Spring 1992


Cleveland State University

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The Gamut

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Editorial

It's the Thought That Counts!

Anyone who has ever gone through the American Christmas experience with its lunatic obsession with quantity of purchases must surely have wondered where our particular version of this holiday, so distant from its Roman forebear, came from. The facts about this ancestral celebration may easily be found in the writings of historians: that the early Christians hid their illegal activities in the Roman festival of Saturnalia—more like what happens today at office parties and New Year’s Eve routs—and therefore stipulated that their leader’s birth took place at that time, when it could safely be celebrated. So much is well-known. But today’s celebrants up to their ears in an orgy of gift buying seem oblivious to the nature of their malady.

Gifts, to be effective, must consist of something valuable to the donor, and over the millennia nothing has been considered more valuable than food, always in short supply somewhere. We have a remnant of this ancient valuation in the decoration of trees and tables with candy, fruit, chocolate, cookies, and other sweets, as well as the presentation of foods among neighbors and workers in offices around Christmas. The holding of feasts at this time, whose main feature is excess, is obviously another stage of the same impulse.

Today, serious giving goes beyond food and consists of something bought for the purpose of being presented to the target person (relative, friend, business acquaintance), whether at Christmas or one of the many other occasions that require our participation: birthdays, graduations, weddings, anniversaries, religious observances, retirements, and all the “days” thought up by greedy merchants.

Although we are trained to think otherwise, gifts are not truly voluntary. In many circumstances, as with people who provide us with services, gifts are expected and if not offered will create disappointment and sometimes anger. Christmas cards from letter carriers, paper deliverers, doormen, and elevator operators are more than hints. They are demands which if not met will sometimes be repeated or may result in inferior service. In some circumstances, gifts of things (bottles) when money is expected will similarly rile the recipient. Such transactions reveal the asymmetric nature of one type of gift exchange. Those who are served present gifts to those who serve and do not expect gifts in return. This feature of the transaction makes clear the nature of the relationship between the parties.

Indeed all gift exchanges—they are called exchanges even when one-sided—perform this act of definition. Parents, for example, give children bicycles or other expensive objects for their birthdays, and the children give the parents crayon drawings, pencil cases made from juice cans, and potholders. It is clear that any symmetry in gift giving between parents and
children would be inappropriate as well as impossible until the children have become adults.

People invited to dinner bring the hostess candy, flowers, or wine, rarely any other foodstuff, unless unusually rare or valuable (caviar, paté de foie gras, truffles). Wedding presents, when the children of friends marry, are nominally given to the marrying couple (who may well be strangers to the givers) but are actually expected to be scrutinized and evaluated by the parents of the bride and groom. The question of appropriate wedding gifts is so complex that etiquette manuals devote entire chapters to it and to how and when they are to be acknowledged, and gift registration procedures are initiated in department stores in order to guide the givers in appropriate directions.

Appropriateness, of course, is the central problem of this transaction, on every occasion. Graduation gifts are fortunately conventional: dictionaries, pens, typewriters (now word-processors), luggage, in some cases automobiles when the graduate has distinguished himself or was not expected to succeed. Appropriateness is also tied to the relationship and the sense of self of the giver. Those who give art objects say something about themselves and about the recipients by so doing. Men who give women subordinates soap, underwear, or costume jewelry expose themselves as tasteless and ignorant. No one gives shoes to another person, for obvious reasons. Everyone may give a book (even to an illiterate!), partly because there are books for every taste and because in today’s declining readership, even non-readers wish to be thought of as readers.

In addition, where a gift is bought, its value, its presentation (both the materials surrounding it and the words that accompany it) are part of the process and affect the regard with which it is received. This is a dismaying fact about a supposedly spontaneous activity, for our culture with all its implicit (unexplained) codes makes us insist on maintaining certain myths about everything, including gift giving: that the process is voluntary, that it is spontaneous, and especially that it is unconnected with material value—price tags must always be removed from gifts, which are invariably received with glad cries of joy, no matter how tawdry or disappointing the gift. Any serious thought about this system of cultural practices must make one long for the time when gifts of apples, sugar, and oranges were the norm.

In other cultures, where explicit conventions prevail, the whole process is less strenuous (though not free of complexity). When marriage is contemplated, brokers or relatives arrange things and the bride and groom don’t even think of love as a requisite in such a pragmatic system. There is an exchange of valuables negotiated between the families and no one is under any illusions. In our romantic and myth-laden world, we marry for love and divorce when we don’t find it. And we become nervous wrecks during the month of shopping days before Christmas. O. Henry’s story “The Gift of the Magi,” in which a wife cuts off and sells her long hair to buy a watch fob for her husband (who has sold his watch to buy combs for her), illustrates how completely we have failed to keep giving under control. In the story, of course, the two perceive their misfortune as a sign of their affection for each other. So we may conclude that only in fiction is it the thought that counts.
Going Around and Coming Around in Prince Edward County

An ironic twist in the long road to desegregation

Jonathan L. Entin

On the first day of its 1990-1991 term, the United States Supreme Court refused to hear a dispute among the beneficiaries of a Virginia trust. The refusal, which was announced in a one-sentence order that offered no details about the case, did not make headlines. Most observers were concentrating on the arrival of the new justice David Souter. But behind the little-noticed case lay a controversy of more than passing interest. The party challenging the Virginia court ruling was the Prince Edward School Foundation. Prince Edward County, Virginia, was one of the defendants—indeed, the most recalcitrant defendant—in Brown v. Board of Education, the 1954 Supreme Court case that is the cornerstone of civil rights law in the United States. The Prince Edward School Foundation was established at the height of Virginia's campaign of Massive Resistance against Brown to operate White-only private schools after the county closed its public schools to avoid desegregation.

The Foundation claimed that the state courts had improperly upheld a racial restriction in the trust, thereby depriving it of almost $100,000 annually in support for its private schools for years to come. Ironically, the Foundation had finally instituted token integration only in 1986, in order to retain its tax-exempt status; but this move violated the segregationist terms of the trust of which it was beneficiary.

I.

Prince Edward County is located about sixty-five miles southwest of Richmond in a part of Virginia known as Southside. Its economy traditionally was based on lumber and tobacco. Of greater significance for present purposes, it was here that the Civil War
ended; Lee wrote to Grant from just outside Farmville, the county seat, to arrange the Confederate surrender at nearby Appomattox. Except for the brief interval of Reconstruction, White supremacy reigned in social and political life. Despite comprising close to half the population, Blacks were largely prevented from voting and could not eat in White restaurants. The public schools were segregated; until 1939, there was no Black high school at all.

Local African-Americans were hardly subservient, however. Before the Civil War, Prince Edward had the largest number of free Blacks of any Virginia county. At the turn of the century, a federal report written by W.E.B. Du Bois noted the existence of an active, church-based Black community. By 1950, almost as many Blacks as Whites were operating their own farms. Notwithstanding the rigors of segregation, then, Prince Edward Blacks had attained a measure of both cultural and economic independence from Whites.

This independence would be an important factor in the school dispute. The Black high school that was finally constructed in 1939 resulted from years of pressure by Prince Edward’s African-American residents. But the new building became severely overcrowded almost immediately. Although it was designed for a maximum enrollment of 180, attendance reached 219 the year after it opened. When 377 students registered in 1947, the school board put up three temporary outbuildings to accommodate the overflow. Many Blacks scorned these buildings as “tar paper shacks” because of their dilapidated condition. The shabbiness of these interim structures became a source of continuing tension as negotiations for a more permanent facility dragged on inconclusively for more than three years.

Matters came to a head in late April 1951, when Black high school students walked out of classes for two weeks. The strike was led by sixteen-year-old Barbara Johns, whose uncle had been a fiery preacher in Prince Edward County before going to Montgomery, Alabama (where he eventually would be succeeded by Martin Luther King, Jr.). The students sought help from NAACP lawyers, who agreed to help on two conditions: (1) that their parents support the students’ protest, and (2) that the Black community demand not simply an improved Black high school but a desegregated educational system.

The lawyers got their answer at two community meetings organized by Prince Edward County NAACP leader L. Francis Griffin, who had succeeded his father as pastor of a local church in 1949 and set about pressing for an end to racial discrimination. Those meetings showed substantial (albeit not unanimous) community support
for a desegregation suit. Exactly one month after Barbara Johns led her classmates out on strike, the NAACP filed the fateful lawsuit.

Initial developments were less than promising, however. The principal of the Black high school, whom local Whites suspected of instigating the student unrest, was not rehired. Barbara Johns, who had given galvanizing speeches at the assembly that began the walkout and at the second community meeting, was sent to live with her Uncle Vernon in Montgomery because her family feared reprisals for her role in the strike. And the school board proceeded, with a substantial infusion of state aid, to construct a large, new Black high school that was physically superior to any White institution in the county. Meanwhile, the lower federal court that heard the lawsuit upheld the validity of segregation.

The case was appealed to the Supreme Court, which consolidated it with similar cases from Delaware, South Carolina, and Kansas that have come to be known as Brown v. Board of Education. On May 17, 1954, the Court unanimously ruled that segregated public schools were unconstitutional. At the same time, it asked the parties to submit additional briefs and arguments about how to eliminate segregation.

II.

In Southside Virginia, many Whites vowed to resist school integration, and their defiant reaction helped to define the state's response. Southsiders organized the Defenders of State Sovereignty and Individual Liberties, a group that would play an influential role during the coming years. The Defenders were committed to maintaining segregation but based their position on the theory of states' rights to control education. At least officially, they did not address racial issues. For that reason the Defenders implacably opposed the Ku Klux Klan, which had carried out hundreds of lynchings and terrorist attacks against Blacks since the late 1800s. They also distanced themselves from the nonviolent but explicitly racist White Citizens Councils that sprang up elsewhere in the South. Prince Edward County was prominently represented in the Defenders' leadership. One of the group's founders was J. Barrye Wall, the editor of the Farmville Herald; its first president was Robert Crawford, a businessman who had served on the county school board for fifteen years.

On May 31, 1955, more than a year after the initial Brown ruling, the Supreme Court instructed the trial courts to devise plans to end separate schools "with all deliberate speed." By coincidence, this was also the last day for Prince Edward's county supervisors to vote on the school budget for the 1955-1956 academic year. The supervisors refused to approve any operating funds for education and made clear
that they would close the public schools rather than acquiesce in desegregation.

One week later, almost 1500 White residents jammed into an auditorium at Longwood College, a women's school in Farmville, and pledged to pay the salaries of the White teachers if the public schools were indeed closed. This meeting also led to the creation of an organization that would raise money to operate private—and, of course, segregated—schools. This was the forerunner of the Prince Edward School Foundation. Within six weeks, it had received pledges of $180,000.

The immediate crisis passed when the federal district court refused to order immediate desegregation of Prince Edward's public schools. Those schools in fact remained open, and completely segregated, for another four years. Meanwhile, the specter of interracial education there prompted Virginia's White leadership to embark on a campaign that its advocates called Massive Resistance. (The campaign had effectively collapsed by the time the federal courts finally ordered Prince Edward to comply with Brown v. Board of Education.)

The leading figures in the Massive Resistance movement were Senator Harry F. Byrd, Sr., head of the conservative Democratic organization that dominated Virginia politics for nearly half a century, and James J. Kilpatrick, then the editor of the Richmond News Leader. The Byrd forces in the state legislature, strongly supported by the Defenders of State Sovereignty and Individual Liberties, passed a series of laws requiring the closure of any public schools that might be ordered to desegregate and providing state tuition grants to pupils who enrolled in private schools to avoid desegregation. Kilpatrick wrote two books and numerous editorials endorsing the Defenders' efforts and resurrecting the theory of interposition originally propounded by Senator John C. Calhoun of South Carolina in the 1830s to defend slavery, under which states could nullify objectionable federal judicial rulings without formally seceding from the union or rebelling against the national government.

The new laws were used in 1958 to shut down schools in three other Virginia school districts that had been ordered to desegregate. This action left more than 12,000 White children without public education and prompted second thoughts about the wisdom of all-out opposition to desegregation. Those second thoughts grew when the state supreme court invalidated the mandatory school-closing law. That ruling, released on the birthday of Robert E. Lee, effectively ended Massive Resistance at the state level. But the Whites of Prince Edward County continued to fight.
In May 1959, the federal courts ordered Prince Edward to begin desegregation in September. The county supervisors responded by making good on their threat to close the public schools. Skeptics who viewed this as a meaningless symbolic gesture were in for a surprise. The public schools did not reopen for five more years.

Over the summer, the Prince Edward School Foundation set up a private educational institution, called Prince Edward Academy, for almost all of the county’s 1400 White pupils. It was an extraordinary performance. Starting with little more than segregationist zeal and about $200,000 in old pledges, the Foundation succeeded in mobilizing moral, physical, and financial support from the White community. Almost all the White public school teachers signed up to teach at the Academy, and numerous churches, civic groups, businesses, and individuals volunteered their assistance to the Foundation.

Several other developments facilitated the Academy’s success. First, the Internal Revenue Service quickly certified that the Foundation qualified for tax-exempt status as a nonprofit educational organization. This ruling was especially helpful because it allowed the Foundation’s benefactors to claim tax deductions for their contributions. Donations quickly came in from members of the Defenders throughout Virginia and from sympathizers elsewhere. Second, the state education department granted the Academy full accreditation soon after it began operation, thereby reassuring White parents that their children were receiving acceptable instruction. Third, the Virginia legislature amended the tuition-grant program so that each
White students attending Prince Edward Academy in its first year. Photo courtesy of Richmond Newspapers, Inc.

White child who received assistance would have to pay only $15 per year to attend the Academy.

Not everything went smoothly for the Foundation, however. The first year's operation was admittedly makeshift. With no permanent facilities, the Academy's instruction was spread over sixteen locations. The school board, which regarded the closing of the public schools as temporary, refused to sell any of its buildings to the Foundation. And after initial awards, a federal judge blocked future payment of tuition grants to Prince Edward's White pupils until the public schools reopened.

Faced with these difficulties, the Foundation launched a major fund-raising campaign. This drive, which was supported by the Defenders and the Byrd political organization, brought in enough money to replace the tuition grants and to enable the Academy to move out of some of its temporary locations. Aided by a substantial amount of volunteer labor and donated materials, a permanent school building opened in the fall of 1961.

Meanwhile, the county's Black children were left with no schools. At first, the NAACP expected the private-school movement to collapse. The surprising success of the Academy forced civil rights advocates to reconsider their strategy. Refusing to establish full-fledged schools for fear of jeopardizing their legal position in the desegregation case, the NAACP acquiesced in the creation of "activity centers" for Black children. A few pupils went to out-of-state schools, but most received no formal education at all for the first four years that the public schools were closed. The prospect of a lost generation of Black children led the federal government, with the cooperation of state officials, to arrange for a privately financed "free school" system that functioned in 1963-1964, the fifth year of Prince Edward's own Massive Resistance to desegregation.
These developments occurred against a background of protracted litigation, with the NAACP proceeding in federal court and county officials resorting to the state judicial system. Finally, in May 1964, the Supreme Court ordered the public schools reopened. "There has been entirely too much deliberation and not enough speed in enforcing the constitutional rights" of Prince Edward County's Black children, the Court explained. "The time for mere 'deliberate speed' has run out." It was, at long last, time for desegregation.

III.

The Prince Edward County public schools did indeed reopen on a nominally desegregated basis in September 1964. Only seven White students joined 1400 Blacks. The schools have remained predominantly Black ever since, although Whites returned in increasing numbers beginning in the 1970s. The turning point came in 1974, when the presidents and faculty of Hampden-Sydney and Longwood Colleges enrolled their children in public school for the first time in fifteen years.

Until the Supreme Court's 1964 decision ordering the public schools desegregated, the Prince Edward School Foundation managed to avoid becoming directly embroiled in litigation. This was to change as the local situation returned to some semblance of normality. The first case affecting the Foundation actually arose in northern Virginia, where Black and Hispanic students had been excluded from White-only private schools. The Supreme Court ruled that a Reconstruction statute prohibiting racial discrimination in the making and enforcement of contracts applied to the admissions policies of the private schools. The Foundation, which had participated in the case on behalf of the defendant schools, was legally bound by this ruling.

The immediate impact of the decision on the Foundation was negligible, however, because the Academy unsurprisingly had never received an application from a prospective Black student. If the provenance of the institution did not serve to discourage Black interest, the headmaster's well-known belief in inherent racial differences in mental ability made the place unappealing. Still, the Academy's admissions policies would serve as the focus for subsequent legal controversies.

As noted earlier, the Foundation's ability to open the Academy on short notice was facilitated by its receipt of tax-exempt status, which permitted it to avoid paying taxes and allowed donors to deduct their contributions from their own taxable incomes. At that time, the IRS did not inquire into the admissions policies of nonprofit educational institutions when granting them favorable tax treatment. In
1970, however, the Service promulgated a new rule requiring schools and colleges seeking a tax exemption to show that they did not discriminate by race in admissions. In 1978, the IRS revoked the Foundation's tax exemption.

The Foundation challenged this decision in federal court but its arguments were rejected. The court found no evidence that the Foundation's policies were nondiscriminatory. The circumstances of the Academy's founding supported the inference that the Academy excluded Blacks, and there was no tangible evidence that the Foundation had departed from its segregationist origins.

Although the IRS's policy of denying tax-exempt status to racially discriminatory private schools had generated intense controversy, the Supreme Court refused to hear the Foundation's case. One indication of the extent of the controversy over the IRS policy is that three justices dissented from the refusal to consider the Foundation's challenge. Another is that the Reagan administration sought to rescind the policy soon after taking office, but the Court ultimately upheld the IRS's position in 1983.

Meanwhile, the Academy's enrollment had shrunk by almost half from its early high levels. Perhaps for that reason, the Foundation decided to take steps to regain its tax exemption. In the fall of 1984, the Academy for the first time announced that it had a nondiscriminatory admissions policy. Under pressure from the IRS, the Foundation added a Black member to its board of directors and set up a small fund for minority scholarships. Despite Congressional criticism, the Service restored the Foundation's tax exemption early in 1986. That fall, five Black students broke the color line at the Academy.

These developments led to yet another lawsuit, however—and to the ironic circumstances mentioned at the beginning of this essay. In 1968, the will of Jack Adams, a resident of nearby Lynchburg, had established a trust worth nearly a million dollars to benefit the Foundation's schools. The Foundation would receive the income from the trust "so long as" it admitted to its schools "only members of the White Race." If it allowed others to enroll, the Foundation would forfeit its rights and the trust's income would go in turn to several other educational institutions, subject to the same racial restriction; if all the schools desegregated, the ultimate beneficiary would be a Southside nursing home that was not subject to any racial limitation.

To clarify the situation after the Foundation regained its tax exemption, the bank administering the Adams trust filed suit in state court seeking advice as to which party was now entitled to receive the income. Under the literal terms of the trust, the Foundation had
forfeited its rights by violating the White-only provision. To avoid this conclusion, the Foundation—Prince Edward County’s most tangible symbol of Massive Resistance—argued that the racial restriction in the Adams trust was unconstitutional. The Foundation reasoned that enforcing this restriction would implicate the Virginia courts in racial discrimination, which would violate the Fourteenth Amendment. The trial court agreed with this argument and invalidated the restriction. Under this ruling the Foundation would continue as beneficiary of the Adams trust regardless of the race of the Academy’s students and would lose its rights only if it ceased to operate an educational institution.

But the nursing home, which stood to become the beneficiary if the restriction were upheld (all of the other schools mentioned in the Adams trust having previously desegregated), appealed to the Virginia Supreme Court. Because of a vacancy on that seven-member tribunal, the remaining members of the court recalled a retired justice to join them for that session. The retired justice who filled out the bench was Albertis S. Harrison, Jr., who had been elected attorney general in 1957 and governor in 1961, the period in which the Prince Edward controversy had occupied center stage in Virginia. As attorney general he had helped precipitate the test case in which the court invalidated the centerpiece of the Massive Resistance laws; as governor he had cooperated in the creation of the “free schools” for Black children during the last year that the public schools were closed.

A skeptic might legitimately wonder how someone who had been so deeply involved in the background to this lawsuit came to be recalled to hear the appeal. One benign explanation is that Justice Harrison had been sitting with the court at least once annually since he retired from active service eight years earlier and that this case was just one of more than a dozen that he heard at the same session. Moreover, he had not been involved in any proceedings involving the parties to this litigation when he held elective office a generation previously, so nothing in the canons of judicial ethics required him to avoid participation in the case.

Whatever the explanation for Harrison’s involvement, the resulting opinion made no mention of the events that gave rise to the Foundation’s existence. Focusing less on the constitutional arguments than on the intricacies of property law, the court ruled that the nursing home should henceforth receive the income from the Adams trust. Whether or not the racial restriction was unconstitutional, the nursing home was not limited to serving Whites and therefore could obtain the income without raising more troublesome legal questions.
Unhappy with this outcome, the Foundation asked the United States Supreme Court to reinstate the trial court's ruling. As noted at the outset, that Court refused to disturb the judgment of the Virginia Supreme Court. The Foundation believes that the case was wrongly decided but does not want to dwell on the alleged injustice. It is time, the organization's lawyer told me, for all concerned to get on with their lives. The Foundation will do so without the support of the Adams trust.

IV.

Though the state supreme court opinion is unsatisfying in many respects, the outcome of the litigation seems correct. Although the structure of the trust document implies that Jack Adams was an unrepentant segregationist as far as education was concerned, the nonracial provision for the nursing home indicates that he had thought carefully about the disposition of this property and had obtained sophisticated legal advice to further his wishes. However repugnant his racial attitudes, there was no need for the courts to rewrite his will to assure that his money would go for a charitable purpose. Adopting the Foundation's position might have rewarded what could be seen as a strategic change of heart. For it was only after the Supreme Court ultimately upheld the IRS's policy that the Foundation chose to abandon its White-only admissions policy, an action that could be viewed as a sacrifice of principle for principal. Some may also find in the Foundation's defeat a satisfying illustration of the maxim that he who lives by the sword shall die by the sword.

The Foundation's change of position suggests that the legal battle over segregation is finished, and that the resisters have lost. Yet the result has not been complete integration. Prince Edward County's pupils remain, to a considerable extent, racially isolated; Blacks make up a substantial majority in the public schools, Whites an overwhelming majority at the Academy. This is less than what civil rights advocates might have hoped for, but much more than die-hard segregationists were willing to contemplate. Just as the passage of the Voting Rights Act in 1965 made South Carolina's Strom Thurmond and Alabama's George Wallace solicit support from the Black voters whose subjugation was central to their earlier platforms, economic considerations seem to have led the Foundation away from its earlier adherence to the tenets of Massive Resistance.

The Adams trust controversy provides a salutary reminder of the vehemence and tenacity of racial discrimination, but it also shows that discrimination can be overcome through economic pressures. And, finally, in these events we can also see once again that deliverance from oppression is likely to be neither instantaneous nor complete, but rather a long, hard struggle. □
Animal Rights

Saving Dolphins, Not Eating Meat

Pamela Harrison

The term "animal rights" is heard more and more often these days. That life forms other than humans might have certain rights is a new concept for many, I think. Yet believers in animal rights are making themselves seen and heard in ever-increasing numbers. The recent widespread boycotting of all but "dolphin-safe" tuna is a case in point. The spraypainting of fur coats (often while on someone's back), accompanied by a lecture on how much better the original owner must have looked in it, is not an uncommon occurrence in major cities. Many department stores have closed fur departments and fur stores have gone out of business. A celebrity quit hosting the Miss America Pageant a few years ago because he objected to the large number of furs worn on the show. Thousands of people have become vegetarians, often (but not always) because of their love of animals.

Popular opinion about this subject is best estimated by examining commercial enterprises. The fact that many cosmetics and household products companies no longer test their products on animals and take pains to tell us so is a good indication not that they have become conscience-stricken but that they have felt pressure from their customers. The noticeable shift in the fashion industry toward fake fur probably also reflects an increasing public feeling that sacrificing lives for purely superficial reasons is no longer acceptable. This heightened awareness of the consequences of our actions is manifested in a host of other ways. Recycling of common resources (aluminum, paper, plastic, etc.) has measurably increased during the past decade. Products which contribute to the destruction of the ozone layer are now being removed from the market and harmless substitutes offered.

Concern for the fact that our "normal" activities and our increasing numbers are eradicating other species, often indirectly, is mounting. The "tuna scandal" which prompted three tuna manufacturers (Sunkist, BumbleBee, Chicken of the Sea) to change their fishing practices, take out full-page advertisements in the New York Times...
announcing this fact, and adorn their packaging labels with phrases like “Dolphin Safe” was caused by public outcry (led by school children) against indirect killing of dolphins. (The use of drift nets to snare large numbers of tuna at one time was also capturing air-breathing dolphins which subsequently drowned.) Other, more expensive methods of tuna fishing are available and have supposedly been adopted by these companies.

The recent furor over whether to allow logging in an area of Washington state, which is the sole remaining habitat of an endangered species of owl (the Spotted Owl, Strix occidentalis), is only one of a number of cases where man’s encroachment on animal territories threatens the survival of another species. In the battle over the owls, as in many where money and jobs are at stake, the animals lost. It was determined that the owls could survive this further attack on their environment, and that the benefits provided by new jobs could not be overlooked. In truth, I would be hard-pressed to side with the owls were my own survival dependent on the existence of one of these jobs. It is generally only those who are well-fed and gainfully employed who have the opportunity and desire to worry about the survival of another species.

I am one of those well-fed people. I have always been in a position sufficiently comfortable to allow me the freedom to be concerned about animal welfare and the preservation of the environment. Being brought up in a semi-“hippie” (or “granola’d out” as we termed it) household where this sentiment prevailed, it was difficult to feel otherwise. Nowadays children are born into an entire nation expressing these beliefs. Every day television programs show us that the rhinoceros, the Indian lion or cheetah, the condor are nearing the end of the line.
Even the physical survival of a few specimens in zoos is meaningless if the gene pool is depleted. As far back as I can remember we were washing out dog food cans and glass bottles for recycling, carrying around petitions to abolish SteelJaw leghold traps, and trying to sell our handpainted peanut creatures to help “Save the Whales.” We did, however, eat meat.

When I reached teen-age I decided to become a vegetarian, while most members of my family remained omnivores. My decision had nothing to do with animal rights or preservation of a species. It had more to do with my personal feelings about animals—my “love” for them, if one can love a group. I felt that I would not, at my present level of comfort, be capable of killing an animal. To have an animal killed by proxy, then ground up so that it bore no resemblance to its former self and neatly plastic-wrapped in order to spare me the gruesome truth, seemed hypocritical. This decision was a moral one and one which I have never felt the need to press on others. People become vegetarians for a variety of reasons ranging from the health-conscious to the extremely personal and sentimental. I made this decision because I wanted to demonstrate to myself the value that I placed on life, and that it was greater than my liking for meat. It may also have been a way to test myself, as I adored the taste of meat.

Vegetarianism has become so common that I am asked less and less frequently about my reasons for adopting this practice. I should mention that most of the people who ask me about it seem defensive, as though I am saying that everyone who eats meat is a hypocrite. The prevailing sentiment appears to be that if people are doing something which is not the norm, they are doing it so that they can reproach others.

A more frequent question is what “kind” of vegetarian I am, a reasonable query, as this is a discipline which has many levels. The most lax form, and the one most commonly found in America, is the “vegetarian” who eschews red meat (most of the time). Generally I’ve
noted that this type does it for "health reasons" which are not clearly understood but which evidently lend a shine to one's appearance and a glow to one's soul. It is a marriage of convenience. ("We hardly ever eat red meat anymore.") This, I fear, is a large part of America's understanding of the movement toward animal rights: it's a popular trend, a fad.

Next is the lacto-ovo-pesco-vegetarian, which I claim to be. The modifiers before the term "vegetarian" indicate that one is taking liberties with the strictest sense of the word and is including eggs, milk products, and fish in one's diet. Whether I adhere precisely to this definition is not clear to me. My form of vegetarianism is one which does not allow me to consume any warm-blooded creature. I feel less kinship with cold-blooded animals, maybe because they stopped evolving so much sooner than we did, or maybe because it's harder to read their expressions. It does seem that people have an easier time anthropomorphizing evolutionarily closer animals, and therefore develop more personal feelings for them. Whatever the reason, I know that while I am not in favor of torturing these beasts (pithing frogs, for example), I do feel that it is within the realm of my current abilities to kill one if necessary. (The fact that many of the cold-blooded animals are unpalatable helps of course.) In addition, I feel no qualms about consuming products which are produced by animals without their being caused pain or suffering (e.g., eggs and milk). The issue of quality of life for a chicken raised to produce eggs or a cow bred for milking is one which I leave to the animal rights groups, many of which I support. I assume that they will make it known should the conditions for these animals become unacceptable.

The strictest vegetarians refuse to eat anything that has life and motion, and those who are stricter still (the "vegans") even avoid animal byproducts. The majority of the latter do this for something like religious reasons, stemming perhaps from a belief that it is immoral to enslave another creature in order to provide oneself with food. Whatever one's reasons for becoming a vegetarian, one must deal with the difficulties inherent in attempting to stay healthy on a diet that omits ingredients one would normally consume. Being omnivores, humans are accustomed to consuming ready-made protein in the form of animal flesh, rounding out our requirements for roughage and vitamins with vegetables and grain. We are incapable of deriving many of the nutrients available in vegetables because we have never had to (for example, cows have microorganisms in their stomachs which help them to digest cellulose—something other mammals cannot do). When we eliminate all animals and their byproducts from our diets, we are cutting out most
sources of ready-to-eat protein. This provides us with the burden of taking in the appropriate ingredients at approximately the same time and in a favorable environment for constructing the proteins that are essential for our survival. A good example and a staple of many vegetarian diets is rice and beans, which have so-called complementary amino acids, meaning that each is lacking amino acids the other has. Taken together they supply all the amino acids necessary to form a protein. There is no arguing that some of the excitement of gourmet dining is missing in a diet of rice and bean curd and no doubt many who would enjoy the benefits of such a diet cannot tolerate the idea of it—or the taste.

It may seem to the reader that I am casting doubt on the sincerity of the American public's interest in things which do not obviously pertain to human welfare. While I applaud the increased awareness of our finite resources, the fact that people are recycling (for any reason), I feel still that this is to a great extent merely a fashion, destined to be short-lived and soon replaced by another, and that people are still doing what all animals do: looking out for themselves. The quandary we all face is the seeming contradiction in our lives: as animals we have the instinct to survive and to do as well as we can so as to increase our "fitness"; as the only beasts who have the capability of overpowering and destroying all other animals and living things we can see or touch or imagine, as well as possessing the singular ability to comprehend the potential effects of our actions, we feel that perhaps we should deny that other instinct. It seems clearly evident that man's instinct for survival will always prove stronger than any ambitions he might have to right himself with his conscience. Sometimes the survival instinct takes subtle forms, of denial, for example. The young male chimpanzees must deny their sexual instinct or the senior male will drive them out of the troop and they will succumb to the leopard. Our willingness to give up the convenience of spray cans and to face the discomfort of taking bags full of bottles and piles of newspapers to recycling sites are instances of self-denial, if not as acute as those of our chimpanzee neighbors. Even I, while denying myself meat and loudly proclaiming my love for animals, if faced with starvation would doubtless be willing to kill one.

"You know?...I think I'd like a salad."
As we continue breeding, we continue to produce people who are desperate and to whom ecological abstractions are incomprehensible. Ivory poaching is stopping not because Africans love elephants but because without elephants there will be no tourism and therefore no jobs. As the human race continues to expand, other species which are not capable of adapting (and are therefore not ecologically “fit”) will cease to exist. Deer and coyotes will do well, wolves and others will perish. In the end, only the strong, resilient, useful and adaptable creatures will survive. Is that not, after all, nature’s harsh law?

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Avoid These Products When You Shop

L'Oréal (Cosmair is the U.S. distributor):

Gillette:

Several organizations have generously allowed us to use their mailing lists for this letter. If you have received more than one copy or if you are already a member of PETA, please accept our apologies. You can help our work by passing this letter on to a friend, neighbor or co-worker who is not aware of the plight of animals in product testing. Thank you.

If you would like a copy of PETA’s annual Financial Report and Registration, please contact PETA, P.O. Box 42516, Washington D.C. 20015. Residents of New York, the Office of Charities Registration, 162 Washington Avenue, Albany NY 12231. Residents of West Virginia may obtain a summary from Secretary of State, State Capitol, Charleston, WV 25305. Residents of Virginia Divisions of Consumer Affairs, P.O. Box 1163, Richmond, VA 23203. Residents of Maryland, Office of the Secretary of State, Statehouse, Annapolis, MD 21401. Residents of Washington state may call the Secretary of State’s 1-800-332-4483. Registration with any of the governmental agencies does not imply endorsement.

From a newsletter produced by the People for the Ethical Treatment of Animals (PETA).
In reviewing materials for this account of my views on the issue of human rights versus animal rights, I had occasion to reread an article entitled “Antivivisection: The Reluctant Hydra,” which was published in 1971 in the distinguished academic journal The American Scholar. This was actually a debate between a highly respected Danish microbiologist, Kathleen Roberts, and myself. Little did I realize at the time that my rather easygoing, scholarly approach to this subject would be so totally inappropriate when examined in the light of the happenings of the twenty years that have passed. During this time, the animal rights organizations, utilizing terrorism, propaganda, disinformation, distortion, and outright prevarication, have mounted an all-out campaign to destroy medical research. Their ability to manipulate the communication media and their pervasive influence on our national and state legislative bodies have resulted in a portrayal of biomedical research as the cause of extreme animal suffering in activities without scientific merit. In addition, they have succeeded in having statutes passed which severely restrict animal-based investigation because of the increased cost and paperwork required to comply with these new federal regulations. Even most scientists and physicians are only dimly aware of the tragic consequences of their success in slowing biological experimentation.

Today, in spite of the fact that close to eighty per cent of the American public support the use of animals for medical investigation, the extremely well-financed antivivisection groups (for example, PETA, People for the Ethical Treatment of Animals) have been so successful in mounting cleverly designed, but dishonest, advertising campaigns that one would gain the false impression that support for medical experiments on animals was lacking among members of the public. The citizens of our country, as well as its medical and veterinary scientists, must recognize that we are dealing with a pernicious...
religion whose prime doctrine is that all mammalian species are equal
to man and, therefore, have the same rights. This could not have been
more clearly emphasized than when PETA itself stated: “There is no
rational basis for separating out the human animal. A rat is a pig is a
dog is a boy. They’re all mammals.”

Some of these animal rights activists have drawn a tragic analogy
between vivisection and the Holocaust; for example, a PETA news
release declared: “In time, we’ll look on those who work in [animal
laboratories] with the horror now reserved for the men and women
who experimented on Jews in Auschwitz.”

In making this illogical and unkind comparison, the modern-day
animal rights activists are inclined to forget that Adolf Hitler was
probably the best known antivivisectionist of all time. In 1933, the
Reich Press Agency released the following statement:

Among all civilized states, Germany is the first country to end the shame
of vivisection. The New Germany not only frees people from the curse of
materialism, egotism and cultural bolshevism, but also gives rights to the
tortured, tormented and, up until now, completely unprotected animals.
The animal friends and opponents of vivisection in all countries will hail
this act of the National Socialist Government of the New Germany with a
joy! ... what Reich Chancellor Adolf Hitler and Prime Minister Goering
did and will do for the protection of animals, stands as a guideline to the
leaders of all civilized states.

Having read these historical statements from Nazi Germany and
the remarks of their modern-day descendants—the animal rights
movement—can one truly believe these individuals have the best
interests of the human race, much less civilization as a whole, as their
basic belief? Are they remotely aware that even Albert Schweitzer,
the great humanitarian physician, who was also known for his devo­
tion to the well-being of animals, acknowledged within his own
unique philosophical scheme that scientific experimentation with
animals was necessary for the alleviation of human ills?

In all my years of medical practice, during which time I have
operated on thousands of people, no family or patient has ever
requested that I not use a drug or perform an operation that had been
first developed or perfected on animals. Harvey Cushing, the great
brain surgeon who was born in Cleveland just a few blocks from
where Cleveland State University is located, echoed other distin­
guished physicians and scientists of his day who were caught up in
these issues, when he said, “Those who oppose the employment of
animals for such purposes ... leave us the only alternative of
subjecting our fellowman, as a lesser creature, to our first crude
manipulations.” Apparently, today, this concept is no longer so far­
fetched, since some animal rights advocates have stated that there is
no difference between the use of animals and mentally handicapped persons for experimentation!

Certainly, all of us are familiar with the often quoted Biblical passage that gives man dominion over animals, but for some reason the central tenet of the antivivisectionist theology is the belief that animals should not be used in laboratories for experimentation. This is THE CREED, and it supersedes their concern about animals in zoos, the use of animals in the food chain, for clothing, and even the protection of endangered species.

Everyone should be concerned about the care and welfare of all animals, but why do antivivisectionists make such an issue of animal usage in biomedical laboratories, when of the 19 to 22 million mammals used per year, over ninety per cent are rodents? The combined percentage of dogs and cats that are actually used for biological experimentation represents only one per cent of this figure. Why don't they acknowledge that over twenty million cats and dogs are sacrificed per year in our pounds and shelters? Does the public realize that, through their efforts, thirteen states in this country do not allow pound animals to be purchased by university research facilities for investigation (in the process, adding significantly to the cost of medical research) even though these animals have already been condemned to death?

One might ask, since there is no logic to their position, just how do the animal rights people justify their organizations' philosophy? How do they justify denying to future generations treatments and even cures for contemporary diseases that will continue to threaten mankind's existence? Do these misguided people really believe that we can learn the causes and develop therapies for such serious diseases as cancer, heart and liver failure, Alzheimer's, AIDS, and even aging, with only the availability of computers and cell culture for medical research—technologies they urge on biological science to replace the animal model? Most of the advances in contemporary clinical medicine—including antibiotics, vaccines, open heart surgery, organ transplantation, and hormone treatment, to list a few—have been derived from extensive animal experimentation. Obviously, future progress will require similar animal-based research.

The fanatical leaders of these organizations have not been content to subvert the well-established beliefs of the American public in medical research, for now they have literally become an "educational virus" attempting to invade and distort the biological curricula of grade schools and high schools throughout the country in an attempt
to influence, even brainwash, young students to condemn the use of animals in laboratory investigations.

Is there no depth to which these religious cultists' devotion to animal rights will not sink? Obviously not, for one of their organizations, the notorious Animal Liberation Movement, which has been listed as a dangerous terrorist organization by the Federal Bureau of Investigation, has repeatedly broken into and destroyed millions of dollars worth of equipment, records, and even animals in laboratories in our country. Worse yet, a similar group, the Animal Liberation Front, in England, has committed violent acts against university faculties. In one case, a veterinarian escaped the explosion of a car bomb placed by this animal rights group. In a similar attack on a researcher's car at Bristol University, a one-year-old boy in his carri­age parked nearby was injured, requiring extensive hospitalization.

Since the publication of my article entitled "The Facts About Animal Research" in *The Reader's Digest* in 1988, my own family and I have been subjected to death threats, hundreds of disgusting letters, and phone calls interrupting our normal life activity. Nevertheless, I personally have had to continue my professional life as a physician and scientist even in the face of mounting unjustified criticism and frequent personal attacks by these same groups.

I have not written this to justify all of the great advances that have taken place through animal model research, for, taken together, they have constructed an unshakable edifice of medical accomplishment resulting in an incredible level of health care for the American public. Rather, my purpose has been to demonstrate the heinous and dangerous nature of the Animal Rights Movement and document its efforts to destroy modern-day medical research. In the process, I wished to demonstrate how illogical and antihuman their basic religious equation is: *animals equal humans.*

The true issue here is not human rights versus animal rights. The proper relationship is human rights in concert with animal welfare for, unless we wish to eliminate the basic tenets of our Judeo-Christian religious heritage, society must acknowledge that man is superior to animals and, therefore, is entitled to unique rights and privileges not morally or ethically appropriate to the animal or to its use.
Animal Rights

Animals Are Not People

Ted Bartlett

My views on the matter of animal rights are based on three different influences. The first is my professional training as a philosopher with an interest in ethics. The second is as a farmer who raises sheep and poultry for the meat, and the third is as a member of the animal care committee at Cleveland State University. (Federal rules require any recipient of federal funds to have a standing committee responsible for the appropriate housing and care of any of the animals used in federally funded research.)

Basically, the last two influences merge. They are both utilitarian. That is to say, they both provide for the management of animals in their own best interest, but only up to a point. One would be hard-pressed to argue that it is in the best interest of a chicken to have its head cut off, or, that it is in the best interest of a dog to undergo experimental neurosurgery that will be, for him, a terminal experience. For all the differences there are between raising food and medical research, the short-term view of the animals is the same. We use them for our purposes, providing for them to the extent to which that care is consistent with our dominant goal. I'll return in a moment to this point.

The difficulty I feel comes from my philosophical training, specifically as it applies to the expression "animal rights." The standard analysis of "rights" typically contains the following points. The concept of "having a right to X" is said to be correlative with "being obliged to Y." For example, if I have the right to speak my mind on some political issue, then there are others who have an obligation not to interfere with my exercise of that right. So, the argument might go, that when we say "animals have the right to X," this implies that some set of human beings has an obligation to respect the exercise of that right to X. The standard analysis of what it means to have a right not only provides for its exercise, but also for its transfer to another party or, finally, for its abandonment, thereby relieving the obliged party of his duty. Basically, having a right to something is...
thought of as being in a moral position such that should one make a
claim, e.g., to speak his mind, then he would be justified in doing so.

My difficulty with this notion is not with its substantive moral
implications, whatever they might be, but with the application of such
expressions as “exercising, relinquishing, and transferring one’s
right.” To attribute such high level, intentional, cognitive activities to
animals is to push these concepts up to and perhaps even beyond
their breaking point. The way in which such an overextension is
glossed psychologically is to make what I call the Walt Disney move,
that is, to assume that animals are basically persons, differently
configured and dressed up in strange clothing. Without an assump­
tion at least something like that, there would be no basis for the
challenge sometimes put forth by the animal rights advocates: “Well,
how would you like it if that were done to you?” That assumption is,
obviously, unacceptably anthropomorphic.

To make the point not so much by argument as by example,
consider a possible parallel in medical ethics. There are a substantial
number of cases in which one may act as a surrogate for another who
is too young, infirm, or demented to be able to speak for himself. So,
if it doesn’t make sense for us to speak of a dog exercising its right
to something, why is this any different or more of a problem than an
infant’s not being able to conceptualize and thus exercise its rights?
What happens in the latter case is that the parents, or the staff of the
hospital, or the State, steps in to speak on behalf of the infant. Why
can we not think of stepping in on behalf of animals in just the same
manner? I believe, however, that this parallel is only apparent. In all
of the medical cases, it is one human being speaking on behalf of
another. Even if the agent is not a close personal friend or family
member with an intimate knowledge of the patient’s personal values,
it is still a creature of the same species. In spite of the vast differences
that exist, for example, between an infant and myself (an over-50,
overeducated, white American male), I can still look at it and project
with some degree of credibility what its future experiences are likely
to be. The mechanism for doing that with a creature of a different
species is, at least, severely compromised. (See Thomas Nagel’s “On
What it is Like to be a Bat,” Philosophical Review, 83, Oct. 1974, pp.
435-450.)

I realize that in some circles these skeptical claims are conten­
tious. (For these arguments see the writings of Peter Singer and Tom
Regan. For example, “Animals and the Value of Life,” by Peter Singer
in Matters of Life and Death, ed. Tom Regan, 2nd ed. [NY: Random
House, 1980, pp. 338-380.]) Even though they really do need to be
supported by argument, I am not going to provide it, partly because
of space, and partly because of its technical nature. There are,
however, some interesting points that can be made even without that argument.

Though it may be foolish to speak of animals as having and exercising rights, it doesn’t follow that there are no moral prohibitions that attach to the way in which we treat them. Gilbert Harmon, in his book *The Nature of Morality*, gives as an example of something wrong, the deliberate setting on fire of a cat by a group of vandals. This is not an instance of using the cat for some greater purpose, the value of which might be debated. It is straight out gratuitous, wanton torture that is, I believe, clearly and indisputably wrong. That it is wrong does not have to proceed from the claim that cats have the right not to suffer. It proceeds well enough from the conviction that it is wrong for human beings to inflict this kind of pain on anything capable of enduring it.

The moral principle implicit in this example, i.e., that it is wrong to inflict pain, has two very important features. To understand them is to understand something important about the way in which moral reasoning works. First, the principle is universal. To say that “it is wrong to inflict pain, is universal” is to say that it is logically impossible to justify a course of action by saying that it is painful. If a painful course of action is to be justified, it will be in spite of and never because it is painful. Clearly there are things that we do that are painful to others and that are, nevertheless, justified. This is what gives rise to the second feature of these principles, namely, that their application is *prima facie*. The fact that something is painful creates a presumption that it ought not to be done. Such a presumption would end discussion on the matter unless, in addition to being painful, the action has some other positive characteristic. If it does have positive features then it becomes a matter of weighing them against the pain. This does bear on the manner in which we treat animals in the following way. Any case in which an animal is made to endure suffering or discomfort is, *prima facie*, wrong unless it can be balanced out by some benefit.

As a farmer in the business of leading his lambs to slaughter, I do not think that there is any suffering attached to the fact that they are killed. Such “suffering”, as there is has to do with their transport. Sheep, for example, do not take particularly well to being moved around. New surroundings tend to make them jumpy. But my guess is that the disruption is on the level of annoyance and confusion, and neither extreme nor long lasting. For example, sheep who are taken to shows such as the ones they have at county fairs learn to adapt very well. Although we do, in fact, time our trips to the slaughter facility so that the lambs do not have to stay very long, I am not sure
whose sensibilities we are catering to. If this characterization is basically acceptable, then it doesn't have to be counterbalanced by a very large benefit. Providing good food for people who want it is, I think, sufficient.

More of a problem is likely to arise from using animals for experimental purposes. If the experiment subjects them to painful and uncomfortable conditions, then it becomes incumbent to show that the benefits that result from the experiment outweigh the harms. There are two problems here. The first has to do with making sense out of there being a scale upon which we may measure physical pain and discomfort, on the one hand, against something comparatively abstract like a future health benefit, on the other. The problem is further complicated by the fact that the one who is made to endure the suffering is not the one who is likely to benefit from its results.

To switch back, for a moment, to people, it is not difficult to understand why someone would agree to undergo the pain, inconvenience, and expense of surgery in order to obtain its long-term benefits. But, what if the person who had to endure those discomforts was not the person who would get the benefits? That happens, for instance, when a parent donates a kidney to a child. But when that happens, one absolutely crucial component is the right of the parent to either donate or refuse to donate. I can't imagine a situation in which we would allow a kidney to be removed from someone without his or her permission.

The closest parallel I can think of that uses a human subject without getting his permission is when we subject a young child to an experimental protocol. For example, a physician doing research into the causes of infant leukemia would need some subjects. If his research was basic and not itself likely to result in anything of help to its own subjects, then his protocol would have to be thought of as experimental. Since the goal of such a procedure is not the direct benefit of the participants, the justification for subjecting them to its rigors cannot be the fact that they are balanced off by benefits to them. We are using the child in order to add to the store of human knowledge that will ultimately, we hope, benefit someone someday. The problem, however, is that the one that receives the benefits is not the one that has paid the price, and the one that suffers is not able himself to either refuse or accept a request to participate.

If we are to justify the pain and discomfort that we make animals endure for our benefit, we must be willing to argue that the value of the benefit to us outweighs the disvalue of the harm to them. If this means that we sacrifice several dozen rhesus monkeys to develop a vaccine that will eradicate cancer, no one, including me, has a problem with that. Clearly, at least in my mind, the benefit to us
outweighs the harm to those monkeys. If, however, we are talking about sacrificing dozens of rabbits so that Revlon may come out with a new nail polish formula, the argument is not so clearly persuasive. Foolish vanity doesn’t seem an appropriate altar upon which to sacrifice very much at all. Does this mean that I think it is evil to make and wear fur coats? I am bothered by that but not for the obvious reason. It is not so much the number of ranch minks that had to die in order to clothe a New York model. It is the New York models themselves that bother me. That is, however, another problem entirely.

Dr. White points out in an article in the Reader’s Digest (March 1988) the cost and inconvenience brought about by the extreme wing of the animal rights movement as they disable a number of medical research projects. For example, the alternative to being able to buy dogs from the pound is to buy them at a much greater price from breeders. An increase, however, in such things as cost and inconvenience are not what I call morally neutralizing considerations. If a course of action has been shown to be a matter of moral duty, then to indicate that fulfilling that duty is likely to be inconvenient and costly is not to offer much of a counter argument.

More to the point and more persuasive, however, are the very real benefits to man and more generally animal kind that have come from research on animals. That a substantial number of lives have been and will continue to be saved is a fact that surely carries moral force. Although I am personally quite comfortable with the use of animals for this kind of significant medical research, I accept the fact that their use raises a moral issue. If Dr. White still believes what he said in a letter to the editor of The Hastings Center Report, he and I differ on this.

Animal usage is not a moral or ethical issue and elevating the problem of animal rights to such a plane is a disservice to medical research and the farm and dairy industry (Hastings Center Report, Nov/Dec. letter to the editor).

I would argue that, on the contrary, the burden of proof must rest with those who would use creatures in such a way as to cause them pain and suffering. Because it is, at least prima facie, morally wrong to inflict suffering, it is up to the people involved in those practices to show that the benefits obtained, in terms, for example, of lives saved, outweigh in their importance the suffering that the animals are made to endure. I am reasonably confident that such arguments are available to be given, and that when they are they will be persuasive. My point is, however, that they are, indeed, needed, and that they are, indeed, moral.
When my wife and I began our year-long stay in China in August, 1988, we were hardly travelling light. In addition to our six-year-old daughter, we were carrying thirty American movies and four pieces of sophisticated electronic hardware: a multi-system VCR and matching video monitor, a camcorder, and a laptop computer to record virtually everything we would see and hear for ten months. We sent ahead enough educational books and magazines to fill a small bookcase. We had been assigned to teach a variety of English and communication courses at the Beijing Institute of Tourism. I was scheduled to teach American Survey and I planned to use film as a way of illustrating American and European culture.

I showed films every week from the beginning of September through the first two weeks in May, 1989, just before Beijing was placed under martial law and the schools were shut. A few of the more determined film lovers chose to see these films while their fellow students were on the streets boycotting classes and keeping the army out of the city.

I think our students learned a lot about the West, though their perspective was undoubtedly shaped by Hollywood. I learned a lot about our Chinese college students, not all of which was pleasant, and most of which highlighted the contradictions of ideology in China. I learned to take very little at face value about China and its people as they nervously entered the 1990s.

Because I had been warned that it was forbidden to show scenes involving nudity and any suggestion of sexuality, I took the rather severe and absurd step of censoring the first film, The Odd Couple. When the Jack Lemmon character goes to a bar and sits directly beneath a nearly-naked go-go dancer, I leaped in front of the video monitor and explained in hurried and barely coherent English that the showing of certain scenes was “against the rules.” No one quite...
knew what I was saying or why I was acting so strangely, but this was my first week teaching in China and maybe the students assumed this was the way certain American teachers behave. Besides, Chinese students rarely question their teachers' words or behavior, especially those of the "foreign experts." Nevertheless, after my initial and crude attempt at censorship I ceased blocking the monitor.

In Crocodile Dundee the juniors watched, with stoicism, prostitutes fighting with pimps, a transvestite, and some sexual dalliance. After class the head of the school's audio/visual office, a retired Army officer who had begun auditing the class, informed me that Chinese students were not allowed to see scenes involving prostitutes or drugs, though he did admit that both vices had reappeared in the People's Republic. Thereafter, if I anticipated a scene involving sex, as I did when I showed Birdy, I simply left the room and came back when the coast was clear.

The movie which elicited the most memorable reaction from the class was The Defiant Ones, a 1958 film by Stanley Kramer that portrays the growing friendship between a black and a white convict in the South who initially can't get past their racial hostility. Here, I thought, was a film made for China's youth. I had come to China with the belief that the Chinese, given their history of racial oppression and a revolutionary past, shared my own democratic values about race.

To my dismay, however, the students were barely able to contain their laughter throughout the film. The students found most comical the scene where the two men fall into a deep pit at a construction site during a rainstorm and spend a while slipping and sliding around in the mud until they realize that only if they cooperate will they escape. What was it they found so funny?

I asked the class to write their reaction to the film. In their papers they wrote they were hoping the men would escape and felt disappointed when they were caught. So what explained their laughter? I asked an American colleague.

"Peter," he began in a tone that suggested how naive he thought I was, "the Chinese are ninety-five per cent Han. They have virtually no minorities, no immigrants, no races. None of them has ever met a black. They know they are superior to you—a white man—in culture, in civilization, in heritage. Can you imagine how much more superior they feel towards blacks?"
“Then why have they invited so many foreign experts to work in China? Why are they paying us so much money?”

“Because they need our technology and our methodology. They’d like your video equipment too if you’d give it to them. They want all the things they didn’t get because of the Cultural Revolution.”

“But why did my students laugh?”

“Because for them the sight of a black man chained to a white man was an absurdity. Most Chinese have absolutely no sympathy for criminals. Criminals are executed sometimes by the thousands every year in China. When a man is arrested in China he is already guilty. There is no question in your students’ minds as to the guilt of your two convicts. They laughed because the whole notion of what they were seeing was ridiculous.”

“But what about the papers they wrote? They said they were hoping the two men would escape.”

“They wrote what they did because they’re smart. They know what you wanted them to say. They know what to say because their government tells them that racism is not the socialist way, that Africa is a necessary ally for third world countries like China. But they don’t believe a single word of it.”

I next showed my other class Franco Zeffirelli’s Romeo and Juliet. While the movie was running, I provided a simple translation. During the scene in which Romeo and Juliet die, kissing and in one another’s arms, I kept silent, but a few of the men were giggling and laughing.
as the doomed lovers expired. This time it wasn’t difficult to interpret why they’d had this reaction.

It is the rare Chinese film which even hints of sex, and they were embarrassed at the open display of physical affection they were seeing. At the same time they were joyful because Romeo and Juliet had made love successfully against all the odds: the star-crossed lovers are of high school age; their families are feuding; none of their relatives approve of their marriage; and Romeo and Juliet manage on their own to make love and get married—if only for a few days.

Although the students were in their early twenties, and Romeo and Juliet are in their teens, the Chinese could identify with Shakespeare’s heroes, who are doing what young Chinese students can only dream about: falling in love, having sex, and eloping, especially the illicit nature of Romeo and Juliet’s relationship, since dating among students in China must be discreet until they graduate.

The language is that of Elizabethan England and the movie is set in Renaissance Italy. “What can you young people here in China relate to in this film?” I asked the class.

We talked about Chinese parents who oppose their children’s marriages. Yes, this happens in rural China, the students admitted, and peasants occasionally kill each other in feuds.

“What about last week’s incident when thousands of Chinese students beat up some African students in Nanjing?” I asked, still thinking of The Defiant Ones and my conversation with my colleague. “Does this show an intolerance of one group for another—as with the Montagues and Capulets?”

Two thousand Chinese students marched to the dormitories of the African students in Nanjing University, many demanding the Africans’ death. Some Africans had refused to show their student identification cards at a school dance and they brought as dates two Chinese girls. A fight ensued between Chinese and African students. Police were called in and all the Africans were forcibly removed, some with cattle prods, to a nearby town, “for their own safety,” said the authorities.

Comments from those who will be tourist guides and hotel administrators in answer to my questions:

“I don’t like blacks. I’m sorry, I just don’t like them,” said one.

“Why not?” I asked.

“I don’t know why. Blacks break the law here. They don’t obey China’s constitution.”

“How? What do they do that is illegal?”

“They don’t show their passes at the gates of the university.”

“Do they have to show their passes? Where do the security guards think these Africans are from?”
"Of course they have to show their passes."
"Then how come I don’t? Do you think it’s because I’m white?"
"Of course you have to show your pass."
"Well, I’ve been to Beida [Peking University] many times and
never had to."
"If you went with a Chinese girl you’d have to. The girls those
Africans took with them to the dance were prostitutes and it was those
girls who refused to show their passes to the security guards."
"I thought there was no prostitution in China."
"There is, but it’s illegal."
"Do Africans commit more crime here than the Chinese do?"
"Of course."
And so it went. I dropped the conversation before too many ill
feelings developed.
The following week I showed La Bamba, the 1987 film about
Ritchie Valens, the American rock star who died in a plane crash at
age 17. The movie is set in the 1950s. Since the music is vintage rock
and roll in America, and in this sense parallels the beginning of rock
music in China in the past few years, I thought the students would
mostly enjoy the music. It didn’t turn out exactly that way.

One of the primary conflicts in the movie is that between the
good-natured, family-oriented Ritchie, and his hard-drinking,
whoring, pot-smoking brother Bob. For most of the movie Bob is
characterized as half mad with jealousy that his younger brother
is a success and that their mother so clearly favors Ritchie. Bob
struck me as the epitome of the type the students wouldn’t like for
all the above reasons. Nothing I had come to expect about the
Chinese—their devotion to parents, to one another, to
monogamy, and their presumed antipathy to drugs, prostitution,
and drinking—would possibly indicate any sympathy for Bob.

My assumptions were wrong. They admired Bob for the same
reasons they eventually joined the student movement then begin
ning to spill out onto the streets of
Beijing against the government: they perceived Bob as a rebel with a cause. He stands up to his mother and to his brother. He is always assertive, never passive. He demands to be heard; he demands to be accepted as fully as Ritchie is. And my students liked Ritchie’s mother because she has complete confidence in his future as a rock star, unlike Chinese mothers who are timid and would never fight for a son’s right to perform such revolutionary music.

They went wild when Ritchie sings, into a phone from a booth, his famous song “Donna” (the flip side of “La Bamba”) to his girlfriend. They laughed merrily during the movie when the police at a rock concert get very nervous as the American teenagers jump out of their seats and start to dance in the aisles. They were glad the police are outnumbered and powerless.

*La Bamba* is not only about an art form which, for my students, had the potential of being seditious. The movie is also able to satisfy their sense of social realism. The movie shows white prejudice toward Latin Americans and it demonstrates that if you rise too high and get too rich you may also fall. “We’re stars, and stars don’t fall, do they?” Buddy Holly tells Ritchie moments before their plane crashes. As much as they admired Ritchie, my students perceived a modicum of justice in his death. No one should be *that* rich—which is one reason they detest their own leaders.

When the lights went on, a few of the girls were crying. The title song of the movie plays during the final credits and the students filed silently out, perhaps once again contrasting their rather predictable lives with the stimulations of American life.

A few days later their essays came in on the film. Here is a sampling:

*In America young men can freely grow. If you want to ask me which way do you like best, I think I will choose the American way. I will not treat my baby as my parents treated me. Maybe my baby will become a famous singer!*

*In America people can do what they want to do. They can find a place, singing. When they are seeing a performance they are very excited. They even dance beside their seats. I think we cannot do that in China. American young people are warm-hearted, self confident, and their spare time is colorful.*

*American young people are not conservative. They do not bother about trivialities. They have their pursuits. On the contrary, Chinese young people are not used to living night life. They always go to bed early. They have not enough activities. They also have their own pursuits, but they are confined by traditional culture and society. They act carefully, and many of these drift with the tide. They are used to national songs*
instead of rock and roll music. They are not crazy when the singers are
singing. Many of them sit there quietly as if they are sleeping.

What interests me most is that Ritchie’s mother and brother are his
faithful audience. They try their best to help Ritchie. Ritchie’s success is
his as well as his family’s. It is difficult to get support from one’s family if
he wants to be a popular star in China because the criteria of esteeming
success is different between the two different cultures and society. The
way of pursuing success is also different. I prefer the American way
because it is more reasonable and it makes us feel more conscious of our
existence. Above all, I conclude that the fierce competition of society
makes people admire the strong, the strong, strengthful music, and the
strengthful people. People become strong because they have a strong
desire for success.

In the film we can see how money controls people in America in the
1950s and how people behave when facing money. Money appears
everywhere and nobody can live without it. The less money Bob makes,
the less love he receives, and the more money he spends on drink, drugs,
and prostitutes. There is no sign of coming down from this [pursuit of
money] nowadays but rather it is getting more competitive.

Cultural anthropologists assure us that American children compete
fiercely for parental love.

As it comes to American culture in the 1950s, I think America must
be absurd in some conditions. They are so crazy about a singer whose age
is only 17. It is not necessary for them to esteem such a schoolboy.

It happened that I showed Norma Rae, Martin Ritt’s 1979 film
about textile unionizing in the South, during the May student boycott.
The timing, I thought, was perfect: The students would see a socially
oriented film set in America while China was experiencing its biggest
social upheaval since the Cultural Revolution. As usual, the results
were not as I expected.

First I was surprised that the students gathered in class that
Wednesday not for instruction but to hold a political discussion. They
argued for a while in Chinese, and then as a class walked out in
boycott. I was surprised, because none of our tourism students had
shown any early enthusiasm for the democratic movement as it came
to be called. I was even more surprised when three out of the class
of twenty chose to watch the film, thereby defying the rest of the
class. They were a tight-knit collective: they took military training
together in the summer, went on class trips, partied as a class,
occasionally dated among themselves, and took the same classes and
teachers for four years. The shouting in class had been about the
defection of the three in staying to watch Norma Rae.
The film sympathetically focuses on the struggle to unionize black and white workers who distrust one another. It is not revolutionary, but the film shows how it is possible for the underdog to win some justice. Surely in May 1989 here was a film that Chinese college students would easily make sense of.

The three who stayed told me they were bored by the film, preferring the more exciting and socially meaningful movies like Starman and Crocodile Dundee. I asked Philip (Liu Li) why the film bored him. Philip was the student who, in September, said he wanted to be rich some day and believed in capitalism and in making millions. “The film is too revolutionary” was his exact reply. His observation appeared to echo the government’s position that the student movement in Beijing was disruptive and was causing social disorder.

A larger paradox was becoming manifest. Showing all these movies was having a reverse effect on the students from the one I expected. I thought these films would expose both the positive and negative aspects of American society and culture. They would see the excitement, boldness, and dynamism of American movies and culture, but see also our preoccupation with violence, sex, and social competitiveness. I thought I could start a dialogue about America. American Survey should challenge the students’ assumptions and stereotypes about my country, just as my assumptions had all been overturned after ten months in China.
My plans had an unanticipated effect. Instead of seeing the United States in all its multiplicities and contradictions, they saw only the profound flaws in their own society and national character. For the graduating class of 1990, China, not America, was the country which needed reforms and was too socially restrictive.

Because they were witnessing and participating in an upheaval, they felt empowered for the first time in their lives. When they wrote about the movies, they made comparisons with China. As to what directions China should take in the next ten years, this was a subject they could write about with confidence.

When the students compared American films to Chinese films they denigrated the latter without mercy. One student wrote, "Chinese films are always dull and uninteresting to see. The films cannot grasp people. So when I see Chinese films I feel tired." For them Chinese films end too predictably; the characters, like China, I suppose, undergo no real changes. The bad guy is defeated and the community wins. An individual's psychological makeup is never taken into account.

I showed E.T., which the students liked as much as La Bamba. The movie was so popular in fact that others got wind of it and the audio/visual department head let me have a special showing. One would think that Spielberg’s fantasy was just the innocent escapist movie needed to get everyone’s mind off the current “disorders.”

Just the opposite occurred. Eliot, the young hero in E.T., really belonged to the student movement in Beijing—or so it sounded reading the students’ essays:

Alleyate [that is, Eliot. I forgot to write the characters’ names on the blackboard.] is very impressive. He is a very brave, very adventuresome and courageous. Even though his mother is divorced she is still independent and strong. American children are much more independent and have much more imagination than Chinese children.

The American children hide E.T. from their parents; Chinese children would never do that. He is not afraid of any adults. Alleyate and his family are very rich. He has lots of toys and a color tv. The fact that Alleyate had some weird toys—like transformer toys—prepared him to meet E.T. who is so ugly.

American children can drive cars and they outsmart the police. None of these things could happen in China. We admire him and his friends who rescue E.T. from the police.

Other students called E.T. a science film and not a science fiction film. This movie showed how advanced American science is: America can talk to the stars and is technologically prepared to deal with “the space boy” who has an “extra appearance.” The students admired
America's ability to imagine things, especially the future. One sophomore wrote, “Our Chinese people should learn this advantage from the Americans.”

They all agreed E.T. had profound meaning. “I am obsessed by E.T.,” said a student, “and also I admire the America's imagination.” Children, many write, are the hope of the world. The movie was really about personal relationships and how we need peace. E.T., argued one student, “is really preparing us for the time we have to leave the earth.”

The scientists depicted in the movie were harshly criticized. They “have lost the childish pure. They doubt everything,” observed a sophomore. The director was trying to recapture Americans’ love for one another through this film because, someone wrote, the American people are “getting colder and colder.”

To some, E.T. contained some serious warnings, most of which have political overtones. The gravest of these came from a student whose English name was Flash, who was a candidate for the Communist Party:

The greatly disenchanted, alienated “leather look” among some Chinese youth in Beijing. Tough, not happy.
What strikes me most is one should live with his friends or live in his own country. Otherwise he will meet more troubles. . . . We can imagine what would probably happen if E.T. did not phone his home. What troubled E.T. most should teach all the Chinese students who studied in America a terrific lesson in order to let them change the ideas of living in America and never coming back.

A great source of embarrassment to the government is that, of the 60,000 or more Chinese students studying abroad during the last five years, fewer than half have returned or mean to return to China. “E.T. come home. Chinese living abroad, come home,” was what I heard Flash and, possibly through him, the Communist Party saying.

Given their general acumen, I was surprised that no student made the connection between E.T. and La Bamba that Eliot and Ritchie Valens came from broken families and that both Eliot and Ritchie’s brother stood up to their mothers. Rebelliousness counted, not the fact that their fathers were missing and that the American family might be in trouble. What was important was that children and women in the United States are more independent than are their counterparts in the People’s Republic. Eliot defied his mother by hiding E.T. and then by relying on his buddies and not on her. Most young Chinese would never challenge their parents, and they loved it when they saw sons talk back to their mothers on the screen.

My students admired Americans for being more expressive than they perceived themselves to be; for saying no when they meant no; for speaking their minds and being careless and taking risks; and, most of all, for not being impressed by authority. In short, my students loved the movie characters they saw on the screen for all the characteristics they feel they lack.

Of course during the months when the students were seeing these films with wonder and envy, a large number of other Chinese students in Beijing were causing the central government to suffer the early symptoms of a nervous breakdown, from which it has not yet recovered.
Mathematics

My Road to Goldbach’s Conjecture

Jack Soules

Number theory is the oldest and, in some ways, the simplest branch of mathematics. It includes all theorems about the natural numbers (that is, integers or whole numbers). An example familiar to everyone is the fact that every integer is either a prime number (a number that cannot be expressed as the product of two smaller numbers) or a composite (a number that can be broken down into smaller factors).* Since by definition a prime number is not a composite, that fact may not seem very profound. What is profound, however, is that every composite number contains a combination of prime factors that is unique. That is, no two numbers can be the product of the same prime factors. For example, 359 is a prime; 360 = 2^3 × 3^2 × 5; 361 = 19 × 19; 362 = 2 × 181. There is no other way to express these numbers in prime numbers.** The fact that any number can be expressed in a unique combination of primes is the fundamental theorem of arithmetic. It focuses our attention on the special properties of prime numbers: how many there are and how they are distributed.

I first became bitten by number theory when, in high school, I was challenged by a simple puzzle. A group of seven explorers comes upon a hoard of gold coins. Remarkably, the coins can be neatly divided into seven equal piles, so there is plenty to go around, and fairly, too. But during the night one explorer is killed (we aren’t told who did it!). Now the pile can no longer be divided evenly—there is always one coin left over. The following night another explorer is done in, leaving only five, and again there is one odd coin when they attempt to divide the pile. Another death, another division, and once again, one odd coin. Of course when the group is reduced first to three and to two there is the odd coin (remember, there was an odd one at division by six so this is an entirely expected result). Only when only one explorer remains does the pile come out even (any number comes out even when divided by one!). The question is, how many coins were there? The answer: 301 is the smallest number of coins there could have been.

* Example: 2, 3, 5, 7, and 11 are prime numbers; 4 (which can be expressed as 2 × 2) is a composite. So is 6 ( = 3 × 2), etc.

** It is assumed of course that multiplication is commutative—that is, the order of the factors can be interchanged (a × b is equal to b × a).
Here's how I reached my solution. If the number of coins is \( N \), then \( N/7 = I_1 \), an integer. Further, \( N = 6I_2 + 1 \) (where \( I_2 \) is another integer); \( N/7 = 5I_3 + 1 \), and also \( 4I_4 + 1 \), etc. The numbers \( 6I_2, 5I_3, 4I_4, \) etc., are all the same number, \( M \), which is one less than \( 7I_1 \). A little reflection will convince you that \( M \) must be a multiple of 60 if it is evenly divisible by all the integers up to 6. No smaller number will do. (I have to point out that the ancient Persians did all of their arithmetic using integers and fractions and therefore recognized 60 as an unusual number with many divisors. Hence our 60-minute clocks and our 360-degree circles.) Therefore our original number \( N \) is one greater than \( M \), which is a multiple of 60, that is, \( N = M + 1 \) and \( M = 60a \) for some integer \( a \). Furthermore, \( N \) is a multiple of 7, that is, \( N = 7b \) for some integer \( b \). Thus we must try to solve

\[
M + 1 = N, \quad \text{or equivalently,} \quad 60a + 1 = 7b
\]

where \( a \) and \( b \) are integers. Equations such as \( 60a + 1 = 7b \), whose solutions are required to be integers, are called Diophantine equations after the Greek mathematician who first studied them. Although the equation \( 60a + 1 = 7b \) has infinitely many real number solutions (just let \( b \) be any real number and solve for \( a \)), it isn't clear that any of these solutions consist of integers.

Knowing that \( a \) and \( b \) had to be integers led me to try the following procedure. Dividing \( 60a + 1 = 7b \) by 7 to isolate \( b \), I got

\[
b = \frac{60a + 1}{7} = \frac{60a}{7} + \frac{4a + 1}{7} = 8a + \frac{4a + 1}{7}
\]

since \( 8a \) and \( b \) are integers, the remainder term \( \frac{4a + 1}{7} \) must also be an integer, call it \( c \). I found I had a new equation, still written in integers:

\[
\frac{4a + 1}{7} = c, \quad \text{or} \quad 4a = 7c - 1.
\]

This was better, because at least the numbers were smaller. Besides, I could use the same trick again to write, after dividing by 4,

\[
a = \frac{7c - 1}{4} = \frac{4c + 3c - 1}{4} = c + \frac{3c - 1}{4}.
\]

Again, using the properties of integers (the remainder \( \frac{3c - 1}{4} \) must be an integer) I had

\[
\frac{3c - 1}{4} = d \quad \text{or} \quad 3c = 4d + 1
\]

with \( d \) a new integer. Since the numbers were clearly growing smaller each time, this process had to end soon. There are no integers smaller than 1! The last step gives

\[
c = \frac{4d + 1}{3} = \frac{3d + d + 1}{3} = d + \frac{d + 1}{3}
\]

and we have
\[
\frac{(d + 1)}{3} = e \text{ or } d + 1 = 3e,
\]

with \(e\) the last in the string of integers. We can't divide further because \(d\), an integer, already stands alone. Now we discover a new property of Diophantine equations. The integer \(e\) can take on any value we like (1, 2, 3, etc.), and it will lead to appropriate corresponding integers \((d = 2, 5, 8, \ldots \text{ etc.})\). From \(d\) we can calculate \(c\), then \(b\), then \(a\) and our problem is solved. Here are the values of the letters arranged as a table:

<table>
<thead>
<tr>
<th>If (e) =</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>then (d) =</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>(c) =</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>(a) =</td>
<td>5</td>
<td>12</td>
<td>19</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>(b) =</td>
<td>43</td>
<td>103</td>
<td>163</td>
<td>223</td>
<td>283</td>
</tr>
<tr>
<td>(N) =</td>
<td>301</td>
<td>721</td>
<td>1141</td>
<td>1561</td>
<td>1981</td>
</tr>
</tbody>
</table>

These are series, of course, since each row in the table is generated by a formula from the row above. The solutions \(N\) are given by \(N = 301 + 420 \times \text{any integer}\). Because \(e\) can take on any integer value there are an infinite number of solutions to the problem of the coins. The smallest number of coins possible is 301, but there could also have been 721, 1141, 1561, and so on as high as you wish.

I was pretty pleased with myself until I went to the library and found that this had already been worked out by the ancient Greeks. In fact, I found that the Greeks were fascinated by the properties of numbers, although they preferred geometry, and they worked out several other clever demonstrations of the properties of integers.

I put number puzzles and games aside for a few years when I was an undergraduate engineering student until one day I noticed that all of my engineering mechanics problems involved right triangles with integer values for the three sides. Of course! This made grading the papers much easier for the professor. Actually, several of the professors in engineering mechanics were using the same tricks. We students had to solve complicated engineering structures involving beams and "bents" and the like. These are riveted or welded steel frames comprising a spider's web of lines which seemed somehow to comprise myriad right triangles. And they all came out in integers! Besides the well-known \((3, 4, 5)\) right triangle, there were \((5, 12, 13)\) triangles, and \((8, 15, 17)\) triangles, and a dozen more. In each case the sides of the triangle are integers which satisfy Pythagoras's theorem, namely, \(a^2 + b^2 = c^2\).* Here was Diophantus all over again, an equation involving only integers. I jumped at the challenge. Just how many Diophantine right triangles were there? Some things

* That is, in every right triangle, the square on the hypotenuse equals the sum of the squares on the other two sides.
became quickly apparent: of the two shorter sides, one was always odd and the other even; and there were no prime factors shared between any two of the three sides. Eventually I got the hang of it and found a simple way to obtain all of the Diophantine right triangles for any given odd number representing one of the two legs.

There are an infinite number of right triangles that meet the Diophantine integer condition, but for any given smallest side only a few. If one of the legs is a prime number, it turns out there is only one triangle possible. It goes like this: Suppose the given odd number is \(2a\) in the right triangle whose Pythagorean representation is \(a^2 + b^2 = c^2\). Then we know that \(a^2 = c^2 - b^2 = (c - b)(c + b)\). So \((c - b)\) and \((c + b)\) are factors of \(a^2\). Now let us write \(a\) in terms of its prime factors, so that \(a = 3^i 5^j 7^k \ldots\) etc., where the \(i, j, k\) superscripts will count the number of times that that prime appears in \(a\). If we square \(a\), we have \(2a^2 = 3^{2i} 5^{2j} 7^{2k} \ldots\) etc. We can now re-sort the factors into two groups in any way we like so as to get, for example \(a^2 = (3^{2i}5^j) \times (7^k \ldots )\). Then we identify the group \((3^{2i}5^j)\) with \((c - b)\) and the group \((7^k \ldots )\) with \((c + b)\), and solve for \(c\) and \(b\). It is almost easier to do than to describe. Clearly the number of Diophantine right triangles with one side equal to \(a\) depends on how many different ways we can separate the factors of \(a\), which is easy to calculate.

For our first example, let's arbitrarily choose \(a = 325 = 1 \times 5^2 \times 13\), so \(a^2 = 1^2 \times 5^4 \times 13^2\). By choosing \(c + b = 5^3 \times 13 = 1625\) and \(c - b = 5 \times 13 = 65\) and solving for \(b\) and \(c\) we get \(325^2 + 780^2 = 845^2\), which is certainly true. Unfortunately this triangle can be "reduced" by dividing all of its sides by 5 or by 13 (or both). Our error was in failing to separate the factors completely. For a proper Diophantine right triangle, that is, one in which all three legs don't contain a common divisor, we should have separated them, for example, into \(c + b = 5^4\) and \(c - b = 13^2\). Then \(c = 397\) and \(b = 228\) and \(325^2 + 228^2 = 397^2\).

Even if \(a\) is a prime we can separate the factors by using 1 as one factor. For example, the triangle with one leg of 7 is gotten from \(a^2 = 1^2 \times 7^2\), so \(c - b = 1^2\) and \(c + b = 7^2\). This leads to \(c = 25\) and \(b = 24\), giving us the triangle relation \(7^2 + 24^2 = 25^2\), which is true. Clearly only one Diophantine right triangle can be constructed on a prime number \(p\), because there are only two factors, \(1^2\) and \(p^2\) and therefore only one way to separate them \((c - b = 1^2\) and \(c + b = p^2\)). This is also true if one leg is a composite of only one prime, like \(p^n\). There is still only one way to separate the factors \((c - b = 1^2\) and \(c + b = p^{2n}\)). Suppose, for example, that \(a = 1 \times 49\). Then \(a^2 = 1^2 \times 49^2\) and \(c - b = 1^2\) and \(c + b = 49^2 = 2401\). This leads to the triangle \((49, 1200, 1201)\). Note that this triangle is quite dissimilar from the triangle \((7, 24, 25)\), which we found earlier.
When I casually mentioned what I had been doing to one of my
engineering profs he showed me a copy of an article one of his
colleagues had written for an engineering education journal. It listed
about 20 “integer right triangles,” as I recall. I felt pretty good since
I had quite a few more. But when I mentioned it to one of my math
profs he said that that problem had also been solved by the ancient
Greeks themselves. They had them all, about 2500 years ago! I did
learn one lesson: what is a hot intellectual breakthrough in one field
is sometimes old hat in another. Scholars don’t often read much
outside of their own field.

I still hadn’t gotten around to actually studying number theory.
There were too many high priority subjects I had to learn to finish
my formal education. But I continued to “doodle” with numbers and
one evening I stumbled on a remarkable observation: if you square
any prime number \( p \) (bigger than 3) and divide by 24 you get a
remainder of 1. In mathematical notation this is written
\[
p^2 \equiv 1 \pmod{24}.
\]*

As I recall, the biggest prime I tried was 2003, but it worked
there, too. I struggled to find a proof but couldn’t. When I shared the
puzzle with a mathematician colleague he worked out a proof in about
a page or so. My discovery or conjecture was, truly, a fact! That
problem stayed with me for about 20 years until one day I worked out
a simple proof that I now teach to junior high kids. It goes like this.
Consider any three consecutive numbers such that the center one is
a prime. Then the smaller is \( p - 1 \) and the larger is \( p + 1 \). Remember
that all prime numbers above 2 must be odd, because all even
numbers must contain 2 as a factor. So the numbers on either side
of \( p \) are even. Therefore both are divisible by 2, and, since every
fourth integer \( (4, 8, 12, \ldots) \) is divisible by 4, one of them must be
divisible by 4. Their product is therefore divisible by 8. Further,
although they are even, one of them must also be divisible by 3 since
for any three consecutive numbers one must be divisible by 3, and \( p \)
can’t be divisible by anything. What we have then is
\[
(p - 1) (p + 1) = 8 \times 3 \times \text{something}
\]
or
\[
p^2 - 1 = 24 \times \text{something}
\]
or
\[
p^2 = 1 + 24 \times \text{something}
\]
or
\[
p^2 = 1 \pmod{24}.
\]

and our conjecture is proved.

Finally, after all these years I got around to reading a book on
number theory.** It was fun and I quickly became acquainted with

* Mod is short for modulus. It is a shorthand way of indicating the remainder when one number is divided by another.

many of the pretty problems in number theory that have been worked out, and a few that haven't. One especially interesting one is called "Goldbach's Conjecture," which dates from 1742. It seems that Goldbach noticed that any even number bigger than 4 can be written as the sum of two distinct primes. Of course any number N can be taken apart into the sum of two numbers in different ways. For example, $6 = 0 + 6$ or $1 + 5$ or $2 + 4$, etc. But Goldbach's conjecture says that for even numbers, at least one of those pairs consists of two primes. For example, $50 = 47 + 3$. Doesn't seem like a big deal. It's not too hard to test it out for ordinary numbers on the order of 1000 or so and usually one finds a suitable pair in just a few minutes. What is intriguing is that, in 250 years, it hasn't been proved. That is, although no even number has been found that cannot be shown to be the sum of two primes, that is not sufficient to prove that none exists. A mathematical proof must consider all even numbers, clear up to infinity, and show that every one can be separated into a sum of primes. I have demonstrated, just using a pencil and paper, that Goldbach's conjecture is true for a sampling of numbers up to 16 million. And these are not even large numbers! Some pretty powerful mathematicians have tried to prove the Goldbach conjecture. In 1921 G.H. Hardy, one of the most eminent mathematicians of his day, pronounced Goldbach's Conjecture "probably as difficult as any of the unsolved problems in mathematics," thereby throwing down the gauntlet!

Since that time there have been many significant advances made, including several proofs that any even number can be made from the sum of a prime and an "almost" prime (an almost prime is a composite with only a few, perhaps only two, prime factors).

Since I can't break the habit of doodling with numbers, I turned to examining how an even number can be written as the sum of two odd numbers. Pretty soon, I was deep into the Goldbach problem, and learned some interesting facts. I haven't solved the problem but I have succeeded in finding a different way of looking at it. Perhaps if I show the construction you'll see how to take the next step.

We begin by choosing an even number, say 360, and then writing all of the numbers from 0 to 360 on a long ribbon. We don't really need to do it, just to imagine it. Then when we fold the ribbon, placing 0 opposite 360, we see that every pair of numbers totals 360, since 1 is opposite 359, etc. All of the even numbers are paired off so we can throw them away. Since 3 is a factor of 360, all the multiples of 3 are also paired, so we can throw them away, too (3 lies opposite 357, 9 opposite 351, etc.) as well as all of the multiples of 5 (5 opposite 355, etc.).
We quickly recognize that if 360 or whatever number $N$ we choose for our initial even number has a prime factor $p$, then $N - p$ also has that factor, and $N - 2p$, etc. And in the left column directly opposite $N - p$ lies $p$, opposite $N - 2p$ lies $2p$, etc. So any prime factors in $N$ give rise to a large number of pairs which are uninteresting because they are composites. We throw them all away. There are only three prime factors in 360 (2, 3, and 5) so after removing all of the pairs which share those factors we have left

<table>
<thead>
<tr>
<th>7*</th>
<th>353*</th>
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<tbody>
<tr>
<td>11*</td>
<td>349*</td>
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<tr>
<td>13*</td>
<td>347*</td>
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<td>17*</td>
<td>343</td>
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<td>341</td>
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<td>23*</td>
<td>337*</td>
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<td>43*</td>
<td>317*</td>
</tr>
<tr>
<td>47*</td>
<td>313*</td>
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</tbody>
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and we have marked the primes with an asterisk. Clearly there are lots of prime pairs that add up to 360. It should be easy to prove Goldbach, but we haven't proved it yet!

Let us set ourselves a different version of the problem. Let's examine even numbers that have only 2s for prime factors. Then we won't be throwing away the multiples of 3 or 5 or whatever the way we did with 360. Our trial number might then be 512 which is $2^9$, and after throwing away the even numbers our ribbon looks like this:

<table>
<thead>
<tr>
<th>1</th>
<th>511</th>
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<tbody>
<tr>
<td>3*</td>
<td>509*</td>
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<td>5*</td>
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<td>495</td>
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<td>19*</td>
<td>493</td>
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<td>21</td>
<td>491*</td>
</tr>
<tr>
<td>23*</td>
<td>489</td>
</tr>
</tbody>
</table>

This time we have come up with far fewer paired primes than before, but there are two in the first 10 pairs. The number 1 is not considered
a prime so it wouldn’t count even if 511 were a prime. (It isn’t. 511 = 7 \times 73.)

Now some logical arguments present themselves. We are interested only in pairs of odd numbers between 3 and 509, inclusive. Of the 254 odd numbers in this range, it can be determined (by the methods described earlier) that 98 are primes; the other 156, then, are composites. If Goldbach is true, there will be at least 1 pair of primes that add up to 512, leaving at most 96 primes to pair with the 156 composites. And so there must be at least 60 composites left over to pair with each other, giving at least 30 pairs of odd composites. As appears in the partial sample of our ribbon, there are actually more than 2 paired primes, so this leaves more than 60 composites and more than 30 pairs of composites. Now we have transformed the problem into a different problem: to compute the number of paired composites on our ribbon, and to compare that number to the total number of composites and to the total number of primes.

[NOTE: You might wonder how I knew that there are 98 prime numbers between 3 and 511. It wasn’t easy! You could, of course, find a prime number table and then count the entries. Or you could use trial and error methods, dividing every number by primes until you get either an answer with no remainder (the number was not a prime) or you exhaust your list of prime factors (the number is a prime). Computers do this sort of drudge work very well. You needn’t try all the primes on the 512 numbers, only those smaller than \( \sqrt{512} \), which is to say smaller than 22.6, which means 19 or less. If a number has a prime factor bigger than 19, which is the biggest prime less than 22, then it has another prime factor smaller than 19. For example, the number 493 has 29 for a factor, but it also has 17, so we would discover that it is a composite by checking it only with small primes.

My computer program begins with 1 and finds that 2 has no other factors and is therefore a prime. It finds that 3 is not divisible by 2 and so is also a prime. The number 4 is divisible by 2 so it skips to 5. Since neither 2 nor 3 divide 5 evenly, it adds 5 to the list of primes and advances to 6. And so it goes. The list of primes grows and the list of numbers being examined grows even faster. My program gave me all the primes up to 5000 in just a few minutes, and that is sufficient to check any number up to 25 million \( (5000^3) \) for primes. Believe it or not, there isn’t any better way to find primes. This method, called Eratosthenes’ Sieve, has been known for about 2000 years. The computer does it faster, but it uses the same method, in principle, as the Greeks used.]

There are several formulas available for counting how many primes there are that are smaller than a given number. Unfortunately they don’t tell you which numbers are primes, so they can’t give an
exact count. But the typical errors are as small as 30 in a billion, so
the formulas are very useful. If there are more than 50 million primes
in the first billion numbers, then there must be somewhat fewer than
950 million composites. And if Goldbach is true then there must be
about 450 million composite pairs on our long ribbon and less than
50 million unpaired composites. As long as the number of primes is
greater than the number of unpaired composites, Goldbach is con­
firmed. What we need is a formula for paired composites as good as
the formula for primes. And that's what I'm trying to develop. ☐
Poetry

Barbara Moore

Primary Colors

We think back with amazement on the sharp, blue notebooks of childhood—page after page of passionate color, pure colors of the north—raw, simple. Day after day we filled the pages, translating everything small and bitter into a clumsy paradise. The face of a worried mother into a daisy spoke with petals. The asphalt of the embattled school yard into a bright mosaic where red and amber children ran and shone. No salt then, in our capacious souls. We hummed as we worked, our work was endless, like a houseful of inspired bees. Growing up, for no apparent reason we introduced all these dark complexities—pictures of guns in snow, mountains of dead bodies being bulldozed into a pit—a glaze of gray computer terminals circling the dazed earth, the gray men attending them. As if there were nothing more gratifying than the spectacle of the human figure stuffed with pain. Why did we spoil the pages of that beautiful book? It’s amazing that the handful of us left here keep running and rejoicing, one eye still fixed on Paradise. On a puff of blue-eyed grass cracking the cinders between railroad...
ties. On a yellow slot
of window, hoisted high above
the angry city, where a woman is
fixing dinner among the powdery stars.
Carrots jump from her knife
in wet, orange chips like coins.

The Premonition

You think it’s summer, real
summer, and actually it is.
The leaves are all there, thicker
than ever. But something
is about to break out, something
is shifting, this scene
is about to be replaced
by another. You don’t know
how you know this, but it’s certain.
Though your existence is more than
ordinary—still it’s a matter
of all or nothing, and the cicadas
blowing wildly through the pores
of their chitinous houses are clearly
delivering a message. What message
you can’t imagine, but a rustle of
husks fills the trees, the lawn
is littered with cast-off shells,
as if these insects couldn’t
shed their old clothes fast enough.

Maybe nothing in particular
is coming—not death,
not time for that yet—just
some tiny change in the interior.
A shore crumbling, a shape
emerging, a darker distance
between familiar intervals.
By now your hands are almost
molten with apprehension, and
you wonder whether it’s just
that old pressure, that drive
toward incessant transformation
that affects us all, as if
Barbara Moore

we were obligated to stand up each morning
in a new, wet version of ourselves.

At any rate, no call
to be afraid. Something
always stays the same
in every transaction with the future.
Like the curious humming in your ears,
that thin, elastic, watery humming.
What could it be but
the note of your own poor life
spinning down the grooves of an elusive
orbit, slipping from ring to ring.
No one knows how far the circles
of a life are flung, but yours
has always been there when
needed, answering in that
high, reedy tone.

Editor's Choice

Judging by the responses to surveys that The Gamut periodically sends out, some of our readers find the poems we publish hard to like or even to understand. That's not surprising, since the practice of reading poetry, and hence the ability to read it, have lately fallen into neglect. And that's too bad, since a lot of good poetry is being written these days.

So, with the presumptuousness that I am afraid is part of an editor's necessary equipment, I thought it might be useful, both to puzzled readers and to authors whose poems I have passed over, if I explained what qualities attract me to the poems The Gamut does publish. I like the two poems in this issue—"Primary Colors" and "The Premonition," by Barbara Moore—because they are optimistic without being facile, and because they achieve subtle effects using simple language and memorable images. These poems are full of little surprises, unexpected turns of thought and phrase that jolt us into attention and engage our imaginations. Such novelty need not be a mere gimmick that goes flat after we've seen it once; if it conveys a fresh insight, or conveys something familiar in a striking manner, it can please after many rereadings, like a felicitous turn in a favorite piece of music, which delights us every time we hear it.

Like many editors, I am often impressed, even before I get through a first reading, when the poet handles language with authority. This quality is hard to define, but all good poems have it.
It's what makes a poem sound professional instead of amateur—what critics mean when they say the poet "has a good ear" or "has found her own voice." Poets who write like this seem comfortable in their sentences as in well-fitting clothes; they are not intimidated by the Victorian schoolmaster that lurks in most of us telling us not to split infinitives; and they are not compromised by the ready-made phrases that seep into most of our writings.

I find this kind of authority throughout Barbara Moore's two poems—notably, for example, in the opening of "Primary Colors":

We think back with amazement
on the sharp, blue notebooks of childhood.

The second line is a surprise; no one could have predicted "sharp, blue notebooks." The notebooks may not literally be books at all, or they may be scrapbooks or drawing pads. More important, they are children's observations and feelings, as incisive as entries in a writer's journal. "Sharp" implies "accurate, definite," and "blue" suggests vastness and purity like the sky or sea.

The poem moves into a lively sampling of children's pictures, which transform everyday griefs into art. Like Blake, the poet values this innocent ability to transcend evil, and regards it not as ignorance but as visionary power. She deplores our adult fall into the world of narrowed vision that sees nothing but grim political and economic realities. With the reference to mass murders and computers, the poem gets a bit didactic, but fortunately it takes a new turn as the poet notes that a few (poets and artists? or women—as opposed to the men at the "gray computer terminals?") retain the vision of childhood and are still able to see beauty in the world around them.

We are given examples of what they can see: small flowers among the cinders, stars so numerous they are like a bright powder above a hostile cityscape. Then the camera zooms in on a particular window in the city for the climactic image, where the reader is allowed to participate in a transformation such as the poem has been praising. The imagery is that of a child's picture—circles of bright orange, right out of the basic Crayola box. The carrot chips are fresh and wet and "jump" with life. The mundane activity of chopping carrots at the sink becomes a satisfying experience of beauty and richness.

The second poem, "The Premonition," records one of those elusive experiences when we sense that something important is going on but we can't figure out what. The opening sentence establishes the tone of mystery:

You think it's summer, real summer, and actually it is.

After the first clause we expect a "but"—we expect to be told that we have been wrong. So we are jolted when we are told that indeed it is summer. Still we are left off-balance: the phrase "you think" plants the suggestion that underneath, things may not be what they seem
after all. (The "you," of course, is indeterminate—it could be the reader or the poet. Our Victorian schoolmaster would tell us to say "one," but that would be too formal for this poem.)

As the poet looks more carefully around her, she does see more hints of change, and she focuses on the cicadas, whose rasping seems an enigmatic prophecy. The metamorphosis of the cicadas, who step out of their skins to become new versions of themselves, exemplifies change that is not imposed but evolves secretly from within.

The poem concludes not with an answer to the question originally implied—what, exactly, is happening?—but, more subtly, with advice about how to respond to the unknown forces we sense. We are advised to adopt an attitude similar to what Keats called "negative capability": don't insist on answers; trust life. The poem, of course, says this in a richer, more suggestive way. The last major image pictures our essential "life" or self as a satellite, a sort of guiding star, slipping from one orbit to another, seeming out of touch and out of control, yet never really lost, always radioing back in a "reedy voice" that recalls the cicadas' message: whatever change is coming, don't worry. Like the cicadas, you'll be different but the same.

Leonard Trawick
Indian artists, whether sculptors or poets, are exceptionally detailed in their representations of gods, celestials, and heroes, especially the female ones, who are invariably categorized as either very beautiful or very ugly. This interest in the gruesome as well as the beautiful is typical of the Indian love of extremes, which often counterbalance one another—for instance kama (desire) and tapas (severe penance). Heinrich Zimmer speaks of the tendency of Indian art to go to the very limits of delight and terror, and even to press almost beyond them, in the representations both of the wonders of the world's sensual charm and of the hair-raising, horrifying aspects of destructive forces.¹

Descriptions of women's beauty sometimes extend for many pages, as in the Naisadhacarita (VII. 1-108), where Shriharsha devotes a whole canto to detailing the beauty of Damayanti, beginning with her hair and ending with her toenails. Ideally, according to the authors, a woman should have large, globular breasts, a slender waist with three folds of flesh, and a deep navel. She should have round, symmetrical hips and thighs which resemble the trunk of a plantain tree or the stalk of a banana tree. Her eyes should be like those of a doe or a lotus, her eyebrows arched like a bow, her lower lip resembling a bimba fruit, and her face like the moon. She should have long black tresses neatly groomed and should be beautifully ornamented. She should have a light complexion and a graceful gait surpassing that of the elephant or the swan. This is invariably how the Devi or goddess is depicted in art, whether she be a warrior or a wife, mother or virgin.

The Devi also has negative or terrifying aspects, however, which are often invoked in mantras (magical chants) to frighten away evil spirits or to paralyze or kill enemies. In contrast to the asuras or daityas, the enemies of the gods in myths, who often vie with the gods

¹ Thomas Eugene Donaldson has been studying Indian art for the past 22 years and has made eight trips to the province of Orissa. He is the author of the three-volume Hindu Temple Art of Orissa, published by E. J. Brill (Leiden), and of Kamadeva's Pleasure Garden—Orissa, published by B.R. Publishing (Delhi). Donaldson holds a B.F.A. and an M.A. from Wayne State University and a Ph.D. from Case Western Reserve University. Currently he is a professor of art at Cleveland State University.
in physical beauty, the terrifying aspect of the Devi manifests an inversion of ideal feminine beauty. In this aspect she usually is either pot-bellied or emaciated and has a dark complexion. She has ugly facial features and a horrendous, devouring mouth or an animal head. Her hair is unkempt and dishevelled, or she appears nearly bald. She frequently sports a short stubble on her chin. She is often nude or wears animal hides and her body ornaments consist of serpents, skulls, severed limbs, or bones. Her vehicle may be a corpse or ghost.

When Shiva’s wife Sati became angry and assumed her terrifying form, called Kali, Shiva attempted to flee, but, unable to escape, he asked who she was and where his lovely Sati had gone: She replied that of course she was his beloved Sati, only this was her real form, the form she assumed for the task of creation and destruction. It was her real form as universal deity. She explained to Shiva that she had assumed the beautiful form of Sati simply to reward Shiva for his austerities.²

Both the sensual and the terrifying thus form part of the totality of the Devi who manifests herself in various forms for the sake of mankind. Whereas modern Western religions tend to provide a comforting view of human existence, emphasizing positive values and suppressing images of terror, the Hindu deities embody life’s horrifying aspects as well. Better, one might argue, to acknowledge the dangerous forces of the universe, and to come to terms with them and perhaps appease them, than to ignore them!

I became interested in this dual aspect of Hindu goddesses while studying temple sculptures in the Indian state of Orissa, which I have visited eight times over the past twenty years. Because Orissa, on the northeast coast of India, south of Calcutta, is off the beaten track of tourism and commerce, its shrines—some over a thousand years old—have remained relatively unspoiled. There are indeed hundreds of temples containing impressive sculptures and relief carvings within a hundred-mile radius of Bhubaneswar, the present capital, and Jaypur, the ancient capital. Some of the ancient temples are still used for worship; some are in ruins, their sculptures removed; others, though abandoned, are protected by roofs or sheds.

The gods and goddesses of the Hindu pantheon represent different aspects of divinity: Brahma is the creator, Vishnu the sustainer, and Shiva the destroyer. The male gods have consorts or female counterparts. Tantra, a form of Hinduism widely practiced in Orissa, particularly worships these Shakti, embodiments of the female principle (probably reflecting the persistence of ancient fertility cults). And many of the female images in Orissan temples provide evidence of the Indian love of extremes.
Varaha and Chamunda: Two Terrifying Females

Two of the most terrifying female figures are Varahi and Chamunda, who belong to a group of matrikas (mothers), usually seven or eight, worshipped collectively, often in a shrine of their own. Although in the texts called the Puranas the Mothers are conceived as blood-thirsty warriors, helping gods or goddesses to destroy demons, in iconographic accounts and in sculpture they are generally depicted in pacific forms which stress their maternal nature. This is not true, however, for Varahi, who has little in common with her male counterpart Varaha (the boar incarnation of Vishnu) aside from her sow-face; or for Chamunda, who is invariably described as a Devi-shakti (emanating from a goddess) rather than a Deva-shakti (emanating from a male deity). Varahi, always gorging herself, has a massive pot belly, while Chamunda, forever hungry, is extremely emaciated. It is their deviation from the ideal that sets these two Mothers apart. Varahi and Chamunda are particularly ferocious and
in the heat of battle often use their own bodies as weapons, either piercing enemy soldiers with tusks or grinding them with teeth and devouring them. Both Varahi and Chamunda are additionally singled out for individual worship, as presiding deities in their own shrines, or as parshva-devatas (side deities) on Shaka temples; the other Mothers are seldom depicted alone and have no separate mythologies.

**Orissan images of Varahi**

We can begin to understand the particular kinds of terror inspired by these deviant goddesses by examining their physical details. Varahi's sow head is certainly contrary to ideals of feminine beauty in India, as in the West. Pigs appear on boundary stones found in Orissa, bearing inscriptions that warn trespassers, "May this happen to your mother!" In two other boundary stones now in Monastery I at Ratnagiri, inscriptions warn that whoever nullifies this grant, "his mother is a small sow and his father is indeed a donkey." The carvings on the stones depict a donkey copulating with a pig while below is a scatological scene symbolizing hell. Even the sight of boars copulating is terrifying according to the Vastusutra Upanishad (4.22), where it is stated that the ritual presentation of a yupa (sacrificial post) or stambha (pillar) decorated with the image of pairing boars will paralyze enemies into posts themselves.

Though it has been suggested that the large belly of Varahi symbolizes her maternal aspect, this attribute is more likely connected with her porcine nature. It may also have been influenced in myths by early associations of Varaha with clouds, the sun, and earth itself, both as its creator and its sustainer. Just as Varaha represents the fat-dripping cosmic father, Varahi symbolizes the cosmic mother, the container of this fat, and thus is synonymous with Prithvi (Earth).

In textual descriptions Varahi is associated with specific symbols called cognizances, which include the club, the sword, the disc, the kapala (skull-cup), the noose, the plough, the shield, and the pestle.
The buffalo is by far her most popular mount, though occasionally others are mentioned, including the elephant and departed souls (pretasana). In Orissan images she has either two or four arms and may hold a fish, a lotus, a hatchet, a pot, a goad, a noose, or a skull-cup.

Though Varahi, like Varaha, has the head of a boar, she is conceived in Orissan sculpture primarily as a terrifying Shakta divinity, whether serving as a Mother or as an independent deity, and she has little relation to the Brahmanical concept of Varaha as an incarnation of Vishnu. She seldom carries Vishnu’s symbols and her association with the boar is primarily due to its ferocious nature, the Mothers being invoked or created in the myths as blood-thirsty warriors.

The ferocity of Varahi is particularly noted in the *Brahmanda Purana* (Lalita-mahatmya, 17. 3-9, 14-15) where her soldiers have boar faces and resemble her in appearance and dress. They carry the same weapons, are likewise dark in color with ruthless eyes, and ride buffaloes while smoke and flames issue from their sharp, curved teeth.

Even when the Mothers are propitiated to liberate children from afflictions imposed by evil spirits, as in the *Agni Purana* (299.50-51), it is their terrifying nature that is invoked; they are asked to attack, explode, seize, and drive away these evil spirits. This antagonism, inherent in the very concept of *matrikas*, warriors as well as loving mothers, is particularly evident in Varahi who, though ostensibly ugly and terrifying by conventional standards, is equally beautiful and loving to her devotees. Her great popularity in Orissa no doubt stems from the belief that she causes as well as prevents all epidemics, and that to ward off such epidemics it is necessary to propitiate her.

Varahi, then, reflects the terrors of bodily harm—physical injury and disease. But she is not only a dangerous force to be appeased;
for her devotees she is also a powerful ally. To one beset by earthly enemies and horrific demons, Varahi might well seem a more effective defender than, say, the typical Western rendering of the Virgin Mary!

**Orissan images of Chamunda**

The emaciated Chamunda is even more terrifying than the pot-bellied Varahi, her skeletal form conjuring up the image of death itself while her corpse-mount suggests her cemetery setting and her garland of skulls testifies to her love of gruesome rituals. Despite the fact that Chamunda is the only matrika not named after a male counterpart, she is more closely related to her counterpart Bhairava (the terrifying form of Shiva) than Varahi is to Varaha. In Shiva’s hymn of praise to her in the Varaha Purana (95. 45-51) Chamunda is variously called Chamunda, Mahakali, Kali, Kalika, and Kalaratri. She also appears in other myths where she is independent of other matrikas. Whereas most of the other Mothers are generally given four arms, occasionally six, Chamunda may have as many as eighteen arms. On the battlefield as narrated in the myths, however, her major weapons are her teeth and her gaping mouth. She in particular represents the devouring aspect of the Mothers. Though the other Mothers are fond of drinking the blood of the slain enemies, they frequently become satiated, whereas Chamunda is forever hungry, as her emaciated form suggests. One of the most popular ways of depicting her in Orissa, for example, is in charchika, i.e., chewing on one of her fingers, implying that she is always hungry and cannot find enough to eat. In fact in daily puja rituals, when the priest bathes, dresses, and feeds the deity each morning, he invariably stuffs a banana into her mouth to appease her hunger so that she will not be tempted to devour him. Because of her voracious appetite she is the only Mother never accompanied by a child.

When four-armed, the various texts prescribe as cognizances a noose, sword, khatvanga or trident, knife, skull-cup, or severed head in different combinations. When she has more than four arms, there may be a number of additional...
Varahi and Chamunda: Two Terrifying Females

weapons and symbols including an elephant hide, and she may display tarjani-mudra (threatening gesture with the index finger pointing upwards). Although the corpse is most often prescribed as her mount, other vahanas include the owl, eagle, vulture or crow, ass, and lion.

In Orissan sculpture Chamunda may be included with the other Mothers as a set, she may serve as a presiding deity, or she may appear with her consort Bhairava.

As a presiding deity within a Shakta shrine, the image of Chamunda is second in popularity only to Mahishamardini throughout the long history of Orissan art. Her worship was especially popular during the Bhauma period (A.D. 736-931), which saw the rise of the Kapalikas, a sect noted for human sacrifices and gruesome rituals. In the image from Devagrama, the activity of these rituals is suggested in the figures of two attendant bhutas (goblins), one on either side of the head of Chamunda, who are gnawing on severed limbs, while additional severed limbs are visible in her coiffure. On the pedestal beneath the corpse vultures and jackals are having a similar feast on severed body parts.

The emaciated and always hungry Chamunda seated or dancing on a corpse is the very antithesis of the usual ideal of femininity, of woman as a sensuous, seductive, and graceful being full of compassion. But from time immemorial men have been attracted to the terrifying, dangerous, and destructive, particularly when associated with the mysterious and fascinating, as with woman. This fascination, in most cultures associated with the nightmarish world of demons and ghouls, in India is sanctified and forms part of the great goddess herself. Poets dwell on every lurid and gruesome detail. We are told, for example, that Chamunda's greatest pleasure occurs when living creatures of all kinds are sacrificed at her altar: Garlands of human skulls are her head-ornament. Corpses of children are her ear-ornament. The elbows of dead men are her earrings. Balls made
from the bones of dead bodies form her necklace. The oozings from the leg bones of corpses serve as her cosmetics. Skeletons play the part of toy-lotuses in her hands. Rivers of wine are the streams wherein she performs her evening ablutions. Charnel-fields are her pleasure grounds. The ashes of funeral pyres are her face-ornament. Raw hides constitute her robe. The intestines of dead bodies form her girdle. The bosoms of dead men are her dancing floor. She plays with the heads of goats as with balls. Her water-sports take place in lakes of blood. The blazing fires of cremation grounds serve as her votive lamps at night. Human skulls are the vessels she eats from.5

She in addition has a horrid mass of matted hair entwined by madly excited serpents while the bells of her club ring out as the human skulls, swaying at her side, move to and fro.

The sculptors likewise delight in meticulously dwelling on every gruesome and terrifying feature of Chamunda's emaciated body, depicting every vein and sinew protruding through the taut skin. Yet these images are some of the most beautiful created by the Orissan sculptor, vying in delicacy with the intricate garments and jewels adorning the lovely Parvati, wife of Shiva. But, while we may become satiated with ideal physical beauty, the awesome beauty of Chamunda is always compelling.

Often, because of her great sanctity, the minutely carved details of Chamunda's body are hidden. All that the devotee sees is her gruesome face. With foil applied to her eyes and often to her tongue, and a blood-red paste smeared on her face, her visage often takes on the appearance of a mask, which intensifies her numinous power.
and her non-human qualities, thus instilling even greater awe.

Clearly Chamunda embodies for her devotees the unknown terrors of the grave. She is associated not only with individual deaths but with the end of the world in one of the great periodic cycles. Somewhat like the audiences of tragic drama in the West, worshippers of Chamunda must find satisfaction in facing personal and universal dissolution in its most extreme and horrifying form.

In modern times in Orissa, as elsewhere in India, Chamunda has been eclipsed in popularity by the mahavidya Kali, who is usually depicted seated or dancing on the corpse of Shiva. She is not as physically gruesome as Chamunda—she generally has an ideal feminine physique—but inversion is still evident in her dark complexion and other attributes.

Although Kali conventionally holds a sacrificial knife and a severed head in her left hands (the death-related side), with her right hands (the life-related side) she displays gift-bestowing and assuring gestures so that, like the matrikas, she is equally terrific and benign. Even though she is characterized as always laughing horribly and drinking blood, she is also described as having full breasts, the milk of which “is the food with which she nourishes the world and the drink of immortality with which she liberates her Sadhakas.” Usually, particularly when she serves as a presiding deity, the devotee sees only her face. Because the concept of the mahavidya Kali is recent, many of the images worshipped as Kali in

Above: Four-armed Kali in Mangala temple, Kakatpur, dancing on Shiva. (Modern.) Right: The face of Kali, Kali temple, Lakshminarayanpur. (Modern.)
shrines throughout Orissa are, in fact, not actually of Kali but of other goddesses, especially Chamunda, which were retrieved from nearby ruined temples of earlier date.

Though terrifying and gruesome, Chamunda (or Kali) is the same goddess as the beautiful mother and lover. The *Kalika Purana* (63.97-98) states that she “gives sexual enjoyment (kama) in an excessive way and she takes frigidity away. There is nobody equal to her in giving sexual enjoyment.” Yet the devotee’s image of the Devi is incomplete if he does not also know her as his tearer and devourer. “The hideous corpses, defiling corpse-handlers, jackals and crows scattering his bones, are Her agencies. She thus has a form he must learn to assimilate into the whole image to which he makes puja, and which is not outwardly beautiful at all.”

This dualism or union of opposites is inherent in the very concept of the *matrikas*, at the same time blood-thirsty and loving mothers, and in Varahi and Chamunda the terror is particularly stressed. Perhaps we Westerners could learn something by recognizing the terrifying aspects of human life which we seem to have successfully repressed, but which Indian religion and art so powerfully express.

Notes

5 Krishna Kanta Handiqui, *Yasastilaka and Indian Culture* (Sholapur, 1968), p. 56.
According to a fervent eighteenth-century defender of the Basque language, a priest by the name of Larramendi, the only way one could communicate with the angels is to know the angels' language, and to know the angels' language is to know Basque, for Basque is the universal perfect language. Ximenez de Rada, a twelfth-century commentator on the Bible, tells that after the flood Japheth's fifth son, Tubal, settled somewhere in Western Europe, and Tubal's sons, who settled in Spain, were the direct ancestors of the Basque people. So it should be no surprise that some Basque people think of themselves and their language as having existed since Biblical times.

Basque, whose own name for itself is Euskara, is a non-Indo-European language spoken by some 700,000 people on both sides of the Atlantic Pyrenees. Very few languages in the world are isolate—i.e., unrelated to any other language (as, for example, French is related to Spanish and more distantly to Russian, Greek, and other members of the Indo-European family). But Basque is indeed such a language, with no clear link to any other language in the world. Still, for centuries Bible commentators, dictionary makers, and philologists have tried to relate Basque to some other existing language or to a specific language family. In the 1960s, some linguists working in the area of diachronic linguistics used statistical methods to compare the number of words that Basque seems to have in common with various other languages; some have established by statistical methods that Basque is related either to Caucasian languages such as Georgian — this position is the most popular—or to a language such as Berber (an Afro-Asiatic language from North Africa). Nowadays most linguists believe that the evidence is inconclusive.

There are three dialects of Basque on the French side of these mountains and four dialects on the Spanish side. It is believed that at one point Basque was spoken in the whole of the Iberian Peninsula and in the south of France—an area much larger than the area where Basque is spoken today. In support of this theory, some etymologists...
have looked at names of places. Tossa de Mar, for instance, is a town on the Spanish Costa Brava; a Roman mosaic shows that the name at one point was Turissa or Iturissa from the Basque word Iturri meaning “fountain.” On another mosaic from the Roussillon region of France, a group of nymphs is described as being neska, which in Basque means “young girls.” Etymologists have also compared different stages of the evolution of Spanish and French and their dialects to determine the degree of Basque influence. They have demonstrated that some of the Spanish vocabulary has Basque rather than Latin roots. The roots for the Spanish words izquierdo (“left”) and achicar (“to belittle”) are from the Basque words ezker (“left”) and txiki (“small”), respectively. Some etymologists, however, may have gone too far, proposing etymologies for Spanish words that can be shown to have evolved from Latin. They claim that the Spanish word ademán (“manner”) comes from two Basque verbs, namely, adi (“to understand”, “to hear”) and eman (“to give”), to convey the idea “to give to understand” and by extension “action of giving to understand, manner.” For some etymologists, the Spanish word ademán comes from the Latin word manu (“hand”). However, the prefix ade- is of unknown origin.

Spanish has borrowed words from Basque, but Basque has also borrowed words from other languages. The oldest known borrowed words come from Latin. There are bake (“peace”), bike (“fish glue”), goru (“spinning-wheel”), and Erroma (“Rome”). They derive from the Latin accusative forms pacem, piscem, colum, and Romam, respectively. Obviously the Basque forms have undergone changes to obey the constraints of the Basque phonological system. For instance, Basque always inserts a prothetic vowel (e or a) at the beginning of a borrowed word (Erroma) that has an initial consonant of r (as in the Latin word Romam). Another example is that of arrazoi (“reason”), borrowed from the Spanish razón, which itself comes from the Latin
accusative form *rationem*. Besides borrowing words from other languages, Basque has also borrowed morphological processes that are very productive. Since the earliest Basque texts, the Spanish-borrowed prefix *des-*, which indicates a negative action or the undoing of an action, is extremely frequent. Consider, for example, *des-egin* ("to undo") from *egin* ("to do"), *des-agertu* ("to disappear") from *agertu* ("to appear"), and *des-lotu* ("to untie") from *lotu* ("to tie"). The equivalents in Spanish are *deshacer*, *desaparecer*, and *desatar*, respectively.

New compound words are continually being created in Basque from Spanish or French models or borrowed from Spanish or French. Today one can hear words like *kontra-esan* ("contradiction") from *esan* ("say") and *kontra-maisu* ("foreman") from *maisu* ("teacher"), *meta-hizkuntza* ("metalanguage"), and *telegidatu* ("tele-controlled").

In English the order of the words helps to determine meaning. The subject comes before the verb and the verb precedes the object. "The man sees the woman" is different in meaning from "The woman sees the man." This pattern is called S(subject), V(erb), and O(object). Other languages, like Latin, don't have strict word order but indicate subject and object with case endings: *Vir feminam videt* has the same meaning as *Feminam videt vir*.

### Sample Basque Vocabulary

<table>
<thead>
<tr>
<th>Basque</th>
<th>English</th>
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<tbody>
<tr>
<td><em>bat</em></td>
<td>man</td>
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<tr>
<td><em>bi</em></td>
<td>woman</td>
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<tr>
<td><em>hiru</em></td>
<td>boy</td>
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<tr>
<td><em>lau</em></td>
<td>girl</td>
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<tr>
<td><em>bost</em></td>
<td>father</td>
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<tr>
<td><em>sal</em></td>
<td>mother</td>
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<tr>
<td><em>zzapi</em></td>
<td>son</td>
</tr>
<tr>
<td><em>zortzi</em></td>
<td>daughter</td>
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<tr>
<td><em>bederatziz</em></td>
<td>grandfather</td>
</tr>
<tr>
<td><em>hamar</em></td>
<td>grandmother</td>
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<tr>
<td><em>amaika</em></td>
<td>aunt</td>
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<tr>
<td><em>amabi</em></td>
<td>uncle</td>
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<tr>
<td><em>amairu</em></td>
<td>baby</td>
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<tr>
<td><em>hogei</em></td>
<td>bread</td>
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<tr>
<td><em>hogetxat</em></td>
<td>water</td>
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<tr>
<td><em>hogeltu</em></td>
<td>cheese</td>
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<tr>
<td><em>hogeltxatam</em></td>
<td>sheep</td>
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<tr>
<td><em>ahun</em></td>
<td>house</td>
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<td><em>gorri</em></td>
<td>red</td>
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<tr>
<td><em>urdin</em></td>
<td>blue</td>
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<tr>
<td><em>txuri</em></td>
<td>white</td>
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<td></td>
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<td><em>gizon</em></td>
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<td><em>beltz</em></td>
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Basque is traditionally described as being an SOV language—namely, a language in which the basic neutral word order in transitive sentences is that of subject, object, verb. Obviously, the complements of the verb (e.g., direct objects and predicate nominatives) can consist of more than one word. Subjects and objects are usually phrases consisting of several words. For example:

(1) Mikelek haurra jantzi du.
    Michael child-the dressed has
    "Michael has dressed the child."

The object follows the subject and the verb comes last. A number of languages use this sentence pattern: Hungarian, Japanese, Navajo, and Turkish, to mention a few. Unlike Japanese, however, where the verb must be in final position, Basque can place the verb elsewhere. The following sentences are correct variants of (1) above.

(1)a. Haurra Mikelek jantzi du.

(1)b. Mikelek jantzi du haurra.

(1)c. Haurra jantzi du Mikelek.

(1)d. Jantzi du Mikelek haurra.

It is obvious that Basque has a free word order, that is, the subject, the object, and the verb can be distributed in relation to one another in a variety of ways.

There is, however, an interesting constraint associated with this free word order. Although the order of the constituents in (1) above can be permuted, the position in front of the verb is reserved for the focus of the sentence.

Let us consider sentences (1) and (1a—d) in relation to the following question:

(2) Haurra nork jantzi du?
    child-the who dressed has
    "Who has dressed the child?"

A good answer to the question would be (1a), because Mikelek ("Michael") is in the focus position, just before the verb jantzi:

Haurra Mikelek jantzi du.
    "Michael has dressed the child" or
    "It is Michael who has dressed the child."

On the contrary, sentence (1) would not be a good answer to (2) because in (1) haurra ("child") occurs just before the verb and thus becomes the focus of the sentence:

Mikelek haurra jantzi du.
    Michael child-the dressed has
    "Michael has dressed the child."

But sentence (1) would be a good answer to the question "Whom has Michael dressed?" The difference between the sentences (1) and
(Ia) is rhetorical, not grammatical: sentence (1) is syntactically correct, but is not an appropriate answer to the question in (2).

Any part of speech can be located in pre-verbal position as long as it is the focus. Consider the few examples below:

(3) Mikelek liburu bat nori irakurri dio?
    Michael book one to-whom read has
    "To whom has Michael read one book?"

Here the focus is on nori (an interrogative pronoun): the questioner wants to know who was being read to.

(4) Mireni irakurri dio liburu bat Mikelek.
    Mary-to read has book one Michael
    "It is to Mary that Michael has read one book."

This sentence answers the question in (3) so the focus is on Mireni ("Mary"), which comes just before the verb.

(5) Mikelek liburu bat ementsi irakurri dio Mireni.
    Michael book one right here read has Mary-to
    "It is right here that Michael has read one book to Mary."

In sentence (5) an adverb, ementsi ("right here"), is what is being emphasized, so it precedes the verb.

The verb system in Basque is very intricate. A verb in a sentence is usually made up of two parts: a non-finite part like jantzi in (1) ("to dress") or irakurri in (3) ("to read"), and a finite part—the auxiliary—like du in (1) or dio in (3). (The non-finite part of a verb is the part without person, number, tense and/or modality markers; the finite part provides this information.) The verb and the auxiliary have their own various positions in a sentence. In the examples above—which are all positive sentences—the auxiliary follows the verb. But in negative sentences it cannot. Thus, the negative counterparts of (1) and (4) above would be these:

(6) Eztu haurra Mikelek jantzi.
    not- child- Michael dressed
    has the
    "It is not Michael who has dressed the child."

(7) Eztio Mireni liburu bat Mikelek irakurri.
    not- Mary book one Michael read
    has
    "It is not to Mary that Michael has read one book."

Some of the grammatical properties of Basque are attributable to the fact that Basque is an SOV language. Like Japanese, Basque lacks prepositions. All case relations and other functional relations that are represented in English by prepositions (for, from, of, to . . . ), by coordinating conjunctions (and, or . . . ), and by subordinators (because, since . . . ) are represented in Basque by suffixes, that is, attachments to the end of words, marked SUF in the following examples.
(8)a. Mikelek 
\textit{haurra} jantzi du. 
\textit{*} Mikel-ek haurra-0 jantzi-0 has 
Michael-SUF child-SUF dress-SUF has 
"Michael has dressed the child."

(8)b. Mikeleen 
\textit{etxera} joango da. 
Mikel-en etxe-ra joan-go da 
Michael-SUF house-SUF go-SUF is 
"He will go to Michael's house."

(8c). Arantzarentzat 
\textit{liburua} erosten dut. 
Arantxa-rentzat liburu-a eros-ten dut 
Arantxa-SUF book-SUF buy-SUF have 
"I am buying the book for Arantxa."

(8)d. \textit{Liburuak} atzo zuk erosiak dira. 
liburu-ak atzo zu-k eros-ak dira 
Book-SUF yesterday you-SUF buy-SUF are 
"You bought the books yesterday."

Another property of Basque that follows from its being an SOV 
language has to do with the internal organization of the noun phrase. 
The words and phrases that modify the head of a noun phrase 
precede the head. Thus, genitives (GEN), relative clauses, quantifiers (how much, some . . . ), possessives (my, your . . . ), and 
numerals come before their heads. (Genitives, quantifiers, possessives, and numerals, but not relative clauses, are also located in front 
of the head of a noun phrase in English, even though English is an 
SVO language.)

(9)a. Miren-en 
\textit{etxe} 
Mary-GEN house 
"Mary's house"

(9)b. \textit{zenbat etxe} 
how many houses 
"how many houses"

(9c). \textit{bere etxera} 
her/his/its house-to (direction) 
"to her/his/its house"

(9d. \textit{bi etxe} 
two house 
"two houses"

Earlier we saw a few examples with the numeral \textit{bat} ("one") (see (7) 
above). This numeral is an exception to the rule of premodification: 
it always occurs after the head. There are two other large exceptions 
to the generalization that modifiers of nouns come before the 
nominal head in the noun phrase: adjectives and demonstratives 
follow the nominal head. Notice the difference between Basque and 
English. For example:
Like English, but unlike French, German, or Spanish, there is no grammatical gender distinction in Basque. *Liburu* ("book") or *mendi* ("mountain") are neither feminine, masculine, nor neuter, whereas in French, for instance, "book" is a masculine noun (*le livre*) while "mountain" is a feminine noun (*la montagne*). There is, however, another kind of distinction that is important in Basque. In some cases, nouns will take different suffixes depending on whether a noun is animate or inanimate. So *gizon* ("man"), which is animate, and *mendi* ("mountain"), which is inanimate, share only some common suffixes. For instance, contrast the following two pairs of phrases:

(11)a. *gizonarengan*
    gizon-arengan
    "in the man"

(11)b. *mendian*
    mendi-an
    "in the mountain"

Here the suffix for "man" is different from the suffix for "mountain." But in the following sentences, the genitive suffix *-aren* is the same for both "man" and "mountain."

(12)a. *gizonaren etxe*
    man-GEN house
    "man's house"

(12)b. *mendiaren etxe*
    mountain-GEN house
    "house of the mountain"

Basque verbs and English verbs are very different. There are two types of Basque verbs, synthetic and periphrastic. The synthetic verbs make up a small class of about twenty very common words like *joan* ("to go"), *etorri* ("to come"), *ekarri* ("to bring"), *eraman* ("to carry"), etc. The root of these verbs serves as a base around which person (first, second, third), number (singular, plural), tense (present, past) are distributed in the form of affixes (prefixes, suffixes, etc.).

Like Latin the Basque synthetic verb contains a number of affixes to mark person, tense, and number. But it differs in that the affixes may be prefixed or suffixed and the verb may also contain subject and object pronouns.
(13)a. naramazu
   n - a - rama - zu
   first present root second
   person singular person singular
   "you carry me"

(13)b. daramat
   d - a - rama - t
   third present root first
   person singular person singular
   "I carry him"

Periphrastic verbs on the other hand cannot take suffixes that indicate person, number, and tense. The person, number, and tense markers are attached to the root of auxiliary verbs equivalent to the English auxiliary verbs "to have" and "to be" as illustrated below:

(14) Irakurtzen dizut.
    irakur-SUF d - i - zu - t
    read-imperfective third- am second - first
    person singular person singular singular
    ("it") ("you") ("I")
    "I am reading it to you."

Verbal forms like daramat in (13b) or irakurtzen dizut in (14) above can stand by themselves as fully grammatical sentences.

Basque morphology (i.e., word formation—prefixes, suffixes, etc.) is of the ergative type. This means that both the subject of an intransitive verb like joan ("to go") or ibilli ("to walk") and the object of a transitive verb like jantzi ("to dress") or irakurri ("to read") are case-marked in a single way, namely by the absence of any suffix (denoted "0"). The subject of a transitive verb, which is called the agent, is case-marked ergative (ERG), as shown in (15) below.

Besides the person markers that are attached to the verb or auxiliary root, Basque possesses independent pronouns which have the same constructions as noun phrases. So, for instance, (13a) above could be accompanied by the two independent pronouns ni ("I") and zu ("you"):

(15) Zuk ni naramazu.
    zu-SUF ni-SUF n - a - rama - zu.
    you-ERG I-ERG first -present - carry- second
    person singular person singular
    0 ERG
    "You carry me."

Overt pronouns as in (15) occur to show emphasis as in Spanish when the subject pronoun is used. Thus, the opening sentence of a
conversation could start with a statement like that in (16) below (where everything is spelled out—which normally would be only understood):

(16) Nik Miren liburu bat irakurtzen diot.
I -ERG Mary-to book one-O read-imperf.

"I (emphasis) am reading one book to Mary."

Let us assume now that someone who was not listening asks next: “So, what’s happening?” I could answer pointing to Mary:

(17) Liburu bat irakurtzen diot.
book one-O read-imperfective third-have third-first

"I am reading one book to her."

The auxiliary forms in (16) and (17) are identical. As we can see, not only pronouns but also noun phrases can be left out in a sentence. “Miren” in (16) does not appear in (17) and there is no overt pronoun standing in its stead. The auxiliary form “diot” conveys the information of person, number, and case.

The principal properties that make Basque so different from its Indo-European neighbors are (i) Basque is a free-word-order language with a basic SOV word order, (ii) it places the syntactic elements that are the focus of interest in front of the verb, (iii) its modifiers precede the word modified, (iv) it possesses a rich inflectional morphology for verbs and nouns, and (v) it need not have noun phrases overtly expressed in a sentence.

According to a Spanish proverb, “Once, when God wanted to punish the Devil, he condemned him to study Basque for seven years. At the end of that time all that the Devil could say in Basque was ‘yes’ and ‘no.’” Now, maybe the Devil was just a bad foreign language learner, but some of his problems with Basque no doubt also had to do with its difficult morphology and syntax. □
The Writer's Model

William Feuer

The local pub became known as The Tap O'Blood only after Little Will discovered the Stone Giant's body in the upstairs bathtub. If it wasn't for old Steve Applebee's father, who made the rather eccentric decision to install a bathtub some thirty years earlier, the pub might still be known among the regulars as The Tap and Tarry. No one is sure what drove Lester Burrows, the daytime bartender, to commit that desperate act although quite a few have freely hypothesized over pints of ale. I prefer the theory that Newcastle's wholly unexpected 6-4 victory over Leeds sent Lester, otherwise known as the Stone Giant, drunk and at the end of his rope, into the upstairs bathroom. There he locked the door and after drinking off two bottles of the pub's finest bitter, chose the Roman way out. He slit his wrists with the knife he used to open crates of bottled beer, and submerged all but his head into the warm water and drifted slowly out of this life, but not before moving one of his muscular arms over the side of the bathtub and onto the floor. The blood crept down the splintered staircase like a stream of molten lava, and bifurcated upon reaching the sensible leather heel of a maiden aunt from the North of England, who was on holiday visiting a nephew, a well-to-do importer of tea accessories. The woman did not scream. Instead, she walked methodically along the muddy trail to the bottom steps, fully expecting to find an overturned bottle of Daddy's Sauce, a condiment something like our American catsup. It was up to the barkeeper on lunch duty, Little Will Farley, to make the discovery, and to his credit, he kept his silence as well. He coolly asked the patrons if they wouldn't mind leaving immediately, as he had just received a bomb scare in the post—probably some crank, nevertheless one that should be taken seriously didn't everybody agree and wouldn't they also agree to a dinner on The Tap and Tarry Wednesday next?

—August Dent, "Death of a Tapster"

August Dent, the former poet, got his facts straight, all right. That's because he got the story from me and from MacSide, Gready,
Diamond, and Patrick Spence, who form a little family of drinkers at The Tap and Tarry; we never have or will call our watering hole The Tap O'Blood, despite the Stone Giant's death in the upstairs bathroom early December 18. August Dent is trying to create a chill in his readership, I suppose. I cannot begrudge an author his lie or two. I am not a writer myself, but oh how I will lie if given half a chance. Take, for example, this morning in bed with Joanne Witt.

The telephone rang at a quarter to 7. It rings every weekday morning at a quarter to 7, and either I answer it on the second ring or I ignore it. Usually I ignore it. It is Mrs. Penville at the temporary agency where I work. In a pinch I can substitute as a file clerk, computer operator, bookkeeper or even masquerade as a C.P.A. (I have a falsified license). Most of the working world thinks it is better to be permanent than temporary, but I disagree. If I stick to the Harps on tap, eat the hard-boiled eggs that Little Will supplies free after 11 p.m., then I can live nicely.

The telephone rang at a quarter to 7 this morning and Joanne said, "Jesus fucking Christ, Philton, if you are not going to answer the phone, then yank it out of the bleeding wall. Some of us would like to get some sleep."

And I said, "If I don't hear it ring, then it would be a waste, wouldn't it?"

"A waste of what?" Joanne asked.

"The waste of a chance to tell that Mrs. Penville what I really think of her. When the phone rings, and I don't answer it, it's just like me telling Mrs. Penville to piss off, isn't it?"

"What's she done to you?"

"She's done nothing to me. It's just the principle of the thing. Her having the audacity to call me at a quarter to 7 in the morning, me hungover, me in bed with a beautiful woman."

Joanne's voice had a giggle in it, "Philton, where does she think you are most mornings when you don't answer the phone?"

"I tell her I'm writing a novel."

"What does she say to that?"

"She says that's very unusual, me being a writer and an accountant. She says that I must have two fully developed sides to my brain. I tell her that I don't know about that; all I know is, there are certain days when I feel artistic-like and certain days when I feel mathematical and accountant-like and I never mix the two. I say, 'You wouldn't want my characters to be spouting out a bunch of figures—my readers wouldn't appreciate that, and if my figures were inspired creations, well then, we would both be out of a job wouldn't we now, Mrs. Penville?'"
As I've said, I've never written a word of fiction in my life, but the part about Mrs. Penville not wanting to lose me—that is all true. I am the only C.P.A. in her stable.

I'm not British. But let me say that when I have a pint or two inside me and they're playing "Ferry 'Cross the Mersey" on the jukebox and Little Will Farley (just as perhaps the Stone Giant might have done in the old days) cries out, "Another one then, Mr. Philton?" I will reach way down for my best British accent and say, "Give us another one then, Will lad." The other boys don't say a word, unless it's suddenly to call me Lord Philton, or Philton of the Lake, or My Most Honorable Friend Philton.

On a good night, when we've had no less than two pitchers each, when the fire is blazing, when Diamond and John are taking everyone for everything they're worth at darts, then a newcomer, someone, I mean, who has just come off the plane, straight out of Heathrow, will say, "Where are you from in England, Mr. Philton?" I look over at Gready or MacSide and they wink and they smile and, sometimes unable to control their feeling of good fortune at the question, they laugh right out loud and I begin: "I am from Dorchester, where, to my parent's misfortune, I was kidnapped by Turks, while my mother and my father left me to fend for myself for a second or two on Brighton Beach Pier. We were strolling there, the three of us, and they had just popped into a gift shop to price a framed photograph of Cliff Richard, when a family of the infidels lifted me from the pram and sped me away to Kent. There the villains held me against my will for 8 years. They didn't send me to school, nor could I understand a word they were saying—me used only to my real mother's tongue. For the most part, I sat alone in a room bare of all necessities save a wooden stool, a blanket, and a bucket. I was fed by a toothless, pipe-smoking old woman named Hij Hamariz, who wore a filthy ragged dress and smelled like basil. I was guarded day and night by a Russian wolfhound—the blood thirstiest animal you'd ever laid eyes on—whom, sadly enough, I regarded as my only friend. One day they took me, blindfolded, on a long journey. The next morning, I woke up the son of a widowed Oxford don, Ambrose Philton. He had paid 1000 English pounds for me. He raised me as his own. Not believing in a classroom education, he encouraged me to be an autodidact, equipping me only with a first-rate magnifying glass and Aristotle's "Nichomachean Ethics" in the original Greek."

By this time, my new friend has me pegged as a rogue and either laughs with the rest of the table or excuses himself, never to be seen or heard from again. But it is never my accent that has tipped him
off, you see, for as I say, if the conditions are just right, then my accent is as sure as sheep in Cambria.

I should add that the very British Joanne Witt, whom I sleep with now and again, believes wholeheartedly that I was born in Carlisle.

One week after the death of the Stone Giant and four full days after the funeral, I ordered my free meal at The Tap and Tarry. The Tap and Tarry is the smallest of three pubs that line the cliffs of the seaside city in California where I have lived the greater part of my life. Unlike the other two pubs, there is no separate eating area away from the bar. Its main order of business is serving ale, stout, beer, bitter and lager. You can’t order any other type of alcoholic drink here, but what you can do is sneak in some good Irish whiskey and spike the free coffee with it. Directly across from the bar is an old-fashioned jukebox—framed with green and red flashing lights, meant to evoke the spirit of Christmas all year ’round—that plays three songs for a quarter. But the most unusual feature is the fog or what is sometimes called the “alcoholic haze,” but what is really the combination of cigarette smoke and a poorly ventilated oven in the kitchen just behind the bar. The pub sometimes has the appearance of a foggy moor with tables, only it smells like cigarettes and kidneys or cigarettes and fish or whatever the people are ordering that night. Some nights, when the sound of horns at sea punctuate the pub chatter and a few stray mutts howl outside the door, you might expect Sherlock Holmes and Conan Doyle to come in, take seats by the fire, draw on two freshly loaded pipes, and start their discussion of that day’s horror.

I sat at the table where old Mrs. Taylor had discovered the Stone Giant’s blood just the week before. I had steak and kidney pie, chips and a salad. Little Will said, “I don’t remember seeing you here, Mr. Philton, that unfortunate afternoon.”

“Oh, I was here all right, Will. Sitting right over there. I hadn’t ordered anything, but, by God, you scared the devil out of me with that bomb scare thing, when anyone in their right mind could see that there had been a murder upstairs.”

“No murder, Mr. Philton. And please hush. I’ll bring you your food right away.”

“And another glass of ale, Will, there’s a good lad.”

After dinner I joined the usual crowd. It was Patrick Spence’s turn to reminisce about the Stone Giant and he was the last of us to have his turn. Patrick was the drunkdest of us all I think—he was weeping as he spoke. He went on and on about how Lester was the greatest this and the best at that. How he could lift about 100 tons, crush his own weight in metal, ram his fist through so many thick,
kick down 1000 sturdy somethings, laugh like 10,000 whatevers, drink so many liters of whatchamacallit, bellow like a goddam who knows what, run like a herd of long-legged-some-kinda-somethings, make love like a young, lusty, ready for anything, fully grown, whatever you call the bastard.

We all showed our approval of Patrick’s soliloquy by raising high our glasses of ale, downing them and ordering more.

Not one of us had seen the small man with the plaid shirt and thick dark-rimmed glasses seat himself at our table. His unkempt hair struck off from his head like so many wayward ram’s horns. He might have been a ghost, he crept in just that quietly. Besides that, he reminded me of someone. When I was very small, I found a corpse on the beach. I called him the sleeping man, and now here he was come back to haunt me. As tonight was a night to celebrate the dead, I guess it was only natural.

He said his name was August Dent and that he was from Ottawa. But let me tell you, that he was no more born under that bright northern moon than I was born within 500 miles of the English Channel. His husky voice reminded me of being bundled warmly in front of a fire, slowly sipping a hot cup of tea with honey—something I did once, against my will, and never plan on doing again.

“Gentlemen,” he said, “perhaps you can help me. I am looking for someone.”

“And who might that be?” asked MacSide.

“Lester Burrows, the bartender here. I have two or three questions for him and require very little of his time.” As he spoke, his head made a slow turn, so that he eyed each of us. His mouth turned down into a semi-frown and his thick eyebrows rose sharply and held fast in expectation of an answer. Before we could give him the morbid news, Little Will came bounding up with two more pitchers of the house’s finest. The diminutive bartender solemnly proclaimed: “Tonight let him be known only as the Stone Giant, as he himself would have had it.”

Of all the applicants interviewed for the job of writer’s model, Lester Burrows seemed to be the least adequate. Yet, because there were only three of us making this decision, and because Claire and Grace split their vote, it all came down to me. Grace was, in fact, right when she said that any boob could see that Lester was too reticent, too bereft of feeling, too unaware of his surroundings for the part. Nevertheless, when the two women unfolded the piece of paper that I handed them, the name Lester Burrows was written plainly on one side.
What, after all, had Lester done that would merit a writer’s interest? And were there any questions the man was willing to answer?

It was a shock to find that he was responsible for those three soft knocks that might have been the March breeze gently rattling the door. Later, Claire wrote that he looked something like a warrior returned from the crusades; his face was a ruddy brown, covered with a sheen of grease and sweat; a scar cut an angular path across one cheekbone; he removed a big-billed cap to reveal a great shock of black curls which fell about his neck as he shook his head. It was clear to me that he was a mechanic of some sort. Perhaps he worked on motorboats in the harbor or on the Jaguars and Austin-Healys that were endlessly waiting repair outside the auto shops that line Ocean Way. But as he stood in the doorway of Grace’s apartment, slightly out of breath, his face aglow and his eyes blazing, he was Hephaestus fresh from his day at the forge.

We used Grace’s apartment for the interviews because it was more presentable than ours. Handmade yellow curtains let just the right amount of morning sun into her living room. In our dark apartment, although more spacious than Grace’s one-bedroom, there is nowhere for writing models (or anyone else, for that matter) to sit, unless they don’t mind the floor or the bed. It is Claire who is the messy one, not me. Before she moved in, the place may not have been immaculate, but it was not an apartment one would be ashamed of. Also, Grace’s apartment was on the ground floor and therefore more convenient for older candidates who would have a hard time climbing to the fourth floor, where Claire and I stayed. We three writers sat on a large beige sofa, across from Lester, who filled his too-small chair uncomfortably, his massive hands clutching the arm rests. After the interview, Claire asked me, “Well, what do you think of him, August?”

“It’s hard to tell, really,” I said. “He didn’t say much—far less, in fact, than that Brazilian woman who spoke almost no English.”

Claire said, “He’s a mystery. I wonder what he’s hiding.”

We were not mystery writers, although I suppose it was Grace who came the closest. She wrote novels about people who are in the midst of a “stunning self-discovery.” She had published four novels, and I disliked every one of them, although they were somewhat better than I had expected from someone whom I secretly despised. Grace was much too thin, overbearing, and compulsively neat for my tastes. She looked well past her thirty-five years, an effect aided by wide swatches of gray hair, a lined face and thick glasses. Her owlish countenance clashed with a character that I found to be neither wise nor fierce.
Grace’s last novel, *All Mixed Up*, concerns a young woman named Gaby, who discovers on a trip home from college that her parents are not her parents. She learns that her real mother and father are, in fact and by the sheerest coincidence, her roommate’s parents and members of a crime family.

*All Mixed Up* was inspired by Bartholomew, the writer’s model we used before Lester. Bartholomew claimed to have kept book for the mob. He had also been employed as a lounge singer and a stereo salesman. I was more interested in his love life than in his various professions, and I wrote a sonnet cycle based on his courtship of a woman named Margo, which I published in a collection that included about a dozen other local poets. Claire, on the other hand, had been less successful with this model. She was only able to produce one feeble short story concerning a stereo salesman who annoyed customers by singing loudly to instrumentals while secretly poisoning them with oleander-spiked complimentary coffee. Grace and I felt that Bartholomew was a fine model, eager to answer questions or volunteer a story, but Claire insisted that he had to go.

It was Claire who lobbied so hard for Lester. She said, when we had gone to bed after the interview, “Lester can make me write. He inspires me somehow. And I want to publish, August. I know that your father left plenty of money, but I want to contribute something. I feel like such a parasite.”

After signing the contract in Grace’s living room, Grace explained to Lester, “You understand now, Mr. Burrows, that your life is no longer just your own but ours as well. We expect you to live as you have always lived. But you must have a sharp eye and an open ear for the unusual detail. It is often the striking detail that will set a novel apart, or a poem in Mr. Dent’s case. Live as you usually do, but be here 7 sharp every other evening, and be prepared to stay as long as we need you. We will pay you by the hour, so think before you come. Try and have something interesting to say.”

He had something interesting to say all right, but whatever it was, he wasn’t saying it—at least not to us. After the first two weeks I knew only five things about Lester: 1) he had an unnatural aversion to cats (I had to take Grace’s black and white tabby up to my apartment before he came each evening); 2) he had a wife and two young children to support; 3) he never observed the unusual detail; 4) he was the day bartender in a local pub; 5) he was habitually grimy.

He was a man of little imagination, and the nights with Lester were virtually identical for the one month that he modelled for us. Grace began each session with, “Tell us what you did this afternoon in the pub, Lester.”
After a few days, Lester's nervousness dissipated. He sat calmly, serenely swallowing the beers Grace offered him. He addressed Claire, whether she asked him the question or not. "Well, nothing really. Nothing different from yesterday, or the day before that. Just served the customers their lagers, that's all."

"Any stories," Grace continued in the same line, "about the customers that you might like to tell us? Have you noticed any changes in their lives, big or small?"

"Well, yes," Lester brightened at finally thinking of something that we might like, "Mr. Philton wears a toupee now. Until last week he had a bald spot, from about here to here." He moved his finger to indicate the area on his own head.

The three of us sat across from him on the beige couch. Each of us recorded Lester's answers. Grace and I chain-smoked cigarettes and drank coffee while Claire sipped coyly at a glass of cognac.

I asked, "Lester, what about your family? Any strife, conflict, turmoil? Your daughter has turned teenage prostitute perhaps, or your wife is seeing your best friend on the sly?"

"Oh, heavens no, nothing like that. Just your normal family," Lester said. He took the question with good humor, but Claire shot a fierce look my way.

She was very gentle with him, however, and her smile even made him open up a little. "Tell me about your childhood, Lester," she persuaded. "Anything happen to you then, that we might be interested in hearing, that we might want to write about?"

"Well once," he began slowly, "in Leeds, my father and I went to a football game. The crowd rioted, I guess you might say—went berserk-like, and I was swept among them. Somehow, I ended up in the backseat of the wrong car and found myself, the next morning, in a warm bed, only it wasn't my bed. It belonged to a beekeeper and his wife. They told me I was in Edinburgh. They were a nice old couple who had no children of their own. They were intent on keeping me, but after about a week, I stole away and hitchhiked back to Leeds."

"Weren't you frightened?" asked Claire.

"Oh no, not of them. They were just a couple of nice old people."

"And the bees," I asked, "were you frightened of them?"

"Oh, I never saw them, to tell you the truth. Though I did hear them once. Yes, I might have been frightened by their sound," he added, eager to please.

The other two were busy writing and I felt as though I should be writing too, but all I could bring myself to do was a simple sketch of two cows drinking from a stream. I drew the cows refreshing themselves on a bank halfway between Leeds and Edinburgh; one cow's
head was up, catching a breath, while the other’s was lowered to the water. I was going to draw bees, but then I thought, why should I disturb these cows. Let them drink. It was certainly the best work that Lester inspired me to do, although I wrote two or three “Lester” poems. I see the drawing every morning, for I have fixed it to the wall next to my bathroom mirror.

After one month of Lester I convened a meeting. Grace agreed with me immediately that Lester had to go, saying “It’s just what I said from the beginning, isn’t it?” We were in our bedroom—Claire’s and mine—and we offered Grace a seat on the bed, where she more leaned than sat, striving hard to avoid some of Claire’s underwear.

“Listen,” I said to Claire, “Lester is no more cut out to be a writer’s model than you or I or Grace are. Oh, he looks the part, I grant you that. But a writer’s model should be like Ulysses, just back from Troy, filled with 10,000 stories.”

She finally had to agree with us. Grace and I just wouldn’t put up with Lester any longer.

III

Oh, great testament to the cunning of men!
You came to my abode, where I offered you my wine. I asked only
That you sing one silver-toned song of your daring:
Of battles fought on Priam’s shore;
Of Helen’s unearthly charms;
Of Scylla’s ravaging hands;
Of the strength of the tender-ankled Achilles;
Of those giants, those one-eyed, fearsome giants who threw stones
At your fleet.

But you were all silence. All silence and cunning even with me,
The most giving of hosts.
You lay with my serving boy and you charmed him with stories;
Even I who am blind can see that.
And now when I look at him, I think of you whispering in his ear,
Your hot breath on his neck.

—August Dent, “Lester in the Abyss”

It was Danvers the cat that gave me the first clue. Grace had said, “You’re not usually home at this time of day, August. Can you take the cat upstairs? She’s driving me batty, and I am trying to write.” Danvers usually enjoyed a trip to our kitchen, where, if I had been to the delicatessen lately, I would give her a thick piece of smoked whitefish. I think the condition of the apartment was as much a treat for her as the fish. She liked to rummage through the clothing on the
floor or hop onto the kitchen counter and sniff at dirty dishes. The whole chaotic scene must have evoked an ancient memory of some primeval home.

I dropped Danvers to the floor as I searched for my key in my coat pocket. As usual, Danvers rubbed her black and white fur against the door, but within a few seconds she was scampering down the stairs, back to Grace. She was spooked and this time it wasn’t some imaginary rodent that she was after either.

I entered the apartment slowly, and I heard the sound of a man roaring with laughter coming from the bedroom. The laugh was what I imagined a giant’s laugh to be; it was a laugh that filled the room, and with the door open, it filled the hall as well. Claire could be witty when she wanted to be. Or perhaps it was one of his own jokes or stories that made him roar. I had never heard Lester laugh except once when I asked him how he managed to get so very greasy working in a pub. I asked him if he had fallen into the vat where they fry the chips. He said that he hadn’t done that but “the pub was a dirty business, indeed” and at that remark he laughed, not nearly as loudly as in the bedroom with Claire, but it was the giant’s laugh just the same. His clothes were strewn around the room; even in the weak light provided by two half-spent candles that glowed on top of the television set I recognized his immense shirt and slacks. How long they had been meeting surreptitiously, I did not know. Two months before, Claire had done the firing. She insisted. He had taken it in stride she said. He too was tired of the whole business, although I wondered what in the world had exhausted him so.

I did not disturb the two of them. Nor did I disturb them over the ensuing months as they met each afternoon. After we fired Lester we decided to take a hiatus from writer’s models for a while. During the spring and summer, Lester and Claire had the luxury of knowing that I would not disturb them. Those days, when the moist sheltering fog keeps the coastal plain cool until 2 o’clock, were ideal for writing at my desk. After working, I had a habit of going around the corner to a small dank bar, where I’d drink a whiskey straight up and nibble on the free popcorn. Each day when I returned to the apartment, Lester was, of course, nowhere to be seen. I always found Claire though, usually still in her underwear, sometimes in a robe, or at times completely naked, in bed, writing furiously. Half in bed would be a more accurate description of her position: one knee was drawn up toward her chin to support a legal pad, while the other leg was nestled deep within the warm darkness beneath the blanket. She refused to talk to me for at least a full hour after my arrival. She would put one hand up in order to arrest my intruding voice and carry on with her work. But Lester had been there. I knew that much.
One day, well into the summer, their meetings ended. I came home and I did not find Claire in her bed. Nor was she in the living room or the kitchen. I did find something unusual. Someone had punched a fist-size hole into the wall across from the toilet. I put my arm into the hole all the way up to my shoulder, and I felt my way among the coffee mugs and glasses in the kitchen cabinet that was just on the other side. I grabbed a glass and brought it carefully through the new passageway and filled the glass with water from the bathroom tap. Then I leaned against the sink, stared at the hole, and drank.

The next day, Claire must have come while I was out because all of her clothes were gone when I returned from my afternoon refreshment. Everything else in the apartment belonged to me. She didn’t leave a note, but she did leave a gauche feather boa that we had picked up in one of the gift shops on the pier. She said that she had to have it and so I bought it for her. She never wore it outside of our bedroom. I found it wound loosely around one of the bedposts.

It was sometime later that I noticed a thin paperback on Grace’s coffee table. She and I were in the process of interviewing new writer’s models. A woman who had told us that she had been a successful writer’s model in Europe was to arrive at Grace’s shortly. Grace was getting dressed in her bedroom, but she had left the door unlocked for me, and I sat down and examined the book. On the cover was a painting of a bartender with a blue-shadowed face, wearing a soiled apron. His arms were spread apart holding two large pitchers of beer. He was smiling and other customers in the bar were raising their glasses and smiling too. The collection was titled *Tavern Tales*. The author was Claire.

“I found this in the bookshop yesterday,” Grace said, sitting across from me.

“Have you read it yet?” I asked.

“Yes, and it is not bad, really. One or two stories are good. Can you believe that he was holding out on us like that?”

“Holding out? What do you mean?”

“These must be his stories. There is even the story of the kidnaping beekeepers. Claire has arranged it all so cleverly. Each story is told by a different patron in the bar. You know, like the *Canterbury Tales*. Can you believe she was holding out on us like that? He must have told her these stories when we had our heads turned.”

“Yes, that must be it,” I said. “Do you mind if I take this?”

That night I read Claire’s book. Grace was right—on the whole I didn’t think the stories were brilliant. Although there were two or three that were very good. One story I found particularly interesting. It was about a woman who took a lover so that she could use his
experiences for her fiction. The more he fell in love with her, the better subject he became. When she finished her book, she cut him loose.

IV

It was Joanne Witt who was attracted to me first and not the other way around as she likes to tell it. It was my accent that did the trick on her, just as it has on so many other, British or otherwise, in our community. I picked up the telephone at a quarter to 7 quite by accident the morning I met Joanne; we hadn’t finished at The Tap and Tarry until nearly 2:30 that same morning and I had no intention of working that day, as hungover as I was. But I was having an unusual dream where the Stone Giant called me on the phone. He wanted to take my order so that he could have my beer ready for me when I arrived. I was a bit shocked when Mrs. Penville said, “Philton, I have a job for you at Carraway Corporation. Be there at 8.”

With my brain still in a fog, I found myself leaping into my car and heading toward Carraway Corporation, where I dutifully reported to a Miss Joanne Witt. “You’re a Brit,” she said. I hadn’t remembered to shed my accent from the night before.

Joanne led me to a stack of papers and an 8-column ledger. She told me that the last temporary accountant had been a disaster, and when I opened the ledger, I saw what she meant. Neatly inscribed in each column was one of the symbols from a slot machine. The man had drawn tiny cherries, lemons, plums, bars, and all the rest. “We need you to go back about three weeks,” Joanne said, handing me the invoices, “and clean this mess up.”

I worked steadily for four hours and a greater torture I have never endured. I slipped off to a corner bar during lunch, and who should I see there but Joanne. She was sitting in a back booth with some C.P.A. type. He wore a gray suit and a tomato-colored tie. I acknowledged her with a wink and then went straight up to the bar where I ordered a double whiskey. My only hope was that she would take offense at my drinking and send me home. Instead, she gave the C.P.A. fella the brush-off and invited me to spend the rest of the afternoon at her place.

Those four hours at Carraway Corporation, substituting numbers for cherries and lemons, convinced me that I was in the wrong line of work. That is where August Dent comes in. Soon after I met him at The Tap and Tarry, he called me and said he wanted to interview me for a job.

I quit the temporary agency altogether, but I never told Mrs. Penville. I just moved out of my old place and moved in with Joanne. With what I take home from working for August, I can afford to spend
most every night at The Tap and Tarry. At first, August wanted to know about the Stone Giant. I told him the truth. Stoney just served the beer; he didn’t do anything out of the ordinary. But then I got the idea that he wanted to know something more, and after all, he was paying for it. So I began to invent all kinds of tales about how Stoney would take a new woman home every night or how Stoney was a hit man for the I.R.A. or how he once saved five kittens from a fire in the pub by carrying three in one arm and two in the other.

He asked me if I knew why Stoney had committed suicide, and I answered him: “Some of us, Mr. Dent, cannot stomach the transition from Europe to America. Each of us handles it in his own way.”

But now, finally, he seems to have lost interest in Stoney, and he concentrates mainly on me. And I have an impressive tale or two to tell him. ☐
Religion

A New Human Testament

A new world religion may be the best hope for world peace

Steven Schmidt

The Gulf War brought us all to our television sets. I was as fascinated as anyone else, but must admit to mixed feelings as I watched the buildup on the border of Kuwait. Despair, yes—the almost automatic reflex of a modern, liberal, peace-loving American; but there was another emotion, which might best be described as a growl. War! Tanks, planes, ships: more carriers in the Gulf than we used to fight the entire Japanese Navy in 1942. This, I thought, would be worth watching, and I ate my supper in front of the set.

We love war ... well, men do; most men. I know I love it. I have shelves full of books on World War II; others specialize in Vietnam, or the Civil War, or the wars of the Caesars—it doesn’t matter, it’s all the same thing: combat; exhilaration; joy—the joy expressed in Ezra Pound’s “Sestina: Altaforte”:

Damn it all! all this our South stinks peace ... .
I have no life save when the swords clash.
But ah! when I see the standards gold, vair, purple, opposing
And the broad fields beneath them turn crimson,
Than howl I my heart nigh mad with rejoicing.

We want peace. Yes, of course. The calm voices of reason, polite exchanges over the conference table. War is barbaric, should be only a last resort; no, not even then: we can’t afford it, not with nuclear weapons. We really feel this way, but another, darker side of our minds sneers at all this talk and pussyfooting around. It is atavistic, we try to push it down into the unconscious, but it keeps popping up: the primitive urge to face our fellow man on the field, exchange salutes, and then proceed to commit mayhem, howling our hearts nigh mad ... .

Konrad Lorenz explained this atavism in On Aggression, but we don’t need to have it scientifically delineated; we have it—the killer instinct—and we know we have it. The wise Plato said that only the
dead have seen an end to war, and Sophocles darkly added that only he that had never been born could be called blessed. But we're stuck with it, this instinct; it's part of our makeup. The cortex has bulged impressively in recent millennia, spreading philosophy and Shakespearean plays and motets and nuclear reactors all over the place, but the reptilian brain is still there, just above the napes of our necks, and it only seems to sleep. Man is a two-legged snail, carrying the house of his evolutionary past around on his back; he can only add to what's on top, he can't get rid of what's on the primeval bottom.

Women, for the most part, don't like war. Their instincts lead them to the creation, not the destruction, of life. The man has the fun of planting the seed, but then the woman must be protected as the next generation slowly develops in her womb. The man is left free, and this is necessary. Who knows? A sabertooth tiger might appear at the opening of the cave, or an Iraqi paratrooper come down in our quiet neighborhood. So the man is left unencumbered while the woman bears the child and then has to nurse and nurture it. Homo sapiens has an extremely long infancy and childhood; this keeps the woman occupied and, meanwhile, the man grows restless. He can go hunting, or drink beer and watch a football game on TV, but he really is a supernumerary once he has played his brief part in bringing the new generation into existence. Besides, women are more evolutionarily advanced than men, as Ashley Montagu pointed out in The Natural Superiority of Women. That's why they don't have to shave, have less body hair, and lack that heavy brow ridge, reminiscent of Neanderthal.

With some justice she complains: "But you've already watched Sands of Iwo Jima a dozen times."

"I know," he mumbles, "but I still like it."

"Well, can't you at least turn the sound down? After all, they're not saying anything."

Strafing without the rattle of machine guns? Soundless bomb explosions? John Wayne mouthing in a vacuum as he leads his devil-dogs up the beach? Ridiculous.

Is there a way out of this impasse? Can we wait another 40,000 years for men to catch up to women in their evolution? No. The human race has taken its evolution into its own hands. Besides, the most sanguine of us probably don't expect our pugnacious race to last another forty millennia on this battered planet. I don't believe the male of the species will change much as far as his aggression is concerned; however, that does not mean I think we should simply shrug and wait for The End. Man's warlike impulses can't be
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extirpated, no, but it has been demonstrated that they can be controlled. But not enough men control them enough of the time—not for safety, not for security. That’s true. When I sat before my set, watching the Gulf War, my exhilaration at hoping to see the Coalition kick some Iraqi ass was tempered by a familiar heart-in-the-mouth dread: would this one do it, the match to the fuse, the beginning of World War III, which would be over in a trice and us with it? Sighs of relief as we learned that Saddam Hussein was not going to deploy nuclear weapons. No use of chemical or biological weapons either. Good! Well, we nipped out of that one. But what about the next one? There are more nuclear powder kegs every year, and plenty of matches in the hands of people like Saddam—big men with mustaches and the emotional maturity of vicious children. All our good intentions will not be enough to forestall such a man. The United Nations is doing a little better than the League of Nations did, but all of our pious hopes for peace on earth sound hollow in the shadow of aggressive, amoral leaders with absolute power to play with.

Since I am writing on this subject, it may be assumed that I have a solution to offer, a possible way out of this cul-de-sac. I have three, as a matter of fact, all equally unworkable, apparently, but—considering what’s at stake—we’re not in a position to ignore any hope of keeping the finger off the button, the match away from the fuse, no matter how improbable it may seem. Here they are:

1. Put women in charge of all governments.
2. Find a moral equivalent to war.
3. Start a world religion that stresses peace and individual maturity.

Apparently unworkable, yes, but not altogether outside the pale.

1. Women in charge of governments

In view of their evolutionary superiority and the fact that their instincts are toward life, not fatal combat, women seem to be much better suited for world leadership than men are. The female sex is not unknown in politics, of course, and many have shown a distinct talent for it. Margaret Thatcher was not the worst prime minister Great Britain ever had. Elizabeth I was one of that country’s greatest leaders. But politics is still, on the whole, a man’s game. How many skirts did we see among the trousers when Congress got together to applaud President Bush after Saddam capitulated? A few. We have never had a woman President, and it is hard to see one on the immediate political horizon. I think a woman would be very good at it if given the chance. In his poem,
“Nightmare for Future Reference,” Stephen Vincent Benét suggests that women have the right instincts. It begins:

That was the second year of the Third World War,  
The one between Us and Them.

It ends with these lines:

And we keep the toys in the stores, and the colored books,  
And people marry and plan and the rest of it,  
But, you see, there aren’t any children. They aren’t born.

The war had not destroyed all life on earth, which is now a possibility that we can only hope will not become a probability; it had done something to our ability to reproduce.

I guess you know, now. There was still a day when we fought  
And the next day, the women knew. I don’t know how they knew,  
But they smashed every government in the world  
Like a heap of broken china . . .

The farseeing Benét wrote that poem in 1938, on the eve of World War II. He didn’t know about nuclear weapons, nerve gas, or anthrax, and his prophecy should not be taken literally, of course, but he was a true seer in that he knew that something bad, really bad, loomed in the immediate future.

It is too much to hope that the women of the world will smash the governments before such a final disaster can occur; however, it is just feasible that enough of them can get into positions of power to make a difference. I hope the Democrats choose a woman to be their candidate in 1992. They are having trouble coming up with a strong male candidate, so why not a woman? There are more women than men voters in this country, and if each of them would vote for her sex rather than her usual party . . .

2. A moral equivalent of war

This is not a new idea, of course, but I think it is worth taking another look at.

Men, when they are not watching war movies, tend to watch football games. Here they may vicariously engage in violence of a usually nonlethal kind. It is a contest, man to man, team against team, calling for strength, skill, and endurance, just as in war. The cheers for a winning play are as fervent as those heard when the American flag flew victorious over Kuwait. Sports such as professional football certainly have a salutary role, allowing strong men to meet in combat without killing each other or dragging their country into war, and millions of watching men can vent at least a portion of their aggressiveness by observing, cheering, and drinking to the victors. I am not a sports fan, but I become one every
four years when the Olympic Games are televised. Here individuals from different nations can compete with each other on peaceful playing fields, and the only shots fired are those of the starting guns. It is, to me, a thrilling spectacle, and one hopefully indicative that the peaceful competition will spread beyond the arena. The Olympic Committee stresses that there is no winning team (nation), and does not declare any country the winner, but no one takes this seriously. For all the attempts at internationalism, national chauvinism is rife all through the games.

Sports are obviously superior to people killing one another in battle, and may be thought of as a healthy safety valve, but in themselves they are not enough to divert men from war. We have had sports since civilization began—the first Olympiad was held in Greece in 776 B.C.—and we have not yet seen an end to war.

I felt a stir of hope when the Russians put Sputnik I into orbit in 1957. The “space race” that developed between the United States and the Soviet Union was seen by many as an excellent substitute for armed conflict, the Cold War being much on people’s minds in those days. It was still a contest, on the scale of nation against nation, but technical and scientific rather than military, and the purported end was an extension of human knowledge, not victory and dominance. Kennedy’s assassination in 1963, however, seemed to symbolize the end of the great space adventure before it had fairly been launched. Johnson kept the program going, but Nixon was more concerned with earthly problems, and NASA has been forced to wage the battle of the budget ever since. *Homo sapiens* is still earthbound. Vietnam and all the brushfire wars in the Middle East have amply demonstrated that the space program, in its present limited role, is no moral equivalent for war.

3. A world religion

The third possibility is, oddly enough, the one in which I place the greatest hope. From time to time we hear that the human race is about to undergo a great spiritual transformation. It accelerated in the frantic 1960s, when the hippies hoped to bring about the Age of Aquarius with guitars, drugs, chants, and gurus; however, it did not start with them. The prophecy is often connected with the fact that we are nearing the end of not only a century but a millennium. Nostradamus, Edgar Cayce, and other seers are trotted out to indicate that the new millennium will be ushered in with more bangs
than whimpers, that it will be an apocalyptic fin de siècle, and out of the ruins will emerge a spiritually illuminated humanity, the survivors bound on a glorious adventure into the hitherto unknown—not outer but inner space.

"All of our old gods are dead," wrote the late Joseph Campbell, "and the new have not yet been born." What new gods? Or rather what new conception of God? Campbell was interviewed by Bill Moyers shortly before his death. In his introduction to The Power of Myth, Moyers writes:

The last time I saw him I asked him if he still believed—as he had once written—"that we are at this moment participating in one of the very greatest leaps of the human spirit to a knowledge not only of outside nature but also of our own deep inward mystery."

He thought for a minute and answered, "The greatest ever."

Campbell, who had studied mythology all his life, told Moyers that "the only myth that is going to be worth thinking about in the immediate future is one that is talking about the planet . . . and everybody on it." The future myth (religion) will not be localized, but a World Religion.

And what it will have to deal with will be exactly what all myths have dealt with—the maturation of the individual, from dependency through adulthood, through maturity, and then to the exit; and then how to relate to this society and how to relate this society to the world of nature and the cosmos.

I don't think Campbell meant that all the people of the earth must first be united under one government—a United States of Earth—and then we can have a World Religion that everyone on earth can partake in. It should be made clear that we cannot invent a new religion. The new myth is being born, it is beginning to emerge from the deep unconscious of the human race, and there will be no stopping it; once it gains momentum, it will sweep ahead like a tidal wave bearing down on the shore of human events. If it takes hold of all men and women, the world society will be born out of it.

We cannot consciously create a religion, but we can assist at its birth by beginning work on its testament. I think of it as the Human Testament because it will be based in humanity, not imposed by an a priori God.

The "mythologies" of the Old and New Testaments should be revised in accordance with our state of knowledge in the twentieth century. Henry Murray, in an address to the Harvard Chapter of Phi Beta Kappa, said that he had in mind "a micro-sketch of a hypothetical book," which "would also be a sketch . . . of a book to come . . .
A super-personal book, a book of books, that might be termed a testament, a world testament.

Like the Bible, this world testament would be a collection of passages, in both poetry and prose, that the writers and editors consider suitable; however, the compilers of this new testament would have a much greater wealth of material to choose from. Murray proposes that its essential features "would be roughly these: it would be the product of the interdependent judgments and imaginations of numerous composers, drawn from different cultures and from different callings."

This testament would differ radically from the Bible inasmuch as its mythology would be consonant with contemporary science; its personifications would all refer to forces and functions within nature, human nature. Also, it would differ radically from previous testaments of the Near East and West—the Bible, the Koran, and the Testament of Karl Marx—by describing and praising, with even-handed justice, forms of excellence, achieved by each and every culture.

Not a rewriting or updating of the Bible, Koran, or any other holy book, the Human Testament must be wholly new, as would befit people adopting a new religion as they enter a new millennium. Peace is not only desirable but essential if we are to survive to see the end of that millennium or even of the 21st century. The earth is still rich and fair—it is indeed the real meaning of the Garden of Eden in Genesis—and can support the entire human population in comfort and freedom if the feeling of brotherhood can be developed into something more than a pious wish, and if international cooperation and mutual helpfulness can be achieved.

But I have seen no evidence that anyone is seriously at work on such a project. That no one has done so is disappointing but not surprising. Scholars seem to be more interested in minute analysis of existing texts than in achieving a grand synthesis.

But why religion? Is the proposed Human or World Testament to be anything more than an international system of ethics? Is it something greater than the "secular religion" that the humanists were asking for not long ago? It is more, and it must be. We have had ethics as long as we have had philosophy, and it has done as little as parental admonitions to prevent crime and war. The trouble with ethics is that it is only heeded by people who are already inclined to be ethical in their behavior.

Ethics would be very much a part of the Human Testament, but not all of it, just as the Ten Commandments, though important, are not all of the Bible. Civilized people of good will have always obeyed the law and conformed to a code of conduct, but these are not enough to guarantee peace and safety, to alleviate disease and poverty, to
Steven Schmidt

ensure that all men and women are free, and that no child goes to bed hungry. Even if we adhere to the laws and codes of society, we need something more, and religion, as Tolstoy said, is what people live by. There is an instinct or intuition in the human soul that rebels against mere humdrum existence, no matter how comfortable it may be for the lucky ones. Human beings are born curious, and the basic myth of humankind is that of the quest. Science has failed to replace religion in our time precisely because it does not attempt to answer the questions that people have always asked.

Religion is an attempt to fill the gap between science and the limitations of practical experience. Science can tell us that the universe was created by the Big Bang about fifteen billion years ago, and that we are here as the present end-products of a process of evolution from simple to more complex forms, but merely shrugs if we ask why or Who? Our experience on this planet tells us that we live as conscious and self-conscious beings, and we can produce more human beings, but to what end? We do not know, and so we turn to a priest or some other religious authority, and find that he not only claims to know but will tell us all about it, in great detail, if we will only join his congregation.

But only by a conscious act of hypocrisy can many of us go on pretending to believe in the tales spun by traditional Christianity, Judaism, and Islam. Rather than be hypocrites, not a few of us have simply stopped going to church, temple, or mosque. But that leaves a void in our lives. Science cannot fill it and religion has disappointed us. Where do we turn?

Joseph Campbell, in *The Inner Reaches of Outer Space*, refers to the old problem of people taking literally what are mythic metaphors or allegories—that is, symbols:

The Virgin Birth, for example, as a biological anomaly, or the Promised Land as a portion of the Near East to be claimed and settled by a people chosen of God, the term “God” here to be understood as denoting an actual, though invisible, masculine personality, who created the universe and is now resident in an invisible, though actual, heaven to which the “justified” will go when they die, there to be joined at the end of time by their resurrected bodies.

He asks: “What, in the name of Reason or Truth, is a modern mind to make of such evident nonsense?” It is not nonsense, exactly, but it is poetry, myth, metaphor—fiction, if you will. The trouble is that it is not taught that way. Sophisticated minds understand this, but most people take it literally, and are encouraged to do so!

Besides the code of ethics mentioned above, the testament I am recommending would, of course, have to address the more specifically religious issues: creation, the nature of God, prayer, the afterlife.
A scientifically correct account of the creation of the universe as we now understand it is a much grander and more awesome concept than the account in Genesis, and the writing should reflect this. But, without sacrificing accuracy, it should have none of the dryness of a scientific treatise. We need a new language for the gospel, one whose mythic images will be able to grip us “with the power needed to understand their true meaning.” For the testament to be a living book, one that can be read and understood by literate people all over the world, it must be both readable and beautiful. It should not resemble an article in *Scientific American* nor a doctoral dissertation.

The creation of human life should also be described in scientifically correct prose (or poetry): it is not a theory but a fact that complex forms, such as human beings, were developed from simpler forms by a process of evolution that has gone on for billions of years. This, too, is a much deeper and grander concept than Jehovah’s creation of Adam and Eve in the Garden, which is more like a sleight-of-hand trick and totally unbelievable except as allegory. The account of the evolution of humankind in the testament must not present man as the pinnacle of creation. Evolution continues, up to us and through us to greater creatures (such as Nietzsche’s Übermensch) either in the terrestrial future or elsewhere in the vastness of the universe.

A religion in which people can believe, can put their faith in, cannot be founded on an abstract principle. But we must, I feel, get rid of the concept of a personal God. Our present knowledge of cosmology and evolution has brought us a long way from the cozy little geocentric world of two thousand years ago. What God is remains a mystery, but God could not possibly be in human form. As Sir James Jeans, the noted astronomer, remarked, the more we learn about the universe, the more it resembles a great thought rather than a great machine (the clockwork cosmos of Newton). Thoughts are created by minds; hence it is better to imagine God as a great Mind that created this wonderful thought we call the universe than to anthropomorphize God as a great Man (or Woman) with personal pronouns used for reference. To say “he” or “she” is like ascribing sex to the sun or the moon.

If the concept of a personal God is done away with, as I suggest, one of the first questions that is sure to come up is, who are we going to pray to? William James and others have made a good case that prayer is efficacious—that it can actually bring about change, and not simply in the mind of the one who prays. But what image is impersonal yet grand enough to stand for the God who is responsible for this tremendous and infinitely complex universe? Fortunately we do not have to invent an image; it has already appeared from the depths
of the unconscious, as described by Jung and other depth psychologists. I submit that the best image of God is a circle, the perfect figure in geometry, which has, of course, long been associated with religion—in the rose windows of great cathedrals, for example, and in the Eastern figure of the mandala. Psychologically, the circle is the image of the Self, the entity in the psyche which transcends the ego and brings all our mental components, conscious and unconscious, into a mature, balanced, and harmonious whole. Prayer, in essence, is talking to oneself (one's Self), but most people imagine divine figures in human form when they pray. Those who cannot bring themselves to pray to a circle should, I suggest, pray to an intermediary (as many already do, addressing their prayers to Jesus, the Virgin Mary, or a favorite saint).

Where do we go after we die? To this frequently asked question my answer is: We don't go anywhere, we are already there. "The Kingdom of God is within you," according to the New Testament, and the statement is psychologically true—yet people still look up at the sky when Heaven is mentioned, as if the City of God were lurking up there somewhere. The only heavenly city we will see is a symbol of the Self, and it is within the psyche. Hell is what is experienced by people who fail to mature, who do not continue on the quest that seems to be the sole purpose of our existence.

Whatever form it may eventually take, the Human Testament I have been recommending must stress its adjective: human. The world is made up of individuals, and not until a majority of the people are mature can we have hope of a mature society—one in which war would be unthinkable and active measures would be taken to eliminate the old scourges of poverty, ignorance, illness, crime, and injustice. Education in such a society would start with myth and go on to religion, so that every child, not a few favored or fortunate ones, would be prepared for the quest that leads to individual fulfillment. And this fulfillment is, I believe, the world's best hope for making war forever a relic of the past. The Gulf War demonstrated that we are willing to put our hand in the fire. We will need even more courage to make the leap toward the great transformation that Joseph Campbell has prophesied.
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