not to listen, "but it seeped into his feelings, whispering of another way of life and death . . . he shook his head, trying to rid himself of the music" (237). But try as he might, "the singing filled his ears; it was complete, self-contained, and it mocked his fear and loneliness, his deep yearning for a sense of wholeness" (238), and its "fullness contrasted so sharply with his hunger, its richness with his emptiness, that he recoiled from it while answering it. Would it not have been better for him had he lived in that world the music sang of?" (238). It was "his mother's world, humble, contrite, believing. It had a center, a core, an axis, a heart which he needed but could never have" (238), because he had done what he could to murder this haunting picture of life. But now the preacher was making it walk before his eyes like a ghost and creating within him a sense of exclusion. "Why should this thing rise now to plague him after he had pressed a pillow of fear and hate over its face to smother it to death?" (264). After he had smothered the preacher's haunting image of life, he had created a new world in which he could live. This first murder, his seminal murder of this picture, is the wellspring from which the other murders and killings come. He replaces the murdered picture with his new order, and it is no mistake that he makes the replacement in the presence of his mother. Before him is what he is saying no to, what he is choosing to murder; within him what he is saying yes to. When the preacher is making the story of creation and redemption walk before him, Bigger first feels awe and wonder, then gets upset: "How could he believe in that which he had killed?" (265). The preacher puts a cross around Bigger's neck.

Later, in his cell, he grips the "cross and snatched it from his throat. He threw it away, cursing a curse that was almost a scream, 'I don't want it!'" (312). The men gasp at him and look amazed. "'Don't throw that away, boy. That's your cross!'" "'I can die without a cross!'" (313), Bigger replies, verbally sealing his fate that has nothing to do with his murder of Bessie, his killing of Mary, or the numerous murders he committed within himself, and everything to do with his first murder, the murder that creates the story of Bigger Thomas, the killing of the preacher's haunting picture of life.

Bigger, in pressing a pillow of fear and hate over the preacher's haunting picture of life, smothers it to death. By this rejection and murder he sets himself free into a world without a center, a core, or an axis. He must create for himself a new world, and the world he chooses to create is one in which he acted as people thought he ought to act. Since he hates, he wants to kill, and, although he lives as the others live on the outside, he is murdering and killing many times on the inside. The natural progression, when circumstances conspire to provide him with a victim, is a very real, physical, visible and dramatic expression of his will, the killing of Mary. When Bessie finds out, Bigger's only concern is to protect himself, to settle things in a way which will not leave him in any danger, to make sure of Bessie, that is, to murder her.

In Bigger's final days he drives away his mother, the Negro preacher, and a white priest. "The priest had come to see others since then, but had not stopped to talk with him" (382). He felt that his making the priest stand away from him and "wonder about his motives for refusing to accept the consolations of religion was a sort of recognition of his personality on a plane other than that which the priest was ordinarily willing to make" (382). But what sort of personality is the priest recognizing? According to Bigger, it is one without a soul (314), one that came to the end of life without meaning, without anything being settled and without conflicting impulses being resolved. Bigger has, in the words of e.e. cummings, "reaped his sowing and went his came, sowed his isn't and reaped the same."

REFERENCE

Wright, Richard. *Native Son*. New York: Harper & Row, 1989.

What the Holland Tunnel Did For New York

Patrick Horan

The Holland Tunnel was the world's first automotive tunnel. When it opened on November 20, 1927, it was hailed as the eighth wonder of the universe. Chief Engineer Clifford Holland, who died before its completion, successfully solved the problem of eliminating noxious exhaust gases. He devised a system of ventilation towers with eighty-four fans each on both sides of the Hudson; completely new, fresh air circulated through the tunnel every ninety seconds. Just as impressive was its "electronic brain," which indicated on a switchboard the location of a fire, traffic flows, and levels of carbon monoxide present.

The tunnel is not only important as an engineering feat, however. As this paper will show, it is noteworthy also because of its immediate effect upon Lower Manhattan and New Jersey. Clifford Holland's legacy boosted real estate values at both termini, and led to the ultimate demise of railroad companies' trans-Hudson ferry services. Its relationship to real estate development parallels that of the steamboat to Brooklyn. After the implementation of Fulton's invention to cross the East River, this bedroom community greatly expanded throughout the nineteenth century to become a rival, before being annexed, to New York itself.

Brooklyn indeed was paramount in the minds of the tunnel commission and developers. It served as a paragon of how a community's growth was directly proportional to its accessibility. In 1927 Chief Engineer O. Sintraub noted, "It is quite evident that, when a comparison is made of the volume of traffic crossing the Hudson River with that crossing the East River, the absence of vehicular traffic facilities has been a great hindrance to the development and free movement of traffic between Manhattan and New Jersey."

A Department of Plant and Structures report in 1926 revealed that for a typical weekday, 171,352 vehicles used the four East River bridges, as compared to 2,400 cars using the six ferry companies. Conversely, the 37,594 automobiles crossing the Hudson had no choice but to use the fourteen ferry operators. Clearly, the western part of the metropolitan area could not grow as rapidly because of its poor transit facilities.

A Bridge Versus a Tunnel

It is interesting to note why this interstate link was a tunnel instead of a bridge. After all, just five years later in 1932 the George Washington Bridge was constructed further north between Fort Lee and 178th Street in Manhattan. The answer has to do with the region's topography, geology, and New York's expensive real estate, all of which made a bridge five times more expensive than a tunnel.

The geology of the selected site played a role in that it made laying the foundations prohibitively expensive. Especially on the New Jersey side, rocking the supports into the earth would have been arduous. The low banks on both sides of the Hudson also made matters impossible. To maintain a proper clearance for ocean-going vessels at the high water mark, the bridge would need approaches on Manhattan that would reach halfway across the island (for the particular site at Canal Street, that would mean a ramp 0.75 mile long). Not only was this impractical from a traffic flow perspective, but also from a realtor's. Land was too dear to be wasted in such a fashion. In addition, in the vicinity of the bridge and underneath it, real estate would depreciate precipitously, doubtlessly causing nearby land owners to fight the project. Consequently, the chief engineer concluded that a tunnel was best.

Lower Manhattan's Hot Spot

An excellent way of evaluating the subterranean roadway's effect on Lower Manhattan is to examine the leasing and sale of land by Trinity Church in the Twenties. Prior to the tunnel's conceptualization, real estate activity was dormant. Sixth Avenue was being extended south to Canal Street, and subway lines were being laid on the West Side; this combination gave the area an air of chaos not conducive to raising property values. A plot on the eastern side of Varick Street near Canal in 1920 will serve as a salient point. The 239 foot by 140 foot site of the Post Office's future Station V, it was bought for \$250,000, or at \$7.47 per square foot.

The Holland Tunnel became a certainty in 1921 and 1922, and a slight increase in land values ensued. This was reflected in the American New Company's purchase of 24,500 square feet of frontage on Varick Street at a cost of \$7.60 per square foot. But even as late as 1925, land could be purchased at the relatively moderate price of \$10.00 per square foot north of Canal Street.

Things began to change in 1926, however. As the tunnel was a year away from completion, prices started to climb steeply. The frontage on Hudson and Varick Streets alone increased by 100%. The Green Terminal Building, situated directly across from the exit plaza and occupying an area of 25,000 square feet, was leased from Trinity Church for \$16.00 a square foot. From the start, the office structure was successful, and it claimed among its list of tenants such familiar names as the William Wrigley Jr. Company and the Dodge Manufacturing Company. As a real estate columnist for the *New York Times* noted, "it can be readily seen that much more activity will be seen in this section, and Varick Street and vicinity will soon be lined with important business structures and be one of the important commercial centers of the city."

Other leases completed in this year showed similar rises in the value of Trinity's holdings. A plot 30,000 feet square on Varick Street between West Houston and King netted \$33,000, or \$18 a square foot. Another Varick Street property between West Houston and Clarkson was occupied by a firm paying \$16.75 per foot square. Hudson Street, too, experienced a jump in rental prices: frontage from Charlton to King Streets cost \$16.66 a square foot. The coming of the tunnel also stimulated the construction

industry in the Lower Manhattan Area. In addition to the Green Industrial Building, there were three more new structures: the Bliss Building on Varick between Grand and Watt Streets, the Stanley and Paterson Building from Spring to Van Dam along Varick Street, and the Graphic Arts Building at the corner of Varick and West Houston. The best had yet to come, however, for the jewel in the region's crown, the United States Customs House, was still being built by Louis Adler in December, 1927. At a cost of \$8 million, it completely covered the block bounded by Varick, Hudson, King, and West Houston Streets.

The Boom in Jersey City

Jersey City, the Holland Tunnel's other entrance, experienced similar growth. This bustling little metropolis boasted of 1,350 industrial plants which employed 175,000 workers, yet only had a population of 325,000 in 1928. Its locus of development was Journal Square, the area where the state's highways converged to approach the tunnel. Here the Pennsylvania Railroad completed a new underground station, while adjacent to it on street level the Marcus Loew Realty Company planned to erect a 4,000 seat theater. Two additional large projects were close to being finished: the Stanley Theater, capable of holding an audience of 5,000, and the fifteen-story office building of the Labor Bank.

To handle the influx of businessmen into the Square, a five-hundred-room hotel was being started. All the bus lines in New Jersey terminated in this town, and forty coaches already had acquired licenses to use the tunnel. The City Commission, realizing that economic vitality was tied to the automobile, approved measures for an 860-car garage costing one million dollars. Finally, a national mail-order firm was projecting to place their sales and office complex there. With so much activity occurring at this time, it is little wonder *The New York Times* remarked, "The most important effect of the vehicular tunnel has been reflected in Jersey City, where, since its opening, there has been an increased demand for industrial plants, businesses, and apartment building sites. Jersey City is one of the excellent building sections of the future, and because of the easy hauling of merchandise, via the tunnel, one of the big industrial sections of the future."

The Demise of the Ferry

Whenever there is an improvement in technology, the preceding way of doing things becomes outmoded. The ferry service provided by railroad companies across the Hudson was just such a victim of changing times. Americans were falling in love with the automobile, and the Holland Tunnel was too potent a competitor with its convenience for the car-carrying ships. Going under the river took only six minutes to reach Manhattan and cost only fifty cents. In contrast, the ferry on the best of days took three times as long, and had fares that varied from one to two dollars, depending on vehicle type and operator. These boats also were prevented from crossing the river on foggy days or if the river froze. Consequently, the tunnel began to quickly push these

services into the red; within a year, the Erie, Pennsylvania, Lackawanna, Central of New Jersey, and New York Central Railroads lost 40%, 50%, 33%, 20%, and 10%, respectively, of their business.

In conclusion, the Holland Tunnel had a remarkable effect on the New York metropolitan area. Prior to its construction, developers focused more on the communities adjacent to the East River. Once Clifford Holland's ideas were realized, however, the course of events changed. In the vicinity of both of its terminals, the local economy rapidly accelerated. Lower Manhattan's land values on the West Side dramatically increased, whereas in Jersey City a mini-building boom was launched. On the other hand, trans-Hudson ferry service fell by the wayside, being too slow, expensive, and inconvenient. Commuters and businesses alike found the underwater roadway delightful to use in comparison to steaming across the river. Indeed, Clifford Holland's brainchild did more than just facilitate driving into Lower Manhattan; it affected the growth of New York for decades to come.

REFERENCES

- Sintraub, O. "Relation of Tunnels and Bridges to Traffic Flows." *Annals of the American Academy of Political and Social Science* 133 (September 1927), pp. 65-71.
- The New York Times*. "Chief Engineer Tells Why Tunnel Was Built Instead of Bridge." (March 11, 1927), pp. 11-14
- The New York Times*. "The Holland Tunnel's Effect on Realty Values." (December 18, 1927), Section XII, pp. 1-3
- The New York Times*. "Aid to Development of New Jersey." (April 15, 1928), Section XII, pp. 2-3

Brain and Brawn: The Struggle To Coexist

Melissa N. Rozenwald

"The best laid schemes o' mice an' men Gang aft a-gley (often go astray) and lea'e us naught but grief and pain for promised joy." This fragment from a Robert Burns poem emphasizes the uselessness of human efforts. This cynical outlook is repeated by John Steinbeck in his novella *Of Mice and Men*. Steinbeck traces the lives of George Milton and Lennie Small, two men who have spent their lives on the road trying to secure and maintain jobs as farmhands. George, the leader of the two, tries to help Lennie realize his dream of owning a farm, but Lennie's antisocial behavior, intellectual limitations, lack of self-control, and childlike emotions, handicap them from ever attaining acceptance into society or fulfilling their dreams.

George's efforts to help and protect Lennie go astray and cause great grief, yet are founded in his caring for another human being. The question of what drives the common man to act is one important theme in Steinbeck's work. Is man a social animal with a moral responsibility to his fellow man? The representation of man is another related theme that Steinbeck portrays through these two characters.

George and Lennie's relationship is based primarily on George's altruistic concern for the voluntary acceptance of responsibility for Lennie. Through this relationship, Steinbeck offers a statement of his belief that "man owes something to man." There is a strong commitment in George's sacrifices and devotion to Lennie, who is helpless without guidance. George is a "good man, motivated to protect Lennie because he realizes that Lennie is the reverse image of his own human nature. . . George represents humanity that (unlike Lennie) is aware of evil. He fills out Lennie's pattern to complete a whole man" (Levant 135).

As individuals, Lennie and George have very little impact on the lives of those around them, but together they are a force to be reckoned with. Both men are struggling for acceptance into the ruthless society in which they live. It is their fellowship and companionship which generates a strong bond between them, giving them the strength they need to pursue their goals and fight against the harsh blows thrown at them. Their relationship, unbeknownst to them, gives each a stronger sense of self, which emanates through their actions. Lennie's emotionally-driven nature is strengthened and sometimes suppressed, if need be, by George's caretaking skills, while George's need for a "buddy" is fulfilled by Lennie's presence. It is their loyalty to one another that intensifies their relationship, and it is essentially this caring and sensitivity that causes George to pull the trigger on Lennie rather than let an obdurate group of emotionally-unattached townspeople kill him.

Lennie is not the only one benefiting from this relationship. George, too, has someone to be with, someone who cares about him and understands him. He can

share his dream with Lennie. Even George, who seems so secure with himself and his position as a role model to Lennie, can be vulnerable in given circumstances and environments. According to Warren French, a critic who studied the concept of naturalism in Steinbeck, "even the man who has achieved a certain amount of control of his instincts and his fellow man and who has shaped a dream – like George – is helpless in the hands of an indifferent and imperfect nature" (76). To a degree, both Lennie and George are insecure; so what they find in their relationship is security, friendship, and faithfulness.

In killing Lennie, George is released from the burden of caring for his socially inept friend. It is George's character to complain about Lennie, who is essentially a retarded child in a man's huge body, but he knows that the sacrifice is worth it. After he kills Lennie, George is ironically free to do all that he had complained Lennie had held him back from achieving. George and Lennie are co-dependent. Because George needs Lennie as much as Lennie needs George, George's perception of his own life is going to change drastically once Lennie is gone. He will not be able to accomplish his dreams without the man who helped him dream them. He is killing himself by killing Lennie.

The alternative to their secure relationship would have been solitude. Without each other, these two men would have felt empty. Their comradeship became a defense against this loneliness. It will be reinforced by their bunkhouse lifestyle. They rely on each other because they need to. This, too, fortifies their relationship. By accepting responsibility for Lennie, George accepts Lennie and all his flaws, unconditionally. "George's initial hope that Lennie can hide his flawed humanity by seeming to be conventional is shattered in the end" (Levant 135), says Howard Levant, another Steinbeck scholar. "Steinbeck develops theme and counter theme, Levant continues, by "exploring the chances for the good life against the flawed human material that Lennie symbolizes most completely and the code of rough justice that most people accept" (134). Lennie's flaws grow into a potential for evil and essentially bring on George's doom.

As a friend, George is obliged to shoot Lennie out of kindness before the posse gets to him. One parallel made in the story was that of Lennie and the old dog owned by one of the inmates of the ranch. The stench of the dog was intolerable to the other men. Both the dog and Lennie, outcasts to the other men, are caught up in the same type of pathetic situation. They are each destroyed with one bullet to the back of the head. They are even killed with the same gun. "The defenseless man is linked by the weapon with the defenseless dog in the group's web of created power," Levant concludes (141).

Bad things happen to good people. No one exemplifies this more than the character of Lennie. Lennie's momentary problems overwhelm him, and his cognitive development is so primitive and infantile that he often acts impulsively before he thinks. Lennie is dangerous and lethal in a fight because he does not know his own strength. Once he starts an act, he is incapable of reversing it. Lennie killed, but is arguably guiltless because he is not responsible for what he does and was not

knowingly violent. This unconventional morality gives strength to Lennie and George's friendship, but leads eventually to Lennie's death.

Steinbeck's fundamental belief about the representation of man is best expressed by James Gray, another Steinbeck scholar. Gray observes that "Men seem to be born with a debt they can never pay no matter how hard they try. It piles up ahead of them. Man owes something to man. If he ignores the debt, it poisons him, and if he tries to make payments, the debt only increases and the quantity of his gift is the measure of the man" (50). Such is the case with Steinbeck's characters, especially George and Lennie. According to Gray, Steinbeck could be called a "moral ecologist because he is obsessively concerned with man's spiritual struggle to adjust himself to his environment" (70).

In figurative and psychological terms, the characters of George and Lennie can be viewed in several ways. Lennie, the man-child, can represent animal appetites. He craves to touch and feel and has an "impulse toward immediate gratification of sensual desires" (Goldhurst 380). George, the caretaker, represents the element of Reason, and in doing so, tries to control the appetites that Lennie represents. George's struggle to suppress Lennie's appetites will never be completed until Lennie is dead because George cannot be by his side all the time, nor can George make spontaneous decisions for Lennie. He finally does quell Lennie's natural urge as he kills him, but since both men together make up the nature of man, George loses part of himself.

In Freudian terms, George and Lennie are representative of the id and ego. The id is the pleasure principle and the most primitive part of the personality. It satisfies its natural urges. The id is the amoral, physical side of a person, consisting of the body and the senses. It is evident that Lennie represents the id because he thinks with his senses and acts on these natural urges. For example, Lennie enjoys petting a dead rat and also rapes a girl. The ego, which is opposite of the id, is the reality principle. The ego is the regulating mechanism that protects society from the id by trying to achieve a balance. It is the person's thinking side, the leader figure within him or her. George is the ego, the leader of the two men. He does all the thinking, makes all the decisions, and tries to create a balance between the two of them. George is the regulating agency that protects society from the id, which is Lennie. Lennie is missing his reality principle and so "a body without a mind controlling it (Lennie) can easily be carried away. A person must be a balance (George and Lennie) of the id and ego" (Goodman 14). It is only George and Lennie together that make a whole man.

John Steinbeck reflects the quality of contemporary American life. He celebrates the worth of man and establishes the dignity of human life. "There is oneness of man with man and man with nature," says James Gray (50). Through the characters of George and Lennie, Steinbeck makes a statement about life. "No life is unworthy of reverence," Gray continues, "not that of an ailing dog, nor that of an idiot. Life must be sacred even to a man who is obliged to destroy in order to save (Gray 58). Man is a social being and must strive to be in harmony with his fellow man if he is to be at peace with himself. Harlod Clurman, who wrote of Steinbeck's depiction of the

loneliness of American existence, best summarized Steinbeck's focal point: "Until brain and brawn become one in our land, we shall suffer the dumb ache of isolation, a perpetual state of partial being" (408).

REFERENCES

- Clurman, Harold. "The Nation." In *Contemporary Literary Criticism* Vol. 5. Eds. Carolyn Riley and Phyllis Mendelson. Detroit, Michigan: Gale Research Company, 1976, p. 408.
- French, Warren. "John Steinbeck: A Usable Concept of Naturalism." In *Modern Critical Views: John Steinbeck*. Ed. Harold Bloom. New York: Chelsea House Publishers, 1987, p. 76.
- Goldhurst, William. "Of Mice an Men: John Steinbeck's Parable of the Curse of Cain." In *Contemporary Literary Criticism* Vol. 21. Ed. Sharon Gunton. Detroit: Gale Research Company, 1982, p. 380.
- Goodman, Michael. *Of Mice and Men*. Woodbury, New York: Barron's Educational Series, Inc., 1985, p. 14.
- Gray, James. "John Steinbeck." In *American Writers* Vol. IV. Ed. Leonard Unger. New York: Charles Scribner's Sons, 1974, pp. 50-70.
- Levant, Howard. "Of Mice and Men." In *The Novels of John Steinbeck; A Critical Study*. Columbia, Missouri: University of Missouri Press, 1974, pp. 135-141.
- Steinbeck, John. *Of Mice and Men*. New York: Bantam Books, 1974.

The Tao of Who?

Timothy Falconer

The Tao Of Pooh by Benjamin Hoff. New York, New York:
Penguin Books, 1982.

The Tao of Pooh, by Benjamin Hoff, is an entertaining attempt to illuminate the nature of the Chinese concept of Tao by comparing it to something more familiar to Western readers, A. A. Milne's *Winnie-The-Pooh*.

Hoff uses Pooh and his friends, Eeyore, Piglet, Rabbit, and Owl, to illustrate his narrative as he discusses such Taoist topics as *P'u* (simplicity), Inner Nature (the way things are), *Wu Wei* (doing things without trying), and *T'ai Hsu* (the absence of things).

Pooh's friends are used to describe stereotypically Western attitudes toward life. Rabbit is seen as a busybody who is always rushing around trying to do things and never taking time to enjoy himself. Eeyore is the worrisome cynic who always manages to see the worst in everything, including himself. Owl is the know-it-all scholar who so occupies himself with clever planning and precise examination that he fails to see the simple solutions. Piglet is the anxiety-ridden underachiever who avoids risks because of imagined dangers and looks to others for his own self-esteem.

Hoff contrasts these characters with Pooh, the simple-minded lover of life. Unlike his friends, he is not busy, worrisome, clever, or anxious. In Pooh we find simplicity and spontaneity. Hoff suggests that it is Pooh's serene and uncluttered attitude that allows him to solve problems where his friends fail. Pooh is seen as the perfect Taoist.

While this is certainly an intriguing approach, Hoff doesn't quite pull it off. His depiction of Pooh as Taoist serves only to distract from his otherwise useful explanation of Taoist principles. Especially distracting are the scenes when Pooh sits on Hoff's writing table, trying half-heartedly to understand what Hoff is writing about:

"Like who?" I asked.

"Like Pooh Tao-tse, the famous Chinese painter," Pooh said.

"That's *Wu* Tao-tse."

"Or how about Li Pooh, the famous Taoist poet?" Pooh asked cautiously.

"You mean *Li Po*," I said.

"Oh," said Pooh, looking down at his feet.

These scenes have an initial charm to them, but it quickly fades. At best, they are only somewhat relevant to Hoff's discussion. On several occasions, they contradict points made in other parts of the book.

An example is Hoff's parallel between Pooh's song *Cottleston Pie* and the Taoist notion that it is better to accept the true nature of things than ponder questions with no simple answer:

Cottleston, Cottleston, Cottleston Pie,
 A fly can't bird, but a bird can fly.
 Ask me a riddle and I reply:
 "Cottleston, Cottleston, Cottleston Pie."

Hoff says that Westerners are always asking questions that lead us away from the true nature of things. "What we need to do is recognize Inner Nature and work with Things As They Are. When we don't, we get into trouble."

Later in the book, while *Wu Wei* is being discussed, Hoff asks Pooh, "What flows like water, reflects like a mirror, and responds like an echo." Pooh misinterprets this as a childish riddle and tries earnestly to find an answer.

One cannot help but think that Pooh, the great Tao Master, would listen to his own advice, and simply answer "Cottleston Pie." Instead, he acts as a child would. Throughout the book, Pooh seems more like a child than a Taoist. In the following scene, he acts defensively:

"All right, Pooh, what can you tell us about the Uncarved Block?"
 "The *what?*" asked Pooh, sitting up suddenly and opening his eyes.
 "The Uncarved Block. *You* know. . ."
 "Oh, the. . . Oh."
 "What do you have to say about it?"
 "I didn't do it," said Pooh.
 "You-"
 "It must have been Piglet," he said.

Hoff confuses the childish Pooh with the childlike Taoist. Pooh's antics make it clear that he is still at the stage where he is "helpless but trying to at least *appear* independent." His simplicity is *naïve*, not profound. He is anything but wise.

Hoff forces his conception of Pooh as Taoist. In this, he is just like the distracted Westerners bent on "trying to devise craftier ways of making pegs fit where they don't belong."

Modern Art and the Mathematically Sublime

Paul G. Beidler

A trip to a museum or gallery of 'modern art' or to the sculpture garden in many a park or university is a confusing experience for most of us today. We are confronted, simply, by objects: objects of all sizes, colors and shapes, and constructed from all materials and combinations of materials imaginable. My own initial reaction to these displays has been one of indignation, for I was raised on Cézanne and Picasso and the modernist renaissance and I resent the blatant, unqualified rejection of tradition that seems to pervade much contemporary work. I also instinctively resent the fact that most of contemporary art seems so easy, as if skill and craftsmanship were no longer welcome in the art world. But I am uncomfortable with the notion that art is dead, and I must also admit to a strange fascination with contemporary art, particularly with the eerie omnipresence of minimalist sculpture. My purpose here is to explore this fascination, which I think can be accounted for by Kant's theory of the sublime. My goal is to contribute to the current debate about the difference between modernism and postmodernism and to place this debate in its context by linking the modern and the postmodern with the sublime.

A peculiarity of our understanding, Kant writes in the third *Critique*,¹ is that it "must proceed from the *analytically universal* to the particular" (Kant 291). This means that the understanding is deterministic rather than reflective,² and that we therefore can only understand something by comparing it with something else on the basis of some common unit, the particular. But since no object is merely the sum of its parts, no unit of measurement will ever have anything significant to do with the whole that it is used to measure, and understanding alone can therefore tell us little about an object itself. The imagination interprets the measurements, creating "another nature out of the material that actual nature gives it" (Kant 182), and these presentations of the imagination are ideas, images of reality. Rationality, then, is not an act but a process. The process Kant describes is one of apprehension and comprehension: we apprehend an object of nature by estimating its relative magnitude mathematically, and we comprehend it by estimating its magnitude aesthetically, by making a subjective determination of its magnitude. The sublime is a feeling of helplessness that arises when we cannot understand something: we apprehend it, but we cannot understand it because we cannot compare it with anything.

Kant's mathematical sublime is sublime because it involves magnitudes that are too large to be measured anywhere but in the supersensible substrate which guides our intuitions. "We call *sublime* what is *absolutely large*" (Kant 103); "that is *sublime* in comparison with which everything else is *small*" (Kant 105). The mathematical sublime is the discomfort we feel when we apprehend something too big to comprehend, like a

mountain or a storm, the implications of which are too immense for the mind to categorize (Kant 108). The sublime, as an effect of the process of measuring, is peculiar because it is experienced over time. It is endless. Kant discusses this unpleasant feeling at length in §27:

Measuring (as [a way of] apprehending) a space is at the same time describing it, and hence it is an objective movement in the imagination and a progression. On the other hand, comprehending a multiplicity in a unity³ (of intuition rather than thought), and hence comprehending in one instant what is apprehended successively, is a regression that in turn cancels the condition of time in the imagination's progression and makes simultaneity intuitable. Hence, (since temporal succession is a condition of the inner sense and of an intuition) it is a subjective movement of the imagination by which it does violence to the inner sense, and this violence must be the more significant the larger the quantum is that the imagination comprehends in one intuition. Hence the effort to take up into a single intuition a measure for magnitude requiring a significant time for apprehension is a way of presenting which subjectively considered is contrapurposive, but which objectively is needed to estimate magnitude and hence is purposive. And yet this same violence that the imagination inflicts on the subject is still judged purposive for the whole vocation of the mind. (Kant 116)

The mathematical sublime, then, is violence to the inner sense. This violence, while subjectively contrapurposive, is objectively purposive because the process of trying to comprehend a multiplicity in a unity is the only way of approaching things that are too large to comprehend in a single act. The violence is the demand that the understanding comprehend something that it can only apprehend, ("comprehension becomes more and more difficult the farther apprehension progresses, and it soon reaches its maximum, namely, the aesthetically largest basic measure for an estimation of magnitude" [Kant 108]), but we want to comprehend these immense objects, and so the violence is both painful and exciting. Comprehension of great magnitudes is painful and takes time,⁴ because an object whose presentation is of such magnitude that it exceeds the "basic measure" cannot be comprehended as a whole. The sublime is alluring because of this new dimension of time. It is a feeling of endlessness, of eternity.

The sublime, unlike beauty, is a feeling and is not an attribute that individual objects can possess inherently:

For what is sublime, in the proper meaning of the term, cannot be contained in any sensible form but concerns only ideas of reason, which, though they cannot be exhibited adequately, are aroused and called to mind by this very inadequacy, which can be exhibited in sensibility . . . true sublime must be sought only in the mind of the judging person, not in the natural object the judging of which prompts this mental attunement. (Kant 99, 113)

Thus the only 'thing' that is itself sublime is reason itself, or God. But many things in nature *seem* sublime, and it is the nature of this seeming that I am concerned with here. In investigating objects of beauty we search for a standard against which beauty can be measured, and the object is only beautiful, or at least only freely so, until we find such a standard. But for the sublime we require "a basis merely within ourselves and in the way of thinking that introduces sublimity into our presentation of nature" (Kant 100). But what is this 'way of thinking,' this 'mental attunement' which makes pain attractive? What does the sublime feel like? "The liking for the sublime," Kant writes, "contains not so much a positive pleasure as rather admiration and respect, and so should be called a negative pleasure" (Kant 98). The sublime is not pleasurable in the same way that beauty is:

In presenting the sublime in nature the mind feels *agitated* This agitation (above all at its inception) can be compared with a vibration, *i.e.* with a rapid alternation of repulsion from, and attraction to, the same object. (Kant 115)

The sublime is like an itch: it feels good, but only insofar as it feels bad. Just as beauty is pleasure without interest (see Kant §9), the sublime is terror without actual threat.⁵ The sublime is the feeling of frustration we experience in the presence of something we cannot measure. There are two moments of the sublime, dread and awe, and the sublime is confusing because of the virtual *simultaneity* of these opposing moments. It is impossible, then, for us to find beauty in something (approve of it) if it inspires the sublime, because such an object is "contrapurposive," or formless (Kant 99). Beauty and the sublime are mutually exclusive.⁶

The question I want to address here is this: what do Kant's theories tell us about a 'fine art' that decides to emulate the sublime instead of beauty. Such an art could not exist under Kant's system, for art is the production of the beautiful (Kant 217), and if it attempted to be anything else, it would be contrapurposive. But literalist sculpture, which typifies the postmodern, is art that aims to produce the feeling of the sublime, often at the expense of beauty, and this art occupies space in gardens and galleries everywhere. What, according to Kant, are the consequences of an art that so renounces beauty? What is the nature of the "way of thinking" that Kant speaks about, according to which things seem sublime? Clement Greenberg thought this way of thinking was the modernist way, and that Kant was "the first real Modernist."⁷

Jean-François Lyotard agrees. In *The Postmodern Condition*, Lyotard writes conservatively about the condition of the arts in our century. He condemns postmodernism as a "slackening" and an "end to experimentation" (Lyotard 71), and laments the premature demise of modernism⁸. Lyotard claims that the magic of modernism has always been its aspiration toward the Kantian sublime, and that postmodernism has relinquished this ideal and suffered for it. He distinguishes two "modes" of aesthetic expression in modernity. The first, modernism, emphasizes either "the powerlessness of the faculty of presentation" or "the power of the faculty to

conceive" the two moments of the sublime; the second stresses "the increase of being and the jubilation which result from the invention of new rules" (Lyotard 79-80). The first, in other words, aspires to a sublime presentation of the unrepresentable:

We have an Idea of the world (the totality of what is) but we do not have the capacity to show an example of it. We have the Idea of the simple (that which cannot be broken, decomposed) but we cannot illustrate it with a sensible object which would be a "case" of it. (Lyotard 78)

The second mode of expression, postmodernism, aspires to gestalt, or what Michael Fried calls "continuous and entire presentness."⁹ Postmodernism, Lyotard argues, is eclectic in its reliance on the new and different, and this, Lyotard argues, makes it kitsch:

Eclecticism is the degree zero of contemporary general culture: one listens to reggae, watches a western, eats McDonald's food for lunch and local cuisine for dinner, wears Paris perfume in Tokyo and retro' clothes in Hong Kong; knowledge is a matter for TV games. It's easy to find a public for eclectic works. By becoming kitsch, art panders to the confusion which reigns in the "taste" on the patrons. (Lyotard 76)

Modernism, which Greenberg defined as self-criticism,¹⁰ has always been glorious in its sublimity, Lyotard writes. Its purpose is to somehow present that which is unrepresentable: "As a painting it will of course 'present' something though negatively; it will therefore avoid figuration or representation. It will be 'white' like one of Malevitch's squares; it will enable us to see only by making it impossible to see; it will please only by causing pain" (Lyotard 78).

A perfect example of the modernist sublime, Lyotard points out, is Joyce's *Ulysses*, which, it has been said, cannot be read but only re-read, because it is so complex and demanding. It cannot be read because it is too big to be comprehended, and it is intimidating and painful. Postmodernism, on the other hand, is decadent because it has given up the fight for true sublimity. Postmodernism, Lyotard writes, "puts forward the unrepresentable in presentation itself"; it "denies the solace of good forms, the consensus of taste," it "searches for new presentations, not in order to enjoy them but to impart a stronger sense of the unrepresentable" (Lyotard 81). *Ulysses* cannot be understood with the totality we are accustomed to with novels. But it is nevertheless, somehow, undeniably a novel.

The issue for Lyotard is reality. Realism, he remarks, has only one definition: "that it intends to avoid the question of reality imprecated in that of art" (Lyotard 75),¹¹ while modernism draws attention to the medium, thus avoiding illusion and confronting reality itself. Eclectic postmodernism, according to Lyotard, produces no knowledge about reality, but only the "effects of reality, or if one prefers, fantasies of realism" (Lyotard 74). Greenberg has described modernism as "a means of living up to the

past,"¹² and as such it is a process of continually testing and reevaluating the past, and of "investigating and questioning the medium":¹³

Modernity, in whatever age it appears, cannot exist without a shattering of belief and without discovery of the 'lack of reality' of reality, together with the invention of other realities. (Lyotard 77)

In short, modernism is concerned with the presentation of the unrepresentable, and is therefore an intrinsically dynamic and sublime process, while postmodernism is concerned merely with the unrepresentable itself. Lyotard concludes:

Under the general demand for slackening and for appeasement, we can hear the mutterings of the desire for a return of terror, for the realization of the fantasy to seize reality. The answer is: let us wage a war on totality; let us be witnesses to the unrepresentable; let us activate the differences and save the honor of the name. (Lyotard 82)

The name, presumably, is art, and the honor of this name will only be preserved by a return to the sublime, the driving force of the modernist renaissance.

I argue, however, that postmodernism, as Lyotard has described it, also involves the feeling of the sublime, but for different reasons and to quite the opposite effect. If modernism is sublime for its agitated insistence on self-criticism and on presenting the unrepresentable, postmodernism is sublime for its simplicity and for its reliance on time and duration as modes of expression. First, a few words about the literalist project. If Joyce's *Ulysses* is a paragon of modernist sublime art, Tony Smith's six-foot steel cube is perhaps the ultimate in postmodern sublimity. Robert Morris, in "Notes on Sculpture,"¹⁴ has sought to define the parameters of literalist sculpture by citing a conversation with Smith about his cube:

Q: Why didn't you make it larger so that it would loom over the observer?

A: I was not making a monument.

Q: Then why didn't you make it smaller so that the observer could see over the top?

A: I was not making an object. (Notes 229-230)

A work of literalist sculpture, then, if it is to be neither a mere object nor a monument, must be similar in size to its observer. Colossal objects include too much of the space around them, Morris writes, and "it is just this distance between object and subject that creates a more extended situation, for physical participation becomes necessary" (Notes 231). Frank Stella is also against physical interaction between subject and object. In "Questions to Stella and Judd," an interview with Bruce Glaser,¹⁵ Stella said:

One could stand in front of any Abstract-Expressionist work for a long time, and walk back and forth, and inspect the depths of the pigment and the inflection and all the painterly brushwork for hours. But I wouldn't particularly want to do that and also I

wouldn't ask anyone to do it in front of my paintings. To go further, I would like to prohibit them from doing that in front of my painting. That's why I make the paintings the way they are. (Questions 159)

Stella is against the absorption or immersion within the text that many modernist works demand.

Morris and Stella are against situations, against art that initiates interaction between art and viewer because such relations eliminate the viewer. Morris, like Donald Judd, is also against relationships, "intimacy-producing relations" within a work itself:

Every internal relationship, whether it be set up by a structural division, a rich surface, or what have you, reduces the public, external quality of the object and tends to eliminate the viewer to the degree that these details pull him into an intimate relation with the work and out of the space in which the object exists. (Notes 232-3)

Morris and Judd are against the language of textual relationships and contrasts that modernism uses to convey meaning and energy. Literalism is a renunciation of this language. Literalist art, then, is meant to be public. It is meant to be a legitimate environmental entity, a gestalt, and not something that hangs on a wall. It is meant to exist in as full a meaning of the word 'exist' as possible. Though such art is often symmetrical, Judd reminds us in the same interview with Stella and Glaser that the goal is not symmetry but simplicity:

JUDD: But I don't have any ideas as to symmetry. My things are symmetrical because as you [Stella] said, I wanted to get rid of compositional effects, and the obvious way to do it is to be symmetrical.

GLASER: Why do you want to avoid compositional effects?

JUDD: Well, those effects tend to carry with them all the structures, values, feelings of the whole European tradition. It suits me fine if that's all down the drain. (Questions 150)

These compositional effects create a situation of false intimacy, not only between viewer and object, but also within the work itself, and violate the integrity of the work.

Michael Fried's objections to the literalist aesthetic make the peculiar sublimity of literalist sculpture clear. "One way of describing what Smith *was* making," Michael Fried has written, if his cube was to be neither a monument nor an object, "might be something like a surrogate person – that is, a kind of statue" (Fried 128). Morris envisions a public sculpture that does not force the viewer into a situation of intimacy, but Fried claims that "a kind of latent or hidden naturalism, indeed anthropomorphism, lies at the core of literalist theory and practice" (Fried 129). A literalist piece, like Smith's steel cube, could only be compelling to the extent that it succeeded in commanding the viewer's respect, not as a work of art but as a being, a gestalt or unified whole, to the extent that the viewer recognized his proper place in the ordered space around the piece and played by the rules with which the piece governed

the space. To Fried, Morris's aesthetic is an attempt to make works come alive, to epitomize their objecthood.¹⁶ By so doing they become theatrical.

"Smith's cube," Fried writes, "is *always* of further interest; one never gets tired of it; one never feels that one has come to the end of it; it is inexhaustible" (Fried 143). Experience and feeling, not concepts, determine the value of a literalist work, and this experience, like the sublime, is something that takes place over time:

... the experience in question *persists in time*, and the presentment of endlessness that, I have been claiming, is central to literalist art and theory is essentially a presentment of endless, or indefinite, duration The literalist preoccupation with *time* – more precisely, with the *duration of experience* – is, I suggest, paradigmatically theatrical: as though theater confronts the beholder, and thereby isolates him, with the endlessness not just of objecthood but of time; or as though the sense which, at bottom, theater addresses is a sense of temporality, of time both passing and to come, *simultaneously approaching and receding*, as if apprehended in an infinite perspective. (Fried 144-5)

Literalist art, like the sublime, is endless. The piece of literalist sculpture, then, both approaches the viewer and recedes away from him, teasing his sensibilities, and is thus intended to evoke the sublime. It derives its power by retaining not the viewer's attention but his presence, his attendance, and this experience is sublime.¹⁷ In "The Present Tense of Space," Robert Morris confirms the necessity of endlessness in literalist work:¹⁸

Now images, the past tense of reality, begin to give way to duration, the present tense of immediate spatial experience. Time is in this newer work in a way it never was in past sculpture. (Present Tense 70)

This emphasis on time in the experience of literalist art is the clue to its sublimity. A colossal work would give the viewer the first of the two moments of the sublime alone, the sense of dread (by making him feel unsafe or unwelcome), while an object small and stylized enough to be charming would inspire a feeling similar to awe, the second moment of the sublime (by making the viewer want to fondle, adore, or own the piece). The ideal literalist piece, however, derives its power from its ability to evoke dread and awe alternately or concurrently in the viewer, thus both attracting and repelling the viewer:

Characteristic of a gestalt is that once it is established all the information about it, *qua* gestalt, is exhausted. (One does not, for example, seek the gestalt of a gestalt.) Furthermore, once it is established, it does not disintegrate. One is then both free of the shape and bound to it. Free or released because of the exhaustion of information about it, and bound to it because it remains constant and indivisible. (Morris 228)

Saying that the viewer of a literalist work must be both free of the piece and bound to it is simply to say that the piece must evoke the sublime in order to be successful.

Clearly, then, literalist sculpture produces something worse than a situation: it initiates a drama in which subject and object interact as equals. Fried rejects this theatricality, concluding: "We are all literalists most or all of our lives. Presentness is grace" (Fried 147).

Morris's literalism is less a fresh look at fine art or beauty than an attempt to produce art that will evoke the feeling of the sublime instead of being beautiful. Fried claims that literalism is theatrical and implies that literalist sculpture, as Morris has defined it, is anthropomorphic: though it does not woo the viewer with charming decoration or intimidate him with immense size, it is a manipulative form, using the sublime, the common ground between teasing and intimidation, to keep the viewer in place. Morris extols the virtues of the "unitary form" (Morris 228) of literalist works such as Smith's six-foot steel cube in comparison with more conventional art objects:

A Baroque figurative bronze is different from every side. So is a six-foot cube. The constant shape of the cube held in the mind but which the viewer never literally experiences, is an actuality against which the literal changing, perspective views are related. There are two distinct terms: the known constant and the experienced variable. Such a division does not occur in the experience of the bronze. (Morris 234)

So literalist art, like Kant's sublime, is a feeling, a 'way of thinking' that takes place almost completely in the mind: The 'known constant' is supplemented by the 'experienced variable.' In the literalist drama of aesthetic experience, the viewer does all the work; this is what Lyotard means by 'slackening.' Questions arise. Are the literalist forms more beautiful than traditional sculpture has been? They are defiantly un-beautiful, at least in the Kantian sense. It could be argued that Morris' ideas about literalist art are consistent with Kant's theory of beauty, and that Smith's steel cube is beautiful. Kant also writes that an object that is excessively large cannot be beautiful:

An object is *monstrous* if by its magnitude it nullifies the purpose that constitutes its concept. And *colossal* is what we call the mere exhibition of a concept if that concept is almost too large for any exhibition (*i.e.*, if it borders on the relatively monstrous; for the purpose of exhibiting a concept is hampered if the intuition of the object is almost too large for our power of comprehension). (Kant 109)

The mere fact that an object is of reasonable size and holds our interest, however, does not make it beautiful. How does Smith's cube hold our attention? Certainly not by mesmerizing us with an indeterminate concept. By being just the right size, a piece somehow neither intimidates the viewer nor attracts him, but in a sense it both attracts and intimidates him, keeping him in his proper place in the space the piece commands. I argue that the force that manipulates the viewer into position is simply the simultaneous dread/awe of the mathematical sublime. If literalist art yearns to evoke the sublime, then it yearns for the contrapurposive, and it is this contrapurposiveness that makes them valuable. So Beauty is not the issue with literalist art. But are they

more *anything* than art objects of the past? They are more simple, and less busy. They are, perhaps, a little more sublime.

One thing is clear: Kant would not have granted the literalist project even the concession of being interesting:

Everything that [shows] stiff regularity (close to mathematical regularity) runs counter to taste because it does not allow us to be entertained for long by our contemplation of it; instead it bores us unless it is expressly intended either for cognition or for a determinate practical purpose. (Kant 93)

Fried agrees, and takes Kant's claim that geometric art is boring one step further:

Literalist work is often condemned – when it *is* condemned – for being boring. A tougher charge would be that it is merely interesting. (Fried 142)

To Fried, there is nothing very exciting about something that is just interesting. Literalist art must be simple because the sublime must be simple. Kant writes:

The sublime must always be great; the beautiful can also be small. The sublime must be simple; the beautiful can be adorned and ornamented. (*Observations* 48)

Clearly, literalist sculpture does not have to be colossal; in fact, it cannot be. But literalist art aspires toward a different sort of greatness. People can be sublime. The literalist project is to evoke the feeling of the sublime in an object the size of a person. It is to create an object, in other words, with the gestalt of a human being, the ultimate being, hence Fried's charge of anthropomorphism and theatricality. For Fried and others, though, a gestalt is no match for modernism. Kant exposes the problem with literalist art most clearly in §30 of the third *Critique*:

Simplicity (artless purposiveness) is, as it were, nature's style in the sublime. Hence it is also the style of morality, which is a second (namely, a supersensible) nature, of which we know only the laws, without being able to reach, by means of intuition, the supersensibility within ourselves that contains the basis of this legislation. (Kant 136)

Thus, it is nature's *style* that literal art imitates by relying solely on simple geometric shapes, "mere exhibitions of a determinate concept" (Kant 92). This is imitation of the product (geometry), rather than the production (freedom), of nature, and illustrates no freedom of its own. As such, literalism would seem to imitate the mechanics of kitsch as it mimics the sublime.¹⁹

Lyotard argues persuasively that modernism taps the sublime as its primary source of energy:

I think in particular that it is in the aesthetic of the sublime that modern art (including literature) finds its impetus and the logic of avant-gardes finds its axioms. (Lyotard 78)

Modernism, he writes, strives to present the unrepresentable, and this requires experimentation, trial and error, in order to stretch the bounds of the tradition and broaden its scope. But modernist art must also be beautiful, and modernism questions Kant's notion that the beautiful and the sublime are mutually exclusive. Modernism expands tradition by questioning and criticizing it, but it begins within the tradition and remains there. *Ulysses* is built upon plots and themes that novels have always been built on. Leopold Bloom is as delightful and lovable a character as Dickens ever dreamed of, but *Ulysses*, while it is a novel, is much more than a novel. The modernist work is dynamic, seeking to scale new heights and explore new depths, and as a result it is often difficult to approach, like the work of Picasso. It is this difficulty, the demands of sheer time and energy, that makes modernist work sublime. Picasso's *Guernica* affords real pleasure, and causes real pain. To use Fried's terms, it absorbs the viewer. But it is necessary to remember that no modernist work could ever be truly sublime. Kant reminds us of this:

nothing that can be an object of the senses is to be called sublime Sublime is what even to be able to think proves that the mind has a power of surpassing any standard of sense. (Kant 106)

Modernism is what art might become if it could be sublime, if art could be nature and the artist could be God.²⁰

Literalist sculpture demands nothing of the viewer but his attention; in fact, it forbids the interaction between subject and object. Literalist work is also not really sublime, for one can ignore it completely, and it is not really kitsch, for nothing kitsch could make demands upon our attention. Literalism wants to produce the effect of the sublime with the least possible effort on the part of the artist. An art that aspires to evoke the sublime in the viewer is an art that aspires to replace nature. To feel the sublime in art we have to want to feel it. We have to pretend that it is nature, and literalist sculpture, especially when it is out of doors, makes this easy for us. We may like such sculpture, but "a liking for the sublime in nature is only *negative* . . . it is a feeling that the imagination by its own action is depriving itself of its freedom, in being determined purposively according to a law different from its empirical use" (Kant 129). Literalist art, then, can never be beautiful, and it can only mimic nature (the sublime). It is, in the final analysis, merely agreeable and agreement, to Kant, is the antithesis of judgment. Indeed, Kant insists,

. . . what is agreeable in the liveliest way requires no judgment at all about the character of the object, as we can see in people who aim at nothing but enjoyment (this is the word we use to mark the intensity of the gratification): they like to dispense with all judgement. (Kant 48)

Neither modernism nor postmodernism is sublime, but I argue that each is bound to the other by a mutual need to step beyond beauty into the realm of the sublime.

Modernist work is sublime in the tenuous agitation of its self-criticism, its need to present the unrepresentable, and, often, in its sheer vastness. Postmodernism too, and literalist sculpture, are sublime in their simplicity and inexhaustible temporality. Sublimity is the cause of literalism and the effect of modernism. Heidegger described a similar relationship in "The Origin of the Work of Art."¹

The world is the self-disclosing openness of the broad paths of the simple and essential decisions in the destiny of an historical people. The earth is the spontaneous forthcoming of that which is continually self-secluding and to that extent sheltering and concealing.

World and earth are essentially different from one another and yet are never separated. The world grounds itself on the earth, and earth juts through world. (Heidegger 48)

The modern and the postmodern are similarly joined, the former spontaneous (Lyotard's experimentation) and the latter open (Morris's gestalt), and the struggle between them, mediated by the sublime, is less discordant than it might seem.

NOTES

¹ Immanuel Kant, *Critique of Judgment*, trans. Werner S. Pluhar (Indianapolis: Hackett Publishing Company, 1987). All italics and parentheses are Kant's own, and all square brackets are Pluhar's. I have retained in my transcriptions only those of Pluhar's bracketed additions to the text whose absence would interrupt the flow of his translation.

² See Kant 18-19.

³ This unit is defined in §25: "That something is a magnitude (*quantum*) can be cognized from the thing itself without any comparison of it with others, namely, if a multiplicity of the homogeneous together constituted a unity" (Kant 103).

⁴ Rudolf Makkreel, in "Imagination and Temporality in Kant's Theory of the Sublime," *The Journal of Aesthetics and Art Criticism* 42.3 (Spring 1984) 303-15, writes convincingly on time and the mathematical sublime: "The imagination performs a transcendental mediating function by schematizing all the categories in terms of time, the form of inner sense. It translates the rules implicit in the categories into a temporally ordered set of instructions for constructing an objectively determinate nature. . . . The production of time and temporal schemata constitutes the imagination's one clearly transcendent activity, for its other operations, like the synthesis of apprehension and reproduction, are essentially empirical" (Makkreel 306).

⁵ This violence to the inner sense is abysmal and terrifying, but it is also positive: "For he has the feeling that his imagination is inadequate for exhibiting the idea of a whole, [a feeling] in which imagination reaches its maximum, and as it strives to expand that maximum, it sinks back into itself, but consequently comes to feel a liking [that amounts to] an emotion" (Kant 109). The power of the emotional response is what is liked, not the object itself. If we like the sublime, we do so because it just feels neat: "If a [thing] is excessive for the imagination (and the imagination is driven to [such excess] as it apprehends [the thing]

in intuition), then [the thing] is, as it were, an abyss in which the imagination is afraid to lose itself. Yet, at the same time, for reason's idea of the supersensible [this same thing] is not excessive but conforms to reason's law to give rise to such striving by the imagination. Hence, [the thing] is now attractive to the same degree to which it was repulsive to mere sensibility" (Kant 115).

⁶ Cf. Kant's *Observations*: "Night is sublime, day is beautiful. Temperaments that possess a feeling for the sublime are drawn gradually, by the quiet stillness of a summer evening as the shimmering light of the stars breaks through the brown shadows of night and the lonely moon rises into view, into high feelings of friendship, of disdain for the world, of eternity." Immanuel Kant, *Observations on the Feeling of the Beautiful and Sublime*, trans. John T. Goldthwait (Berkeley: University of California Press, 1991) 47.

⁷ Clement Greenberg, "Modernist Painting," in *The New Art*, ed. G. Battcock (New York: Dutton, 1966) 66-77, quotation from p. 67.

⁸ Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1979).

⁹ Michael Fried, "Art and Objecthood," in *Minimal Art: A Critical Anthology*, ed. G. Battcock (New York: Dutton, 1968) 116-47.

¹⁰ Greenberg, "Modernist Painting": "The Enlightenment criticized from the outside, the way criticism in its more accepted sense does; Modernism criticizes from the inside, through the procedures themselves of that which is actually being criticized (p. 67)."

¹¹ Greenberg writes, in a similar vein, that "Realistic, illusionist art had dissembled the medium, using art to conceal art. Modernism used art to call attention to art" ("Modernist Painting," 68).

¹² Clement Greenberg, "Modernism and Postmodernism," *Arts Magazine* 54.6 (February 1980) 4-6, quotation from p. 65.

¹³ "Modern and Post-modern," 65.

¹⁴ Robert Morris, "Notes on Sculpture," in Gregory Battcock, ed., *Minimal Art* (New York: E. P. Dutton & Co. Inc., 1968) 222-35.

¹⁵ Bruce Glaser, "Questions to Stella and Judd," in G. Battcock, ed., *Minimal Art: A Critical Anthology* (New York: Dutton, 1968) 148-64.

¹⁶ "In fact, from the perspective of recent modernist painting, the literalist position evinces a sensibility not simply alien but antithetical to its own: as though from that perspective, the demands of art and the conditions of objecthood are in direct conflict" (Fried 125).

¹⁷ "A long duration is sublime" (Kant, *Observations* 49).

¹⁸ Robert Morris, "The Present Tense of Space," *Art in America* (January/February 1978) 70-81.

¹⁹ Greenberg writes: "Kitsch is vicarious experience and faked sensations. Kitsch changes according to style, but remains always the same. Kitsch pretends to demand nothing of its customers except their money – not even their time." Clement Greenberg,

"Avant-garde and Kitsch," in *Clement Greenberg, Collected Essays and Criticism, Vol. 1: 1939-44*, ed. J. O'Brien (Chicago: University of Chicago Press, 1986) 5-22, quotation from p. 12.

²⁰ Cf. Greenberg: "The avant-garde poet or artist tries in effect to imitate God by creating something valid solely on its own terms, in the way nature itself is valid, in the way a landscape – not its picture – is valid" ("Avant-Garde and Kitsch," 8).

²¹ Martin Heidegger, "The Origin of the Work of Art," *Poetry, Language, Thought* (New York: Harper & Row, 1975) 17-87.

CONTRIBUTORS

Nora Beidler is a first year student from Easton, Pennsylvania. Her contribution to the *Review* was originally written for Professor Benjamin Wright's Freshman Seminar on "Visions of the End."

Paul G. Beidler is a graduate student who received his M.A. degree in English this year. He will be attending the University of Miami in Florida for his Ph.D. in English.

Michael W. De Nie, a Phi Beta Kappa senior from Mullica Hill, New Jersey, is a member of Lehigh's College Scholar program with a double major in History and English. He is also president of Phi Alpha Theta, the national history honor society.

Maureen Dunn, who is from St. Charles, Illinois, is a senior majoring in Biology. A member of Gamma Phi sorority, she will be attending Columbia University Medical School.

Timothy Falconer is a senior majoring in Computer Science and minoring in Philosophy. He will return to his computer software development company, *Gravity Systems*, upon graduating. He is currently writing his first novel.

Joshua Feldman has served as an editor of Lehigh's newspaper, the *Brown and White*. A senior Government major, he comes from Leominster, Massachusetts.

Tammy Hillebrand is a senior majoring in Mathematics who lives in Bethlehem, Pennsylvania. She plans to attend graduate school at Lehigh and then go on to a career in teaching.

Patrick Horan, who hails from Philadelphia, Pennsylvania, is a third year student in the Arts-Engineering program. His two majors are in History and Mechanical Engineering.

Romeen Kochar is enrolled in the Pre-Med program at Lehigh. She is a junior and comes from Cherry Hill, New Jersey.

Peter Leis is a May 1992 graduate, with majors in Cognitive Science and Philosophy. He is from Framingham, Mass., the largest town in the United States. He enjoys creative writing, skiing, frisbee, good tunes and playing with LEGO.

James B. Rather, Jr. received a B.S. degree in Chemical Engineering in 1932. His article is reprinted from the sixth volume of the first *Lehigh Review*.

Melissa N. Rozenwald is a first year student from Brussels, Belgium. A member of the College Scholar program, she is interested in Environmental Science and Behavioral and Neural Biology.

Jeremi Roth is a sophomore in the College Scholar program who comes from Ontario, Canada. He has yet to declare a major.

Kristopher J. Takacs is a freshman participant in the College Scholar program who plans to major in Architecture. He is from Bethlehem, Pennsylvania.

Scott T. VanDuser is a senior College Scholar who hails from Slatington, Pennsylvania. A double major in Molecular Biology and English, he is a member of Phi Beta Kappa and Sigma Tau Delta.