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EDITORIAL
Louis T. Milic  3  Gnothi Seauton
David M. Larson  5  Science Fiction—Not the Future
   Despite the claims of some writers, S-F is not prophetic.

SPECIAL SECTION
17  "What If . . .?" Futurological Contest Winners

Leonard M. Trawick  18  Introduction
Mary Makofske  20  His Brother's Keeper
Justine Buisson  28  Pike World
Carole L. Glickfeld  33  What Could Be Missing?
Ted Gargiulo  40  PLAYDAD: The New Efficiency
Shirley Powell  46  Cheruboom
Nancy Potter  50  Occasional Aromas
Ralph Mendelson  51  The Goodness Pill
Erica Frances Obey  54  Apocalypse Postponed

Bruce A. Beatie  58  "Dear Devil": The Alien as Savior in Science Fiction
   Keep watching the skies: is outer space home to friends or foes?

Richard M. O'Donnell  66  Word Dance: Electronic Creative Writing and the Digitized Word
   Are traditional books yielding to electronic bookware?

Joel Lipman  80  No Price Tags, No Rejections, No Returns: The Creative Democracy of Mail Art
   An art form open to everyone—all you need is postage.

Michael Chickey  94  Last Words
   What to read on the highway now that Burma-Shave signs are gone.

Edward Jorasky  95  Letter: Beauty Redefined
THE COVER: Drawing by Amy Jenkins. Eight American writers, winners of The Gamut's "What If ...?" contest, try to take the wraps off of our future, pp.17 through 57.
Editorial

Gnothi Seauton

The ancient Greek passion for self-knowledge, expressed in the injunction at the head of this piece ("Know thyself") has deeply infected the modern world, especially California, and has taken some peculiar forms, but nowhere more peculiar than when periodicals are the seekers after it. Whereas individuals can look inside themselves for knowledge about themselves, we magazines define ourselves differently. Half of what we are is found between our covers; the other half is in you, the readers. We have a gnawing need to know something about you, even though you are a shifty group, constantly falling away, being replaced by new recruits, returning, being added to. Although perhaps only a fraction of The Gamut’s original band of subscribers are on our list today, we tend to think of you all as a steady immutable body, all standing together in the open space in front of Rhodes Tower, impatiently awaiting the next issue, thumbing it feverishly when it appears, commenting to each other about the contents and going out and telling your acquaintances about it.

This chimerical scenario, we recently decided, was unsatisfactory as a basis for making editorial and circulation decisions. After some hesitation, we put ourselves in the hands of media experts, who suggested that we survey you first and then interview a few of you in depth. So last March we sent out over a thousand questionnaires (over which we had sweated a good deal) and waited for the results. A surprisingly large number (35%) cooperated, for which we have tried to thank you by extending your subscriptions. The results of the survey were much what we had expected, using the intuition that has guided us for the six years of our existence. Some of you wanted more science, others less; more history; less history—in short, you like us as we have been, except that the articles were too long.

As for you, you are as varied as our contents, but you do have a certain number of attributes in common: some connection with Ohio, Cleveland State University; or the academic life; a devotion to cultural events (film, art museums, zoos, and theater in that order); a dedication to reading, as expressed in subscriptions to other periodicals and visits to bookstores; a higher than average level of education. And you are in general quite satisfied with our format and contents.

Nonetheless, our sharp-eyed statisticians detected the likelihood that you are actually two groups: first, those who have subscribed in response to a direct mail flyer; and second, those who heard our radio ads, saw our print ads, noticed a bookstore display, received a subscription as a gift, or were personally acquainted with the staff. The former group is more likely
to include alumni of our institution and members of the legal, financial, and political worlds, the latter is heavily made up of academics and others less easily classified. Beyond such crude dichotomies, we are on shaky ground. The message from our experts: don’t change the magazine—at any rate don’t change the contents.

Interestingly enough, in spite of this orgy of introspection and the effort that went into it, in this issue we seem to have ignored their advice, changing both the format and the contents. We like to think that this comes from listening to our own drummer and making decisions because we think they will improve our product. Variety continues to be our slogan and variety comes from not doing the same thing—even not being various. So in addition to the format changes announced in the last issue [mainly wider margins, more illustrations, changed typeface], we have produced nearly an entire issue devoted to a single topic, not The Future, but Visions of the Future. Our contest yielded eight prize-winning stories, whose picture of the coming years is for the most part pessimistic. Almost all of the contestants thought of our contest as requiring a science-fiction entry, but that had not been our original plan. We merely asked that contestants imagine some specific change in the future, and then develop its implications. We conclude that regardless of the rules, contests will develop their own dynamic which expresses some felt desire or fear in the reading public. Editors and judges must take account of the force of these feelings.

In addition to the contest prize-winners we have two articles about science fiction: as a predictor of the future and as a reflector of ideas about extraterrestrial life. A little further afield, there are articles describing two new forms of art, one using old technology (mail art), one using new (computer literature); and there’s still another form of self-expression, a sequence of photographs showing bumper stickers that try to say something other than what is printed on them.

We’ll return to our usual varied subject matter in our next issue (our twentieth, due out mid-February). We hope you like the present one [both form and matter] and that, whether you do or not, you will let us know. We can almost promise to print your letter. Our concern for your opinion is easily understandable to anyone who has ever struggled to put together a set of words, sent them out into the careless world, and waited vainly to learn what kind of fire they have started. We are a little like Willy Loman, working with a shoeshine and a smile and hoping that people will smile back—without losing our souls in the process.

Louis F. Mili
Science Fiction—Not the Future

David M. Larson

Science fiction is fiction, not science. It is essentially a type of literature, and in many respects it is an escapist literature. This can be seen by glancing at the shelves of any local bookstore, because publishers, knowing their audience, class science fiction with fantasy, as do many current science fiction editors, fans, and even writers. Indeed the inextricable link between fantasy and science fiction is acknowledged in the title of one of the standard science fiction magazines, The Magazine of Fantasy and Science Fiction.

If, however, science fiction is not only fiction but fantasy, a type of literature upon which scientific-minded writers have poured contempt ever since the eighteenth-century, a type of literature which was essentially destroyed as a genre by the discoveries of science, how can science fiction have any connection with serious studies of the future? Are not futurology, the attempt to forecast the future scientifically, and science fiction, the use of science to re-create the genre of fantastic literature, diametrically opposed?

Thirty years ago this question would never have arisen. In the minds of most science fiction writers and editors, science fiction was the heart of futurology. Science fiction was also attacked on every side in the 1950s by those who rejected any claims of serious value for it: humanists argued that science fiction fostered naïvely positivistic attitudes; religious writers charged it with deifying science; scientists claimed it revived exploded beliefs and myths; literary critics sneered at the quality of its writing; and everyone insisted it pandered to mindless escapism.

Science fiction writers and editors offered one central argument in defense of their literature. They claimed that science fiction differed in kind and purpose from other literature. Far from being a literature of escapism, they said, science fiction was a literature of ideas, a literature which prepared its readers for a future which was bound to be dramatically different from the present. In 1956 John Campbell, then the dean of science fiction editors, wrote a defense of science fiction in which he argued that "science fiction's fundamental purpose is to make accurate, loose prophecies of general trends." Not content with making science fiction a forecaster of general trends for the future, he went on to list the technological innovations science fiction had accurately After avoiding science fiction during his adolescence because he was convinced it was all rocket ships and bug-eyed monsters, David Larson began reading it in college, and has continued to do so for more than twenty years. His area of specialization is, however, eighteenth-century literature, for which he prepared himself with a B.A. from the University of Minnesota (Morris), and an M.A. and Ph.D. from the University of Minnesota (Minneapolis), all in English. "My fatal mistake," he says, "was to become interested in the criticism of science fiction." Larson has published several articles on the subject and for five years taught an introductory course in science fiction at Cleveland State University, where he is an associate professor of English. When asked for any unusual facts about himself, he said, "Minnesotans don't go in for the unusual and interesting in their personal lives—it's not in character."
predicted, including hypersonic aircraft, rocket engines, computers, automation, atomic weapons and atomic power. In this old-fashioned view, the function of science fiction is to prophesy future events, and its frequent literary defects, such as two-dimensional characters, wooden dialogue, and predictable plots, are not defects at all but necessary consequences of its unique mission. As a literature of ideas concerned with the serious business of preparing its readers for the future, science fiction sacrifices literary graces to logical extrapolation from the present into the future.

Campbell’s vision of science fiction as a kind of handmaiden to futurology remains alive. Isaac Asimov, one of science fiction’s best known and most prolific writers, continues to argue that the crucial function of science fiction is to prepare us for the future, although he broadens that preparation to include social as well as technological change. He is echoed by the school of technically trained writers of “hard” science fiction, writers whose work attempts to remain within the limits (very loosely defined ones) of current scientific theory. In this view science fiction is only truly science fiction when it does not contradict known principles, and the fundamental purpose of the genre is to predict, if not the future, at least possible alternative futures.

The notion that science fiction prepares us for the future by predicting it has a certain surface plausibility. To Campbell’s list of accurate science fiction predictions could now be added space flights to the moon and the probes to Mars and Venus. Soon the prediction of a space station will become a reality, and the space laboratories, factories, even “space colonies” envisaged by science fiction writers such as Larry Niven may well exist eventually.

So some predictions are fulfilled. Yet this view of science fiction’s relationship to the future is demonstrably nonsensical. For every “prediction” of science fiction which is remembered because it anticipated some later technology or event, there are dozens, or even hundreds, which did not come true and never will. We are never likely to commute to work by helicopter or air car or to live in miles-long apartment buildings eating processed algae or to solve our energy problems through psi (mental energy) powers. While it is important to notice science fiction’s incorrect predictions, it is even more important to notice its frequent failure to anticipate important technological developments. For example, most science fiction written before the 1950s is technologically inaccurate because it failed to predict one crucial technological development—the computer.

Jules Verne and H.G. Wells are hailed as early twentieth-century prophets of space flight because of their literary space voyages; we forget that their works are part of a long tradition of imaginary voyages, that they do not differ in kind from voyages to the center of the earth or to imaginary islands. We remember the concept and forget that their technology was either wrong or non-existent. We travel through the air, but not usually by balloon or dirigible, and although we have gone to the moon, we did not use a gigantic cannonball, as Jules Verne’s astronauts did. Technically accurate prediction of the
future in science fiction is notable and remembered not because it is common but because it is so very rare.

Take, for example, what is probably the single most famous example of accurate science fiction "prophecy." In April, 1944, a story by Cleve Cartmill called "Deadline" appeared in John Campbell's Astounding Science Fiction. This story of future war included a fairly detailed account of an atomic bomb. Although stories about atomic power and atomic weapons were common in science fiction of the time, the technological details in Cartmill's story were so close to those of the actual bomb being developed by the Manhattan Project that government officials feared a security leak had developed and arrived at Campbell's offices to investigate. Eventually Campbell convinced the agents that no leak had occurred and that if the publication were suppressed it would tip off science fiction fans to the existence of such a weapon, so the magazine continued to be published. In science fiction annals this incident is justly famed as an example of accurate technological prophecy, but it is famous precisely because it is so rare. Even when it treats a very limited topic, such as atomic energy, a possibility every perceptive scientist knows is in the works, it is unusual for a science fiction writer to get the details right.

When hundreds of science fiction works are written every year, some will inevitably turn out to anticipate events or trends which do eventually occur. The reader, however, has no way of knowing as he reads the stories which few are accurately anticipating the future. The reader of the most famous science fiction writers of the late 1950s and early 1960s, such writers as Isaac Asimov, Robert Heinlein, and Arthur C. Clarke, would have been prepared for a future in which robots did most of the menial labor, sidewalks and highways rolled to provide universal mobility, and cities were protected, domed enclaves. So far all we have are domed sports palaces. We have not become a technological Utopia. On the other hand, neither are we yet a squalidly primitive population, barely surviving after the collapse of our technology—an alternative possibility projected by some writers of that time. The problem is that different science fiction writers, or even the same science fiction writer at different times, may imagine different and contradictory futures. Out of all the different predictions, the chances are that somebody will be right.

This point is even more obvious in science fiction novels that project a possible future from current social trends than it is in those that emphasize technology. All readers of Aldous Huxley's Brave New World and George Orwell's 1984 must have been struck by the contrasts in those writers' visions of the future. Huxley's future is all mindless happiness and security created through drugs and psychology while Orwell's is tyranny and scarcity enforced by war and fear. Both have elements of accurate prediction, but neither is prophecy. Even more interesting for their contrasts are the novels of John Brunner. Brunner writes science fiction novels set in the near future which are based upon straight-line extrapolations of current social trends. In the 1960s and 1970s Brunner produced four equally convincing and quite different portraits of our future. The Jagged Orbit describes a future America in which racial and economic divisions have led to a society at
war with itself; in *Stand on Zanzibar* Brunner envisages a world in which overpopulation and the hostility engendered by it threaten to destroy civilization; in *The Sheep Look Up* he portrays a society disintegrating because of corporate greed and pollution; and in *Shockwave Rider* he borrows from Alvin Toffler’s *Future Shock* to invent a future in which change itself is producing a society-wide nervous breakdown. Each of Brunner’s novels is an equally convincing projection of the future. None, of course, is likely to be a very accurate prophecy.

There is little point in praising science fiction for predicting the future when there is no way a reader can know which stories might be accurate. Science fiction is not a literary form of futurology; it cannot serve as a window into what will be. There is, however, a more complex and more interesting possible connection between science fiction and the future. By envisioning various alternative futures, science fiction may either warn readers of possible dangers or psychologically prepare them for change, and thus may actively affect future events rather than passively predicting them.

In the negative version of this argument, science fiction is accused of teaching its readers to accept horrific events by making them seem commonplace. For example, since science fiction frequently deals with the destruction of entire planets or even solar systems, it is accused of psychologically preparing its readers for the extension of human conflict into outer space, and hence of bearing ultimate responsibility for the current “star wars” defense proposals. Similarly, because many science fiction writers have created novels based upon the premise that humanity has survived nuclear war, science fiction is charged with encouraging a spurious confidence in our ability to survive nuclear holocaust.

The empirical observations upon which these conclusions are based are accurate enough. Space Opera, a popular type of science fiction familiar to millions because of the success of the *Star Wars* movies, does treat space as a stage upon which good battles evil much as it once did in Westerns. Space Opera destroys whole planets as casually as old-fashioned Westerns wiped out entire tribes of Indians. Luke Skywalker is a distant descendant of James Fenimore Cooper’s Natty Bumppo. More thoughtful science fiction stories about post-nuclear holocaust societies are also common. But the critics who conclude from these facts that science fiction is responsible for the twin dangers of atomic gangsterism and space warfare reveal a startling naivete about both literature and human nature. Literature has traditionally dealt with all realms of human possibility; it gives form to human desire rather than inventing it. A species for which rape, murder, torture, and war are perennial amusements can surely be credited with the ability to extend its natural activities beyond its home planet without the aid of science fiction. Science fiction merely imagines the consequences of humanity’s continuing to act in its accustomed manner in new territory; it humanizes the terrors of limitless space.

The theory that science fiction offers a beneficial preparation for the future is more sophisticated. In it science fiction becomes a kind of funhouse mirror of the future, offering alternative visions of the future so that we can consciously
choose those we desire and, equally important, avoid those which promise to oppress us. This theory argues that extrapolation is at the heart of science fiction. The writer examines contemporary culture, discovers the social trends which dominate it, and imaginatively envisions the future which will result if these trends continue to develop unchecked. A writer might see population growth, resource depletion, pollution, and economic inequity as defining characteristics of the world in the 1980s, project the effects on our society if these trends continue unabated until 2050, and write a novel which envisions our society at that date. Another writer might see very different trends as central to contemporary society and write a contrary projection of the future, one based on total population planning, control of the media, and a complete dedication to winning the arms race.

According to this view, the hypothetical extrapolations of science fiction writers, which have shown us what possible futures would feel, smell, and taste like, have saved us from the hedonism of *Brave New World*, the political authoritarianism of *1984*, and the rampant commercialism of *The Space Merchants*. The list of evils which science fiction has warned against and which we have avoided, in whole or in part, could be extended indefinitely. It can even be argued that we have so far avoided nuclear destruction because science fiction has so vividly portrayed its consequences.

The central deficiency of this flattering argument about science fiction's relationship to the future is summarized in the fallacy of "post hoc ergo propter hoc." Science fiction may have warned about these evils and we may have avoided them, but it is unlikely that there is any causal connection between the two. And in fact most of the evils against which science fiction has warned us—drug abuse, doublespeak, brainwashing, political oppression, and fascism merely begin the list—continue to plague humanity. As a vehicle for moral and social reform, as a means of safeguarding the future, science fiction deserves no more credit or blame than any other imaginative human enterprise.

An understanding of science fiction and its relation to the future must begin with the recognition that science fiction is a type, or more accurately many different related types, of literature. It is not fictionalized science, although it makes literary use of science. Moreover, science fiction is an extremely elastic term which encompasses a wide, sometimes an astonishing, variety of works. It is not limited to projections of near future technology or even near future societies; rather, it includes works set in the past, works set in alternate histories, works set on other planets or in other universes, works set in futures so distant that our era is not even a legend—even works without human beings. Given the variety of works which are subsumed under the term science fiction, any attempt to provide a rigid explanation of the literature's connection to the future is bound to fail.
Since a definitive answer is impossible, why do science fiction writers and critics continue to pronounce on the relationship between science fiction and the future? How can anyone presume to generalize dogmatically about a category of literature which includes everything from novels set a year or two in the future with only one significant difference from the society we know, to novels set in worlds in which magic works and medieval legends come alive? Yet the questions of what science fiction is, how it relates to science, and what connection it has with the future continue to be popular subjects of debate. The very elasticity of the category science fiction invites debate; it encourages attempts to identify the essence of science fiction. Most attempts to define or explain or even defend science fiction turn out to be efforts to purify the genre by dismissing as “false” those types the author dislikes. Theorists of science fiction often sound suspiciously like theologians trying to distinguish true doctrine from heresy, or like political partisans bent on expelling members who depart from the party line.

Return for the moment to the argument that science fiction differs in kind from other types of literature because it is a literature of ideas, that as a result what matters in science fiction is not characters or structure, but its ability to predict the future. This view of science fiction is associated with John Campbell and the writers he fostered at Astounding Science-Fiction (later Analog) in the 1940s and 50s, but it is also held by writers too young to have been directly influenced by Campbell. It is less an attempt to define science fiction than it is to limit science fiction to certain varieties of the genre. Campbell did have fairly strict guidelines as an editor, rejecting stories that weren’t scientific enough or, sometimes, that weren’t upbeat enough. Campbell’s analysis is a prescription for science fiction disguised as a definition; it tells us not what science fiction is but what Campbell wants it to be. Or to put it another way, it attempts to distinguish true or good science fiction from false or bad science fiction. Campbell’s own writers knew this, for they sent to other magazines the types of stories which they knew Campbell would disapprove of, and there were popular science fiction writers whose work Campbell refused to publish because it was not scientific enough.

In the 1960s and 70s the adherents of Campbell’s view of science fiction clashed with the supporters of the New Wave movement. The New Wave writers and editors were an eclectic group, unified mainly by a conviction that science fiction as a form of literature could benefit from the adoption of the techniques of the modern novel and short story and by their desire to expand the boundaries of science fiction. There really was little unified New Wave dogma; rather there was a desire to expand the limits of traditional science fiction.

This period did, however, produce one extremely influential work of criticism and theory, Kingsley Amis’s New Maps of
Amis's work is an attempt to define the essence of science fiction, and although it is less naive and less openly dogmatic than Campbell, it is still firmly in the tradition of tendentious criticism. Amis's work focuses on the social importance and literary value of science fiction dystopias. His reputation as a novelist and the insights of his criticism helped to make science fiction respectable and expanded its audience, but the emphasis of *New Maps of Hell* on science fiction dystopias tended to make social science fiction the only respectable type of science fiction. Once again, an attempt to explain science fiction becomes, at least implicitly, a drawing of lines to exclude much of the genre from the realm of serious attention.

After Amis has come the deluge. Since science fiction is now taught in colleges and universities, and dissertations are written about it, science fiction criticism of all types, including attempts to construct a theory of the genre, has grown to unmanageable proportions. Perhaps the most influential recent theorist is Darko Suvin, whose *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* combines scholastic erudition and love of system with a Marxist self-assurance and post-structural love of jargon for its own sake. Suvin views science fiction as the "literature of cognitive estrangement." He attempts to provide a pure definition of the genre, freed from references to theme. For Suvin science fiction "should be defined as a fictional tale determined by the hegemonic literary device of a *locus* and/or *dramatis personae* that (1) are radically or at least significantly different from the empirical times, places, and characters of 'mimetic' or 'naturalist' fiction, but (2) are nonetheless—to the extent that science fiction differs from other 'fantastic' genres, that is, ensembles of tales without empirical validation—simultaneously perceived as not impossible within the cognitive (cosmological and anthropological) norms of the author's epoch." At first decoding, the only controversial part of this statement appears to be the rhetoric in which it is couched. Science fiction does produce a sense of imaginative separation from our world, and it must, to be science fiction, differ in some way from fiction which mirrors the world of common experience.

All this is obvious. Embedded in the second stipulation of Suvin's definition, however, is the tendentious assertion that science fiction includes all and only those fantastic tales perceived as possible in the author's time. This assumption produces two astonishing effects. It includes in the genre of science fiction works written before the concept of science, in the modern sense, existed, and it excludes all works which, according to the assumptions of their own period, treat of impossibilities. Thus this definition excludes large numbers of contemporary science fiction works and expands the history of science fiction to include works written in other traditions.

The purpose of Suvin's definition gradually becomes clear as he builds his argument that science fiction reflects a popular, "subversive" tradition in literature which has been suppressed...
by high culture. Suvin's apparently scholarly definition turns out to be yet another argument, in disguise, for separating "true" or "good" science fiction from "false" or "bad" science fiction.

Of course, evaluation is a useful and necessary part of criticism. It becomes objectionable only when it masquerades as definition. Science fiction is such an elastic, imprecise term, it includes so many different subtypes, that any definition is bound to turn into an argument. Indeed, many science fiction readers live in different worlds; each reads only the type he or she likes and is either ignorant or scornful of all other varieties. The only way to explain this peculiar situation is to analyze briefly the development of science fiction.

Any analysis must begin with some assumption; this one assumes that science fiction begins as response to science. In the course of its development, science fiction takes various directions, but at its source it is a response to the effect of science upon humanity and society. Consequently, it makes little sense to talk about science fiction until the eighteenth-century at the very earliest, and in fact the first writers who show an awareness that they are writing something new and different, who are consciously crafting a new sub-variety of literature, do not appear until the early nineteenth-century. Mary Shelley is clearly aware that her *Frankenstein* differs in some ways from other gothic romances of the period, although
she seems uncertain just why it is different. Nathaniel Hawthorne's short stories about science and scientists, especially "The Birthmark," "Rappacini's Daughter," "Dr. Heidegger's Experiment," also reveal a conscious response to the threats and promises of science, as do some of Poe's works. Although the name does not yet exist, the tradition of science fiction begins with these and similar early nineteenth-century fictions, those which reveal a clear attempt by their writers to deal with new forces in the world—science and technology. Yet in the treatment of science by these writers, some significant paradoxes occur. Their work, especially that of Hawthorne, associates science with magic and art, and paradoxically the form in which they write, the symbolic romance, is itself a half-step into the world of fantasy, the world which the age of reason had discredited while bringing science to maturity. So from the beginning science fiction is associated not with mimetic realism but with fantasy.

In the later nineteenth- and early twentieth-centuries, science fiction unites with a myriad of different fictional types, everything from the adventure story to the political novel, to produce a miscellaneous host of descendants. One of science fiction's most fruitful unions is with the Utopian novel; this alliance produces "scientific" Utopias, dystopias, and eventually what Samuel Delany has called, accurately if inelegantly, the "ambiguous heterotopia." One of the least promising of science fiction's unions was with popular science, but from this union comes the modern tradition of American science fiction. Early twentieth-century magazines of popular science, notably Hugo Gernsbach's Modern Electronics, began using fiction about science to extend their readership. Soon the stories dominated the magazines. Thus the American pulp science fiction magazine was born. Most of the older living American science fiction writers learned to write in the pages of these magazines, and their devotion to "hard" science fiction and their ambivalence about science fiction's emergence from the safety of the pulps stem in large part from their origins.

In this glance at science fiction's origins and development, two features stand out. First, science fiction is associated from the beginning with fantasy. The first writers who deal in literature with the effects of science fiction are in revolt against realism. Mary Shelley, Edgar Allan Poe, and Nathaniel Hawthorne are all symbolic romancers, trying to create works in which the "marvelous," as Hawthorne calls it, has a place. Second, science fiction is associated with attempts somehow to anchor fantasy in the ordinary world. For the nineteenth- and twentieth-century writer who wants to break the bounds of realism, the question is how to persuade a reader who "knows" that fantastic worlds are false to suspend disbelief. Because of our faith in the possibilities of science, science or pseudoscience can be one method for inducing the willing suspension of disbelief. Paradoxically, science becomes a means for restoring imaginatively the legendary and mythic worlds it helped remove from the realm of serious literature.
A satisfactory definition of science fiction does not emerge and perhaps should not emerge from looking at the development of the genre. It is possible, however, to note two characteristics possessed by all works commonly classed as science fiction. To be so considered: 1) a literary work must contain at least one proposition which is counter to reality as it is commonly perceived, and 2) it must give that departure from the world of common vision a scientific or pseudoscientific basis.

The first of these points is self-evident. If nothing in a fictional world counters commonly perceived reality, it is essentially mimetic or realistic. The second point is slightly less obvious. A work of fantasy fiction such as J.R.R. Tolkien's *Lord of the Rings* is not usually considered to be science fiction because Tolkien simply describes a world and a history which we know is fantastic. He does not make use of science or pseudoscience to anchor the work to reality. In contrast, Roger Zelazny's *Lord of Light*, a novel as filled with magic and wonders as Tolkien's, is usually classed as science fiction because Zelazny provides a pseudoscientific basis for its impossibilities. In addition, Zelazny writes from within the historical tradition of science fiction; Tolkien does not. To be science fiction, a contemporary work must be written with an awareness of the historical development and current state of the genre. Literary genres do not pre-exist as ideal forms; they develop through time.
Underlying this discussion is the assumption that science fiction is a form of literature. Despite the vehemence with which the hostile critics of science fiction insist that it is a subliterary genre and the almost equal vehemence with which a few of its writers and readers insist that it differs in essence from traditional literature, science fiction remains a peculiarly modern type of literature, not fictionalized science but fiction. As with all types of literature, its works vary in quality and effect; science fiction tales can be imaginative, well-written, and insightful and they can be mechanical, cliché-ridden, even dull. Good or bad, however; science fiction remains literature, and as such, its major connections are not to our future but to our present.

As literature, science fiction reflects the desires and anxieties of its authors and their times. A history of science fiction is a history of the hopes and fears that we have projected upon our modern magic worker, science. Science fiction mirrors our current selves rather than our future. Thus, the 1950s brought forth both stories of humanity triumphing against all odds, stories reflecting the era's surface confidence, and tales of alien deception and invasion, tales betraying the underlying fears of the period. Similarly in the 1960s and early 1970s many science fiction writers started experimenting with new narrative structures and layering their works with symbol, myth, and archetype while writing about free love, drugs, and social upheaval. In the 1980s science fiction seems to be awash in a wave of pure escapism; stories of implausible heroism on improbable planets have flooded the market. Thus science fiction mirrors the conditions of its writers, perhaps more clearly than less topical writing.

Still, the best science fiction is more than just a reflection of its times. At its best science fiction explores the results of an individual's conflict with his fellows, his society, and his environment. It sets the perennial question of what it means to be human against the ever-changing discoveries, with their accompanying promises and threats, of science and technology. An enthusiastic critic might go further and argue that science fiction is the true twentieth-century inheritor of the tradition of the eighteenth- and nineteenth-century novel. Such an argument might run thus: serious twentieth-century fiction has tended to ignore or side-step the issues raised by science's investigations into human nature and the physical universe; consequently, it has increasingly become a literature written by and for literary intellectuals. Rather than confronting the challenges posed by science's assumption of a knowable—or at least explorable—objective reality, modern literature has focused upon the individual and his society. The results of this narrowing of vision can be seen in contemporary experimental fiction which, scorning science, plays with traditional philosophical paradoxes, such as whether reality is merely a projection of the individual mind or, alternatively, whether consciousness and free will are merely illusions. By thus evading
a direct confrontation with science's effect upon humanity, the inescapable facts of our age, fiction has created a gap which science fiction attempts to fill. Enthusiastic critics perhaps claim too much for science fiction just as the hostile critics acknowledge too little. Science fiction's resemblances to other types of literature are finally more important than its differences. Serious science fiction is an exploration of what it means to be human, but it explores this question in conditions beyond ordinary experience. Science fiction creates new worlds, but they are worlds with human thoughts and feelings in them, even if these thoughts and feelings are found in aliens or machines. Science fiction can release us from the prison of ordinary experience while simultaneously imaging our deepest hopes and fears. Good science fiction provides us with an escape from our world and ourselves which turns out not to be an escape at all but an indirect route to greater understanding. As this is probably no more than saying that good science fiction does what all good literature does, perhaps the real connection between science fiction and the future is that, as literature, it offers hope for the future and consolation for the past.

NOTES

3 Campbell, p. 9.
5 Suvin, p. viii.
6 Suvin, pp. 87-89.
Winners of The Gamut’s Futurological Contest

First Prizes:
“His Brother’s Keeper,” by Mary Makofske (Florida, NY)
“Pike World,” by Justine Buisson (Miami, FL)

Second Prizes:
“Playdad,” by Ted Gargiulo (Greenbelt, MD)
“What Could Be Missing?” by Carole Glickfeld (Seattle, WA)

Third Prizes:
“Cheruboom,” by Shirley Powell (Stone Ridge, NY)
“Occasional Aromas,” by Nancy Potter (West Kingston, RI)
“Apocalypse Postponed,” by Erica Obey (Brooklyn, NY)
“The Goodness Pill,” by Ralph Mendelson (Cleveland, OH)

Honorable Mention:
“Portents,” by Ellin Carter (Columbus, OH)
“Designer Breath?” by Robert Basalla (Berea, OH)
“Life in the Left Lane,” by Mary Simons (Tulsa, OK)
“Earn While You Sleep,” by John Craig (Littleton, CO)
“Moon Over Megapolis,” by Travis Charbeneau (Williamsburg, VA)
“The Serendipity Factor,” by Gregory Georgiou (New York, NY)
“Aphrodisiac,” by Ronald Peacock (St. Ann, MO)
“The Last Man in North Dakota,” by Ted Hopes (Greenlawn, NY)
A concern with the future is arguably the defining characteristic of the human species. It is our glory and our misery that, far more than any other creature, "we look before and after." The ability of our consciousness to imagine circumstances beyond the immediate present is responsible for the invention of tools, the planting of crops, the organization of individuals into societies. An interest in foretelling—and hence controlling—what is to come has always fascinated us, from the stone-age cave paintings that depicted (and thus, apparently, attempted to accomplish) a successful hunt, to the Greek oracles and the Madame Sosostrises of our day.

Who would not welcome a true glimpse into next year or next week? A copy of tomorrow's stock market report would be worth a fortune. Literature, reflecting such wishes, is full of characters with prophetic powers, like the little boy in D.H. Lawrence's "The Rocking-Horse Winner." As William Blake observed, however, the real prophet is not the recipient of supernatural messages, but someone who understands the present so well that he can see where it is tending: "He never says such a thing shall happen let you do what you will," but rather "if you go on So the result is So."

This kind of rational extrapolation from current trends has become a lucrative exercise for futurologists like Alvin Toffler, whose Future Shock and The Third Wave were best sellers in the seventies, and John Naisbitt, author of the more recent money-maker Megatrends. Such latter-day prophecies have the ostensible appeal of helping readers make practical decisions on the basis of predicted changes—whether to invest in real estate or communications, for example, or how best to prepare for evolutions in the social structure. More likely their popularity owes most to simple curiosity about what is going to happen to us next.

In his perceptive essay in this issue of The Gamut, David Larson argues that as futurology, science fiction is a flop, but at its best, as literature, it does what good literature always does, namely to provide insight into existing human concerns—which, of course, is the only intelligent starting place from which to address the future.

The winning submissions to The Gamut's "What If" contest bear out Larson's thesis. All hypothesize some change in the not-too-distant future, but the change is an extrapolation from sharply observed characteristics of the present. The real interest of these stories lies in what they tell us about the world today. Each author focuses on some aspect of life imagined in the twenty-first century, as a microbiologist might isolate a particular strain of virus in a laboratory culture. So each piece gives us a heightened version of some quality—usually pathological—already incipient in our lives.

The entire field of 102 contest entries gave a fascinating picture of what is preoccupying people's thoughts nowadays. Not surprisingly, the threat of a nuclear holocaust weighed heavily on the consciousness of many writers; a number of stories depicted grim survival scenes. Many more revealed anxiety about other kinds of irreversible damage to the environment. Several authors, including Nancy Potter ("Occasional Aromas"), imagined the universal loss of one of the senses.
Many, like Carol Glickfeld in "What Could Be Missing?", foresaw increased regimentation of society as computers come to dominate all our activities. A number of entries focused on other problems introduced by modern technology; Mary Makofske's first-prize-winning "His Brother's Keeper" tensely dramatizes some of the questions of personal identity which recent advances in medicine are rapidly thrusting upon us.

Both "Pike World," a first-prize winner by Justine Buisson, and second-prize-winning "Playdad," by Ted Gargiulo, are grimly humorous variations on the theme of technological regimentation. In Buisson's story, Disney-World-like replicas so dominate the characters' perceptions that they lose the ability to distinguish the artificial from the real. "Playdad," an ironical discourse in the vein of Swift's "A Modest Proposal," attacks our credit-card economy, with sharp side digs at our crumbling family system and the loss of a sense of proportion in all our values.

Erica Obey in "Apocalypse Postponed" simply throws up her hands in comic dismay: the world has gotten so bad that it's too much even for the great dragon of the Book of Revelation. A few of the entries looked at the world with more gentle humor. Among our prize winners, Shirley Powell in "Cheruboom" imagines a genetic mutation that produces a generation of winged humans. Though she pokes fun at a variety of human foibles, especially those stimulated by the media, her final assessment of human nature is optimistic, as people, for the most part, manage to adapt to unexpected circumstances in a civilized fashion. (Several of the entries hypothesized the appearance of flying human beings. Maybe these writers are on to something.) Finally, Ralph Mendelson's fable "The Goodness Pill" takes a wry look at human virtue—or at least what most people consider virtue—and concludes, as Bernard Mandeville did more than 250 years ago in The Fable of the Bees, that everything society has promoted as "good" in individual behavior may not in fact be good for society.

Almost all of the contest entries, using an imagined future as a vehicle, actually portray our situation in the present. With few exceptions, the writers see that situation as fraught with danger, especially with new dangers from unexpected sources. Not only our physical well-being, but our minds and our social structures are threatened. And yet the individual characters who face these dangers are mostly sympathetic. Though they are often helpless and often inept, still they try to cope as well as they can, and sometimes they even do so with humor and generosity. The most striking quality of this entire collection of entries in our futurological contest is how much their assessment of the human predicament resembles the assessments made by the literature of the past.

—L.T.
His Brother's Keeper

Mary Makofske


He began to pace back and forth, six paces exactly the length of the room he now called a cell, though it was white and clean, with a comfortable bed and overstuffed chair, a wooden table and bench, one wall of electronic equipment, and a complex exercise set that swung down from the ceiling at the touch of a button. A toilet, sink, and shower were tucked into a small alcove. Through a slot on the wall he received food and clothing.

From the electronic wall a flash of static erupted—what Brandon called the Rob clearing its throat. “Ar, could I suggest . . . ” the Rob began.

“No, you may not,” Ar snapped, switching it to Off. It crackled and went silent. Usually he was more patient with Rob—the Rob—and didn’t turn it off until Brandon arrived, but it was too good at reading his moods, and he wanted to be alone just then.

Suddenly Ar tilted his head back and laughed. Alone! He had never seen another human being except Brandon.

Every so often (for Ar had, then, no way of measuring time) the door would open and the cleaning Robs would come in. They never spoke—he assumed they were incapable of speech, so he ignored them, trying as best he could to continue whatever he was doing while they worked around him. It never occurred to him to look outside the door. Indeed, his flesh crawled when he thought of it, and he hoped the Robs had been thoroughly cleaned of contamination. He had seen the films, and considered himself lucky to be one of the saved. Whenever he became restless, he talked this over with his personal Rob, who assured him that someday the world would be safe again, and he would be able to see for himself the wonders he had read about and viewed on the monitor. Some­day, he would even be able to meet the others, like himself.

So the day the door had opened and Brandon had stood before him, Ar thought the time had come.

Mary Makofske, former travel agent, college writing instructor, and news/feature reporter, now writes fiction and poetry, "more or less full-time" in Florida, New York. Born in Washing­ton, D. C., she earned her B.A. at Douglas College and her M.A. at the University of Minnesota. The germ for her story, which at one time took the shape of a short, bitter poem, originated with something she read about the possible usefulness of clones as organ donors. "Consider­ing that our species has a tendency to reduce certain groups to a less­than-human status, I speculated that our treat­ment of clones might follow the same pattern.” As for the future, Makofske says, “Some­times I think speculative writing is the last refuge of pessimists. If only we humans could learn from our mistakes.”
Brandon, of course, had known what to expect. But nothing could prepare him for the jolt he felt. He had assumed there would be some differences. After all, the example of twins... The man might have been thinner, or heavier, not bald or graying, of course, no, his hair was the exact chestnut shade, the same thick mane lifting slightly from the temples. The same eyes, dark blue, the skin crinkling slightly at the edges—did he smile, here? Only the clothing, the baggy, faded green institutional clothing, set this man apart from Brandon Wilford Arthur III.

As Brandon moved forward, the other man backed away, making a few strangled sounds.

Was he all right? Brandon wondered. Had they done something to him? Did he even know how to talk?

"Please," Brandon began, every speech he had planned escaping his mind, "please, don't be afraid."

"I didn't know," Ar said, panicked that he would offend the other. "Forgive me."

"Forgive you?"

"I didn't know you would be so like me."

Brandon grasped him by the shoulders, willing his hands to stop trembling. "My brother. What can I call you?"

"My name is Ar. You see?" And he pulled back the sleeve of his shirt to reveal the tattoo on his wrist: AR 942 71 1248. It looked familiar—of course, Brandon realized—my social security number.

Clone. The word roiled in Ar's mind. A new word. So many new things to learn.

He was a part of Brandon, really. Or a possession. That was what the court had said, Brandon explained bitterly, so of course he was entitled to see his own "possession." Ar watched Brandon's lips twist around the words as if they pained him. Ar had to remind himself to listen, not to let the mere physical presence of another human distract him. The flashes of emotion across Brandon's face intrigued him, and he could feel his own face respond, becoming a mirror, practicing the parts. As he had stood in front of his own mirror, tensed his muscles, grimaced, smiled, made faces.

Rob had helped him, when he fell into what he called the darkness. Rob had offered him music, art, games, film, long talks following a thread of thought that spun into Ar's mind, often from a dream. When the changes had come upon his body, Rob had explained everything, had told him the strange throbings and coursings of pleasure were blessings to be enjoyed. Rob had always been there, so that the hollowness that sometimes overwhelmed him was, finally, bearable.

But now... Ar had lost all track of the conversation, but suddenly he reached out and took Brandon's hand in both of his. It was warm, the same texture as his own flesh, yet somehow so foreign that his skin tingled. Slowly he turned it over, as Brandon might have turned a rare antique, infinitely precious and breakable.
The scaffolding of his life crumbled slowly, piece by piece. He was not under protection, but under lock and key. The world was not contaminated, but flourished in bright, chaotic tension outside the walls of his prison. His vocabulary expanded to include lawyer, court, human rights, incarceration, slavery.

Even his dreams yielded evidence that his life had been a sham. Only after Brandon came did he understand one particularly vivid and recurring dream: the warm pillow of flesh, the voice without a trace of metallic buzz, the eyes and hands that still floated up out of his unconscious, had been real.

As Brandon explained the use of nannies, Ar began to pace.

"I remember. I remember she held me and cried."
"It must have been when she was terminated."
"What?"
"At a certain age, it varies from child to child, the nannie's services are considered expendable. The Rob takes over."

Ar stared at the blank screen, the rows of buttons, the speakers, the electronic eye that swiveled in a protruding socket. He thought he noticed a movement. Suddenly he darted to the corner of the room and whirled in time to catch the subtle tilt of angle.

Brandon's eyes turned toward it, too. "I should have known," he muttered, removing his coat and draping it over the socket.

"Remove the obstruction, please." Ar recognized it as Rob's sternest tone.

"Take me to court," Brandon spat back. He motioned Ar to the corner of the room farthest from the speakers, where they stood talking in hushed voices.

"Damn them anyway." Brandon fumed. "I'll take them to court as soon as I leave. Bugging us."

"But Rob was switched off."

"The Rob," Brandon corrected him, "is just a machine, Ar, as I've told you. The cloning authorities can override any instructions you give it, or any previous instructions they want changed. Don't ever trust it."

"But—"

"'Never. I mean it. Don't you see how they've manipulated you with it? After I'm gone, for example, what does it say about me?'"

"'Nothing better than you say about it,'" Ar replied with a smile. Brandon's hearty laugh exploded in the room.

Only after his mother died did Brandon discover that his parents had purchased a clone for him. Disapproving of his radical ideas, his parents had kept it a secret to be disclosed only on their deaths, by which time, they hoped, he would have come to his senses about the value of such a gift.
For several years he had lent half-hearted support to clone rights, but this revelation hit him like a blow in the stomach. Somewhere, caged in a ten-by-twelve cell, was his doppelganger, a man who had never seen the sunlight, never seen another person, but waited in trust and ignorance until he was needed, until some organ in Brandon's body gave way and required replacement.

His first clone rights meeting had been a revelation. Hundreds of people jammed the hall—fellow lawyers, former nannies, doctors who had "delivered" clones from their artificial wombs, clergymen, owners of clones. After the official program, people came forward to explain what had brought them.

As Brandon listened, he edged closer and closer to the stage. He felt flushed from the heat of so many bodies, overwhelmed by the emotion in their voices. He was not a man easily swayed, but the sense of empathy sucked him in, and he tried to imagine himself—for it was, really, himself, wasn't it?—walled in forever, kept alive only as a collection of spare parts.

A short, stocky man was speaking, his voice breaking like the sound of tires over gravel. "And I realized," he said, "how I was scared. I mean I was terrified. A clone. Exactly like me. He could replace me, just as well as keep me alive." The crowd seemed to draw in one breath—Brandon could hear it, like a huge hiss.

"That's really what scares us, isn't it? We're not superior to them. They are exactly—exactly—like us. So some of us are saying, 'Let's make sure they're cared for properly and leave them where they are.' Or, 'Ban cloning'—but what about all the clones alive now? And some say, 'If the clone is mine, give it to me. I'll take care of it for the rest of its life, as if it were my own child.' But they're not our possessions, or our children, are they? They're our sisters and our brothers. Even more than that. More than twins—they're us! It's your own being, locked up in those compounds. There's only one answer. Free the clones! Free the clones!"
The crowd picked up the chant and bounced it against the walls and the high ceiling. Without thinking, Brandon climbed the stairs to the podium, raised his hands in a gesture for quiet. Finally the audience wore itself down. In spite of his own emotional upheaval, his courtroom training took over. He waited until it was completely quiet again, raised one finger, waited again. Then his resonant voice boomed out slowly. "One ... step ... at ... a ... time."

And every step had been slow and tedious. Through the lower courts, which, steadfastly denied citizen's requests to meet their clones, through the appeals courts, and finally to the Supreme Court, which after a number of delaying tactics, finally heard the case. The Court ruled, 5-4, that the contract signed by the parents, agreeing to no contact between clone and owner or owner's family, was indeed invalid. It further ordered the clone storage facilities to comply with requests for access, without dealing at all with the question of the actual status of clones.

So Brandon had stood, finally, outside the door of room 1031, had slid the entry-exit card into the slot, and had become the first to meet his double.

"A book. Open it. It's yours."

Ar stroked the cover, gingerly pried it open. A flutter of white, like the wings of sea gulls in the beach film, his favorite, and then the pages settled. A jumble of black marks coalesced. Words! Cramped onto the paper in tight lines, words he could touch with his fingers. He began to read, forgetting Brandon.

"It took another legal skirmish to get that inside," Brandon said. "They didn't want you exposed to anything more dangerous than the pap they feed you on the telereader. It's only the first. I'll bring you whatever I can—newspapers, magazines, books. There's so much for you to learn if . . . ."

Ar rose suddenly, knocking the book to the floor. "You'll get me out. I'll go with you, there, outside—with all the others. Won't I, Brandon?"

"I'll do everything I can."

The movement was fragmenting. After the initial court battles, the first flush of success, the cooperation Brandon had helped to forge began to disintegrate. Several couples whose children had died were suing to adopt the clones that might replace them. Clone owners were pressing to have clones allowed as dependents for tax purposes. A citizens' action suit was pending, claiming that clone services discriminated, since only the wealthy had access to them. But establishing human rights for clones was proving difficult. Business had been too good for the clone companies; organ transplants from clones to humans had proved too successful.

In spite of the hundreds of people who had taken advantage of visiting rights, the thousands who wrote letters or gave money to the cause, few of the rest of the population were fired by the issue. There was even something
of a backlash—a group had sprung up that demanded not only a ban on cloning, but the destruction of all existing clones. Brandon knew the legal battle was too slow and complicated to bear the whole burden. They needed media events to galvanize public opinion.

When the chairman of the Clone Rights League quashed his plan, Brandon did what he had to. Arranging a special meeting of the other board members, he called for a vote of no confidence. After hours of heated debate, he emerged as chairman, with his entire plan adopted.

Almost shyly, he rolled up his sleeve. Ar started, then reached out to run his fingers over the tattoo on Brandon’s wrist.

“But why?” The letters and numbers which Ar had once taken for granted had become a sign of his inferior status. It pained him to see that Brandon had, by choice, taken them on.

“Don’t you see? Thousands of us, Ar. All marked as clones. To show everyone that we feel we’re one with you. And look at this magazine.”
 spread the slick pages under his hands. It was a close-up of two identical teen-aged girls in profile, facing each other. Eyes wide, lips parted, each explored with her fingers the curves of the others' face. The caption below began, "WHICH ONE IS REAL?"

"An incredible photo. Just incredible," Brandon exclaimed. "It's going to be everywhere. It's going to become the banner of the movement."

Ar studied the faces, sensing the terror behind the wonder. "This was their first meeting?"

"First and last, as far as I know. We had a hell of a time talking the girl's parents into it. They've been visiting and fighting for custody, but they didn't want to involve their daughter yet. Well?"

Ar shook his head. "An incredible photo. May I keep it?"

Ar glanced at the watch Brandon had given him. For three weeks his brother had missed his regular visiting day. Somehow the authorities must have prohibited him. Or... no, nothing could happen to Brandon. Then, announced by the door's muffled swish, Brandon was there.

"We're so close, Ar. So close. If we can keep up this pressure for a few more months, maybe a year..." He seemed to slump down, become smaller. Nervously he began searching his pockets, then whispered "Damn."

"Forget your cigarettes?"

"No. Gave them up. Can't get used to it yet."

Brandon's eyes shifted around the room. "In a year you could be out of here forever. And all the others. More than a hundred thousand men, women, and children." He began talking tactics, becoming animated, and Ar listened intently. But when Brandon wound down, he sat staring at the floor, his moodiness returning. "What is it?" Ar asked.

Brandon met his eyes then looked away. "I don't think I'm the only one who can run the League. There are other capable people."

"What do you mean? You're not stepping down now?"

"I don't want to."

"You're ill."

Brandon nodded.

Ar waited for him to continue. Brandon finally stood and began pacing slowly. "I just can't do it. I can't."

"I don't understand."

"I can't ask it of you."

"Ask what?"

Brandon turned away, keeping his voice a cautious monotone. "The Board is pressing me. They know the choices. I would never ask this for myself, believe me. They're worried—an internal power struggle now... They insisted you would understand—I've told them about you. They said you'd do it for the other clones..."
He took papers out of his briefcase and handed them to Ar. "I drew these up myself. You can say no. You're free to say no."

Ar tried to understand the words. It was some kind of consent form.

He looked toward Brandon, who was sitting with his head in his hands. "It was a mild heart attack. I never even suspected. But once they gave me all the tests . . . I need a transplant, Ar. Soon."

The papers slipped from Ar's hands.

"You'd have an artificial heart. The best doctors in the country. They explained it all to me. I can tell you the chances—"

He was Ar's only contact with the world. If it had not been for Brandon, Ar never would have known that world existed. And all the other clones, too, waiting to be freed, would owe their lives to Brandon. And to Ar, of course. To Ar, who would never see the world shimmering like a dream beyond his reach. Would it be a double statue, in their memory, or only one?

But the roaring in Ar's head drowned out these thoughts, and Brandon went down like a stick caught in a flood. For a moment he flailed against the pounding fists, then clutched his chest and went white, his eyes frozen on the face that mirrored his. Feeling the body go limp beneath him, Ar pulled away, felt for the pulse, cried out and backed away. His hand brushed Brandon's coat. The entry-exit card was in the pocket.
Pike World

Justine Buisson

Along the Florida Turnpike that July morning, the blue Chevy began slowing down. It had just passed the North American turn-off, below which, on either side of the pike, lay the states east and west of the Mississippi. To the north rose the bridge over old Lake Okeechobee, now the Atlantic and Pacific Oceans, and then there was the whole world to choose from, straight to the Georgia border.

"So what's it going to be, you guys?" asked Phil Miller, at the controls of the Chevy. He was about thirty-five, pale like the rest of his family from living in the covered walkways and closed buildings of the Greater Miami Complex.

Beside him sat his wife Marge, plump and placid-faced. As they crossed the bridge, she studied the turnpike map. In the back seat, thirteen-year-old Sally, who had been filing her nails, stared vacantly at the endless Pacific, and ten-year-old Ken looked up from his pocket soccer game to watch an ocean liner moving toward the horizon in the direction of Africa.

"We've been everywhere," he said glumly.

This was the first year they hadn't decided on a vacation spot before leaving home. With their tinted visors and body suits, they were ready for five days of sightseeing under the Florida sun. But where on earth would they go? They had visited every American landmark, every European capital. And more. Hadn't they climbed Mount Everest, and made a safari through Kruger National Park? Fished from kayaks in Greenland? Pike World offered as much of the world as technology had been able to cram into the Florida peninsula north of the Complex, and the Millers hadn't missed any of it. The first week in July was their annual travel time. The Complex covered the entire southern tip of the state, both the former cities of the Gold Coast and what had once been the Everglades. Its inhabitants, some ten million of them, took rotated vacations, so there was a steady flow of tourists up and down the pike all year round. "It's a small world," the saying went, and like many families, the Millers had no alternative now but reruns.

"Check out that alligator, kids."

As they descended from the bridge, the raised turnpike swept them into the heart of the Brazilian jungle. A sign to the left of the broad, climatized highway pointed to Rio and Brasilia. On their right flowed the Amazon. Squat Indians were pushing off from the bank in a dugout as a group of tourists looked on.

Justine Buisson grew up in Bronxville, New York, but has lived in Miami for the last twenty-three years. About her story, she says, "Although one can't help but admire the technological marvels of Disneyworld, the preference some people demonstrate for lifelike simulations has often disturbed me. My husband and I were driving past Orlando a few years ago when Epcot and Travelworld had just been added to Disneyworld. He joked about their taking over the entire Florida Turnpike, and my story grew from that 'what if.'" Buisson wrote two science fiction stories 20 years ago, then none until "Pike World." She writes poetry and "serious" fiction, and conducts creative writing workshops for Dade County in Florida. Her vision of the future is "precarious, humans as guardians and caretakers gone astray, who still may see the light in time!"
“It’s never going to catch them,” said Ken with a scowl. “It was in the same place last year.”

“It’s turning around,” said his sister, craning her neck to peer out the rear window. “It’s heading for the tourists.”

“Big deal.”

“Well, a girl in printscan with me said her dog got eaten by one.”

“Tron! Those gators can’t eat anything.”

She kicked him in the shin, and he turned and seized her by the throat.

“Enough!” shouted their father. “We can’t go back, but we can sure as hell drop you off in the jungle.”

“What a program.”

“Yeah, let him eat banana chips all week,” said Sally, running a comb through her hair.

Their mother gave them a placating smile and passed out chewmints.

Miles and miles of American grassland. Now and then a fenced area indicated one of the vegetable-grain farms that fed the citizens of the state. Marge pointed to a group of tourists in a land rover speeding toward distant hunting grounds. Then, “There it is.” Beyond the plains rose the white peak of Kilimanjaro.

“You know,” she said, checking the map again, “if we turn off at Exit 23 we could take in the Far East.”

“Aaw, Mom,” said Ken. “Not again.”

“I wanted to go to California,” said Sally. “I told you.”


“We were only there once. Maybe they added something.”

“There’s no more room, Sal,” said her father. “You know that.”

“Ever hear of the territorial limit, you gorbi?” said Ken.

They pulled into a rest-stop on a subpike for lunch, and ate skewered tastees in view of the Acropolis.

Marge Miller’s soft face took on a dreamy look. “Remember that old hotel, darling? We hardly ever left it.”

Sally threw Ken an exasperated look.

“Umm,” said Phil, finishing his last lamb-flavored bite. He signaled for the check. “Gotta get going. Let’s see that map, hon. How about a bullfight, kids? If we take the next subpike west, it’s only a half hour’s drive to Spain. They let the bulls run loose down the main street at Pamplona, remember?”

“Those bulls couldn’t hurt anybody,” Ken said.

“Funny thing, Ken. The manager’s nephew went there last month. He apparently slipped and fell.”

“He claims a bull trampled him. His leg was mangled.”

“See?” said Sally.

“Whoever heard of such a thing?” said Marge.

“He must be pretty dumb to get trampled by a sub.”

Phil grimaced. “I’m getting fed up with your attitude, Ken. These subs are more lifelike than the originals.”

“I’d rather see the originals,” said Ken, drumming his fingers on the table. “I wonder if there’re any left. And those places, are they there any more? Is there still a California?”
"Of course, son. We saw it on vid last week."
"Yeah, a rerun."
They got back in the car and headed for the northbound pike. Phil looked tired.
"O.K. Make up your minds."
"I'll let the children decide," said Marge, leaning back on the headrest. "Lunch made me sleepy." She was already dozing when they passed the Colosseum.
"People used to cross borders," said Sally. "I read that in the scanner. They even crossed oceans once."
Phil looked at his daughter curiously. "Did it mention the drawbacks of that kind of travel—the bad sanitation, changes in weather, terrorist attacks?"
Sally shrugged her pretty shoulders. "People came to America from other places too."
"That was a long time ago, Sal. America was the land of opportunity. 'Give me your tired, your poor ... ' Remember the Statue of Liberty? Think of the courage it took for people to leave their homelands and set out for a new continent."
"You sound like a tape," said Sally.
"Columbus didn't even know where it was," said Ken.
"Right you are. He really had guts, didn't he? With all those scoffers warning him not to sail too far or he might fall off the earth."
"What?" said Sally, raising her eyebrows.
"People thought it was flat, like a table. Eventually you came to the end of it."
"That's funny," laughed Ken. He placed one stubby hand upright on the other, chugged across it. "Look, Sally, plunk!"
His right hand reached the edge of the left, then plunged.
They took another break at three, and sipped "limonades" overlooking the Seine. Boats with tourists glided by, and beyond them rose the slim gray buttresses of Notre Dame. Their waiter, an Algerian, was missing a front tooth.
"Looks authentic, doesn't he?" said Phil.
"I wouldn't trust him very far," said Marge. "Grace Banks's daughter went to Morocco last year."
"This sub's Algerian, Mom," said Ken.
"Well. There was a girl in the party at Fez, Grace said. She wandered off down a side street and never came back."
"Hah!" hooted Ken. "Probably wound up in a harem."
"You gorb," said Sally.
Phil Miller was studying the map again. Suddenly his face lit up. "You know what? Let's go some place we've never been."
He grinned.
"We've been everywhere," said Ken.
"Not to my granddad's home town."
"Where?" said both children at once. Marge looked confused.
Phil thumped the top of the map. "Look. The end of the line is the North Pole, right?"
"You can't go no farther," said Ken. "Then comes the border."
"Any farther," corrected Sally.
"Not quite, Ken. First comes White Springs."
"Do you think it's still there?" asked Marge.
"Why not? It's not on the pike. They never developed that land near the border. Granddad said it was a beautiful little town, with a state park and an old southern mansion, and even river boats you could ride on the Suwanee River."
"Paddle boats?" asked Ken. "The real Suwanee River?"
"Sure. Wouldn't that be a change? What do you think, Marge?"
She shrugged. "Of course, we have seen the Deep South."
"People used to come down from Georgia to stay at the old hotel there. It might not be quite as comfortable as the ones in Pike World."
"I want to go," said Ken.
"Let's," said Sally.
"Well, all right," said Marge.
Phil drove on at top speed, zooming past the Scottish highlands, the Scandinavian turn-off, toward the Arctic. They hardly noticed the Eskimos and igloos, the huskies dragging sleds packed with tourists.
"Granddad's father was a traveling salesman. He used to drive the old pike when they were just beginning to build Pike World. It started near Orlando, where the orange groves were."
"Real orange groves?" asked Ken.
"Florida was famous for oranges."
"They had to squeeze them in a machine," said Marge, "and freeze the juice. Powder is easier."
"Orlando. Wildwood. Tallahassee. Those were nice names."
"You can see all that south of the bridge," said Marge.
"We haven't missed anything."
"Wait till you see White Springs."
It was five-thirty when they approached the north terminus.
"Leave the talking to me," said Phil. "Just in case they give us a hard time." He poked a hole in their ticket with his pencil.

"They'll catch us," said Ken. "They'll make us go somewhere else."

The attendant held up his hand. "The Pole's closed on week days," he said. Then, examining the ticket, "Hey, if you went to Greenland, you should be headed south again. How'd you get in the northbound lane?"

"It was the kids' idea. They wanted to go to the end of the world." He laughed. "We'll just pull around and go back."

The attendant punched their ticket and waved them on.

They looked at one another with glee. As they rounded the U-turn, Phil took the service road to the right. Before them was a wooded road, hung with Spanish moss.

"Just like Granddad said," said Phil.

"It is different," said Marge.

Ken and Sally poked their heads out the window, sniffing the odorous air. They came to a wooden gate. A man stood by it and swung it open. He was dressed like a park ranger.

"Welcome," he said. "You folks are just in time for the Suwanee Cruise." He pointed to a field with perhaps a hundred other cars. "You can park over there."

"Look at that," said Phil. "They all had the same idea."

"I don't know, Phil," said Marge as they got out of the car.

The children ran to the river bank, where a paddle boat was taking on passengers.

"The Suwanee's a lot wider than I expected," said Phil, gazing out at the expanse of water. "You can't even see the other side."

He and Marge found chairs in the deck lounge. The children ran back to look at the paddle wheel. They watched it turn slowly, churning up tea-colored water. Then they walked unsteadily to the prow as the boat headed out. A half mile or so ahead, another river boat, loaded with passengers, drifted toward the horizon.

In the screened lounge, a band began to play "Jeannie With the Light Brown Hair." Phil reached for his wife's hand. Their voices joined the others in the words of the old song.

On the front deck, Ken and Sally held on to the rail and watched the boat ahead.

"From here it looks like an ocean liner," said Sally.

"How would you know?"

In the lounge, Marge sipped a mint julep. "This is a real trip," she said. "I don't care if it never ends."

The boat was picking up speed. The children could feel spray on their faces.

"It tastes like salt," Ken said. "I'm hungry. Let's get something to eat."

"Wait a minute. Look." Sally pointed to the distant water's edge, where the other boat tottered and dropped suddenly out of sight.

Ken's face clouded for a moment, then cleared. He shook his head. "You gotta hand it to 'em. They make everything look real. But it ain't."

"Isn't," said Sally, as they turned back to the lounge. ■
What Could Be Missing?

Carole L. Glickfeld

She fixed herself tea and toast, a habit from way back when, and took the thermaplate and thermamug to the computer monitor, a seventy-two-inch diagonal screen embedded in the far wall of the livingroom. Her friends preferred Sweet Oval Snacks mid-morning, those beans of a jelly-like consistency, chock full of aphrodisiac. At seventy-one, Violet felt no need for SOS, as the sweets were known. The toast wasn’t the kind they’d had in her youth—her relative youth, that is—but it would do, since soy flour was highly nutragenic. The tea was made of algae.

As soon as Violet settled in her thermal chair, by the computer console, the cards came up on the monitor. Each contestant was allowed ten bingo cards. They occupied most of the screen, except for the upper righthand corner, where the computer-picked numbers flashed.

As part of the razzmatazz they provided these days, the first number danced around, flashing bright red, outlined with purple. Fifty-five. The squares on her card that had the number fifty-five lit up now. Sixty-one. Eleven. Nine. Her cards were doing well. The numbers formed a line of human-like dancers. Thirty-four. One to go. She took her first sip of the tea and looked up. BINGO, BINGO, BINGO, the screen flashed.

In the center of the screen now was her picture, captioned Violet Abby, WINNER, followed by pictures of other winners in her Complex, with whom she would split the pot. The prizes were smaller lately, but there were more opportunities to win. In the upper lefthand corner of the screen flashed the game’s length: 0:53. Fifty-three seconds.

Violet could remember back when each bingo game would take a half hour, and without the razzmatazz. Why they’d even had to venture outside at night, risking a mugging or worse, to go to a church basement or community hall where they would be subject to carcinogenic smoke, just to try their luck. There were precious few games in an evening then, what with numbers tumbling endlessly in a drum until one fell out, only to be announced again and again, till even Violet lost patience. Not to mention how long it took till winning cards were “verified.” Now, with TEL-GAMES, it was all so efficient, so safe, so precise. This morning alone, she had played more than fifty games.

The combination of elements that sparked Carole Glickfeld’s story were an interest in computers and her last “real” job (before she quit to write fulltime) as director of an advisory board concerned with senior citizens. Now living in Seattle, Glickfeld was born in New York City and educated at the City University of New York and Hunter Graduate College. This story is her “first and only science fiction story.” She is currently working on a collection of short stories about the 40s and 50s in New York, and is seeking a publisher for her novel On the Cutting Edge.

About the future, Glickfeld feels strongly that people need to be actively connected with the outcomes in their lives. “Computers calculate; people no longer have to think. Commercials persuade; people no longer have to reason. Television is a substitute for experience. Proliferating vegetable gardens and other ‘returns to nature’ cannot reverse these trends.”
As always Violet called up her TEL-ACCOUNT balance to see that it had been correctly debited for the cost of the games and credited with the amount of her winnings. TEL-ACCOUNT never made a mistake. No muss, no fuss, she thought, amazed that she recalled that expression from forty years ago.

At noon, when the special rates for TEL-VISIT went into effect, Violet typed in the ID number of her friend, Lenora, who also lived in the Complex. Lenora appeared on the monitor, looking agitated, even though she was pops the Sweet Oval Snacks, which were said to have "a calming stimulant" effect. Lenora hadn't won any bingo games this morning and Violet knew her TEL-ACCOUNT was precariously close to D.D., too deeply debited to allow new charges.

"If we could have more games—" Lenora said. "I'm sure my luck would turn."

"Maybe they're saving you from ruin—" Violet suggested. "Once you're D.D.—"

"They'd sell off my stocks, then the bonds, or maybe the bonds first. I haven't been following it."

"Well, I have," said Violet. "The international debt is up to sexdecillion now. They may end our personal credit."

Lenora gasped. "But not bingo?"

"Unlikely," Violet said. "We can only visit and vote for so many hours a day. Or pop SOS's, she thought, seeing Lenora feeding them into her mouth like peanuts. Whatever happened to peanuts? Violet wondered.

"Sure's nice to visit like this," Lenora said.

Violet agreed. Time was when they'd had to leave their Complex to weather the worst of what used to be called "nature" in order to see each other. Now, at the touch of buttons, they were together, so to speak.

"Do your cleaning yet?" Lenora asked.

"Not yet," Violet confessed, wondering why she'd been unable to type in the code to start the filter systems, the air and surface vacuums that removed all dirt and dust. She'd always been such a tidy housekeeper, even when it hadn't been so easy, and it was getting easier all the time. Soon filters would be programmed to run automatically. The TECH-Board was arguing now only over how often to run them, and what charges to assess for each use. Violet believed herself lucky to live during an era of incomparable leisure, but for some reason, she'd been unable to bring herself to activate the vacuums this week.

"Remember the old uprights?" Violet asked Lenora now. Lenora shook her head. "You don't?" She reminded her friend of those clumsy appliances, manually operated, that preceded TEL-CLEAN and the Robotseries.

At one o'clock, a beep signalled the end of special rates, so Violet logged off. For a few seconds, there was an eerie yellow after-image on the screen, then the screen blued. Instead of tending to the cleaning, though, Violet typed in MUS-NOS 90 for Nostalgic Music from the 1990s.

She leaned back in her chair, recollecting when she and Lenora had gone to bingo together at the Delwood Community Center in Urbana, or was it Oak Ridge? It was raining so hard
she couldn’t see through the windshield wipers of the dyno-prop, or was that before, when there were still cars? Anyway, Lenora was hellbent on going. It was their only night off from the pathology lab where they had worked before the dread diseases had been eliminated.

Lenora had run through her money fast that evening, then borrowed five dollars from Violet to buy ten cards. What a time they’d had, trying to keep track of them, but then Lenora won the blackout. A thousand dollars. She leaped and hugged Violet and screamed. As far as Violet knew, Lenora had never been happier.

She wondered how close Lenora was now to D.D. Once they got into your assets, they kept going, till they took away your PC, vacated your compartment, and put you in the AD Center for addicts. Some claimed that losing your assets hastened your recovery. Others said it was good because it was punitive. Violet suspected that asset seizures were necessary to help pay off the international debt.

Wasn’t that why they were promoting Sweet Oval Snacks now? All day, on the monitor, in animation and subliminally, the figures sang, whispered, danced, cajoling the uninitiated to try SOS. “It’s YOUR answer to what’s missing,” the promotions said.

One thing for sure, her erotic urges weren’t missing. So what was the point of intensifying them? Violet wondered. So she could watch the Triple-X Channel half the day and all night? That’s what heavy SOS users did, typing their fantasies into the console and having them play out on the monitor, imaging their own face onto the person or persons or animals they wanted to be. Violet was darned if at this stage of her life she would start doing it on the screen.
She much preferred TEL-TRAVEL and other educational features, although, she had to admit, she occasionally got listless. That's why she'd bought PORTA-GYM, to stimulate brain chemicals that warded off attacks of Inertia, the number-one mood disorder in the galaxy. But occasionally she was too listless even to use the PORTA-GYM.

Its former owner had sold it when he became addicted to NED, the new ecstasy drug. Violet understood its effect was to double real time, so heightening everything that happened that there was no need anymore to have things happen. It was the single most expensive commodity. Yet the TECH-Board hadn't prohibited it. Off the record, one Board member said NED was useful as an antidote to Inertia.

Mounting the seat of PORTA-GYM, Violet wondered whether to buy NED stock and sell her REC-TECH bonds, since the use of NED was increasing while the use of PORTA-GYM was diminishing. She slipped her arms and legs through the bands of the machine, set the timer for two minutes and gritted her teeth. PORTA-GYM did the rest, leaving her well exercised and sweaty. Shedding her clothes, she entered the RUB-A-DUB, which bathed and dried her. Then she dressed.

The latter part of the afternoon she spent deciding on dinner, calling up hundreds of menus on her screen, each with tantalizing pictures and aromas, before selecting chicken-C, a chemical imitation. It was good with kaluce, a hybrid of kale and lettuce, micro-steamed with garlic. Then she settled in to view the early evening news, not surprised to learn they would be distributing a month's supply of SOS free to new consumers. But she couldn't stay awake to watch the rest. Lately, she hadn't been sleeping too well at night.

She dozed soundly. In her dream, she lay in her thermal chair, while next to her a robot called up a travel program from San Francisco, or was it San Diego? Another robot brought her algae tea. She tried to stop him.

"Let me, let me," she told him, but he didn't seem to hear her.

Two robots were rubbing her feet.

"Let me!" she cried, real tears forming in her eyes.

Violet woke up. Her cheeks were wet. A bulletin was flashing on the computer screen. By popular demand, the number of bingo games will be dramatically increased, effective immediately. Then the rainbow of TEL-GAMES blazed across the screen, signalling the start of evening bingo.

Violet went to get some tea. By the time she returned, she'd missed a dozen games. Of course, if she'd won, her account would be credited, but still . . . Instead of appearing on the monitor individually, the numbers came up all at once now, followed by the simultaneous lighting of all winning numbers on the cards, then the flashing of winners' faces and games. Bing, bing, bing, BINGO. Technology was dazzling!

At the conclusion of three hundred games, Violet felt emotionally spent. She'd won several, but TEL-ACCOUNT showed that the cost of playing the games exceeded the amount of her winnings. A wave of sadness swept over her, but it had nothing to do with the money.
She'd last felt like that when they took baseball out of the TEL-GAMES some twenty years earlier, on account of its unpredictability, the TECH-Board said. After that, football went, then basketball, hockey, soccer, and tennis. But what could one do? It was in the international best interest.

Violet sipped her tea, trying to decide between TEL-TRAVEL and TEL-OPINION, while a promotion for SOS filled the seventy-two-inch screen. "Is something missing in YOUR life?" a breathy male voice asked. "There IS an answer . . ."

Violet typed in TEL-TRAVEL. Charges had risen again, now that experiential travel was no longer possible, what with the outside oxygen contaminated. Before her was Jamaica, from the old Earth, reconstructed. How green the water was along the shore! How odd the people looked, selling those handcrafts, items actually hand-made! Another wave of sadness washed over her. She reached for a regulator patch, but instead of putting it behind her ear, she flung it across the room. An unseen force sucked it up immediately. So, the vacuums had been activated automatically. No longer would she have the cleaning to think about now.

On the screen were those beautiful waterfalls. Ocho Rios, was it? Real water! She had climbed those falls once, felt the water dripping over her body, the stones slippery beneath her feet. Abruptly, she logged off and punched in TEL-OPINION, deciding the time was better spent learning what was on the minds of her Uranian compatriots.

Tonight it was TEL-GAMES. With several billion people watching, COMPU-Lotto selected those who got sixty seconds on the SPEAKBOARD, paying extra, of course, for the privilege.

The speaker was rhapsodizing over the speed-up of bingo, predicting that it would exceed the rabbit races in popularity. Stakes for the rabbit races were ten times higher, because of simulation. There hadn't been any rabbits since the transmigration from Earth, but TEL-GAMES reconstructed them so you couldn't tell the difference.

Then Lenora came on the screen, bubbling her approval. "Tonight I cut down on SOS," she said. "When you don't have to wait so long for the results, it takes away the stress," she concluded, beaming.

On the screen flashed the disclaimer: "Views of speakers may not reflect that of management and/or their advertising subsidiaries or the TECH-Board."

To her surprise, Violet found herself signalling to speak, even more surprised when, after an intermediary speaker (a scientist confirming the relation between suspense and stress), she was selected.

"What good is knowing everything as soon as possible?" Violet asked, her voice cracking with emotion. "There's your number one reason for Inertia: no surprises." When they cut her off (for exceeding the time limit), she was demanding the "inalienable right to suspense."
She fell back in her chair, her chest heaving. The next speaker criticized her anti-intellectualism, saying it was incomprehensible that people should choose to live in ignorance of outcomes. When the vote was taken to approve the speed-up, there were only two dissenters. Possibly the other one was a mistake. Violet thought. That happened sometimes, you punched the wrong button and by the time you cleared it, they were on the next issue.

She went to the PORTA-GYM and set the timer for three minutes. She’d never done that much before. At the end, she was soaking wet and, amazingly, angry. She hadn’t been angry since—well, maybe the last time with what’s-his-name, when he wanted to view the Triple-X Channel, as though Violet Abby in the flesh needed supplementing.

Stepping into the RUB-A-DUB, she spoke out loud. “We’re becoming superfluous, except as the means to pay off the sextillion debt.” The shower hissed by way of answer. There was a man once, they’d studied him in the school of her youth. Marks? Karl Marksman? Something like that. He’d claimed that people were only useful as the means of production for the state. Here, in Uranus, people were also tools, but as instruments of leisure.

On a sudden impulse, Violet tried to take over the automatic functions of the RUB-A-DUB. She pulled and yanked on the arms to get them to stop washing her, but they continued, indifferent to her cries of “Let me, let me.”

Dressed once more, she tried to think of something she could do herself, without the computer. She’d been a gourmet cook once, but most ingredients were no longer available. The manual diary she’d started a few years back had been inadvertently sucked up by the filter system, and she’d been wary of doing her diary on the PC. PC—the name struck her as oxymoronic. What was personal about a computer accessed by billions of people?

Not that she was opposed to the life it afforded her, the unparalleled leisure and ease. It made democracy possible in ways undreamed of in bygone eras. But something—she didn’t know what—was missing.

Deciding to skip late evening bingo, she went to bed, but couldn’t sleep. Obstinately, she refused to take a DREAM-EZE tablet. Should she get out the cards again? she wondered, even though they made her feel terribly guilty. She’d even destroyed cards she’d made in the past, only to order more plastic film so she could make another deck.

Violet got out of bed and retrieved the cards from where she’d hidden them, under the rack of slippers. Was it forty years since those she brought with her from Earth had disintegrated from use?
She put out the aces, notated by scratches made in the plastic, to begin her favorite solitaire game, Auld Lang Syne. Solitaire had long been banned by the TECH-Board as anti-social. It was Violet's secret dream to create a solitaire game that could be played by billions, and with stakes that generated enough revenues to pay off the debt. Perhaps there was another solitaire player already out there, Violet fantasized, dealing the four reserve piles. Maybe it was the person who dissented along with her tonight, when she'd voted against the speed-up of bingo.

She smoothed the edges of the pack in her hand. Since there was no play onto the foundations, she dealt out another reserve, mocking her own foolishness. A computer could save her all this trouble.

Tomorrow she'd make up her civic responsibilities by playing the rabbit races, contributing more than she could afford to the international treasury, while participating in the national pastime: risk without suspense. Meanwhile she'd enjoy the comfort of solitaire, which was quite the opposite. Perhaps it was the novelty of going "at a snail's pace" that engaged her.

She said the phrase out loud. It was one of those from way back when. She remembered the expression meant going slowly, but she'd be darned if she knew anymore what a snail was. She repeated the words, relishing the sounds. Some day we won't have to talk at all, she thought.

Turning up a two of hearts, she put it carefully on the ace of spades. She'd have to deal another reserve row. At this rate, the game might take ten minutes. Violet gritted her teeth. Whatever it took, she'd stay with it. She smiled, recalling the other name they used to call Auld Lang Syne: Patience. And with good reason, she thought, wondering if she'd have enough to try a second game.
PLAYDAD—
The New Efficiency

Ted Gargiulo

Our theme is toys: the stuff of dreams, of traditions, of big business.

Toys. A phenomenon which our experts see as part of an elaborate apology syndrome: a legacy from a guilt-ridden parent to a love-starved child, a haven for the emotionally bruised, a refuge for the sensually deprived, a mock-up of Man's world, a makeshift universe, a cherished illusion, a consolation prize, a placebo.

Toys. That is our theme.

We see today that the demand for toys and diversions has already escalated to epidemic proportions. The reason, according to our experts, is easy to understand. Most parents, in order to pay off their debts and support their families, now spend more time at their jobs than at home. Hence, the need to leave something in their stead to amuse and placate their youngsters—to "apologize," as it were, for the empty existence their absence has forced upon them. Little wonder that children's toys over the past ten to fifteen years have become more ambitious, more sophisticated—and more expensive.

Even less amazing is the fact that these zealous breadwinners, in their desperate attempts to make amends, have plunged themselves even deeper into debt. Spiraling demands give rise to spiraling costs, and vice versa. This, according to our experts, is how the syndrome fuels itself. They predict that by the year 2000 the average middle-class parent will lavish more money on his children at Christmas than the Metropolitan Opera now spends on Aïda. They do not expect that children will be proportionately happier, only that Moms and Dads will be laboring the more feverishly to maintain—or surpass—the level of make-believe to which their young ones are accustomed, lest they become discouraged or rebellious.

We see this insane proliferation of playthings in the market and in the home. We see human creation groaning and travelling in quest of that mythical plateau of contentment and economic stability which, our experts happily assure us, will never be attained. How, then, is all this stuff to be paid for in a normal lifetime?
That is what INTERNATIONAL PLAYDAD is all about.
PLAYDAD is (among other things) a unique concept in personal finance. It is the brainchild of the very experts whose ideas we have been espousing thus far—economists turned entrepreneurs—who have developed a more efficient cost evaluation and reimbursement system. PLAYDAD, at the present time, is a nationwide credit syndicate and amusement outlet with designs for overseas expansion, capitalizing on what its founders call the "Give-As-You-Live-Principle." The rationale behind this principle is quite simple: the cost of living is virtually incalculable. Nowhere is this truer than in the realm of human recreation. To express the value of children's toys in dollars and cents would be like measuring the number of feet from here to the Moon. Moreover, the sense of "value per se is altogether too personal to have the universal application it once had. For this reason, children's toys are no longer priced. Instead, their value is expressed in years. That is, years of bondage in which the parent works off the colossal debt. No money changes hands, only data—and time.

Thus, PLAYDAD represents a revolutionary new step towards a cashless economy. Although deferred payment is not really a new idea in itself, the commercial visionaries of INTERNATIONAL PLAYDAD have transformed this world trend into a dynamic megasystem. The following will provide a rough idea of how the system works.

First of all, there is THE TOYSTORE—the mecca of wish fulfillments and dreams-made-flesh-made-sweat where business is initiated and transacted. INTERNATIONAL PLAYDAD owns the merchandise, operates a chain of retail outlets, sells franchises, and leases property on which future outlets are now being erected. It is also in the process of buying out a number of toy enterprises already in existence. THE TOYSTORE is a faddishly simplified trade name (like "The Book" or "Le Car") for any retail center or supplier operating under the I.P. umbrella.

Next, there is a payroll deduction plan. Computed into every transaction, along with the appropriate sales tax, interest, and service charges, is the customer's personal information: rate of earnings, estimated overtime, bonuses, raises, current debts, etc. Money (that is, data) that isn't already owed to withholding taxes, Social Security, retirement funds, insurance premiums, and other credit payments would then be designated for the financing of Junior's space station, battleship, electric guitar, idiot box, etc. The actual "amount" a parent owed THE TOYSTORE would, in effect, be determined by his financial situation. Thus, the "value" of an item would vary with every customer. That "value" would then be converted into time. A live-in doll house, for example, might set a stock clerk back two years; a corporate executive, only a few months.

Now we come to I.P's computer SYSTEM. Once a new customer's vital information has been entered into the SYSTEM, he is issued a twelve-digit finance code. This code, like his Social Security number, will henceforth belong to him all the days of his life. In order to receive a printed estimate of the toys on his list, the customer need only copy his item
numbers, plus his personal finance code, onto an official "request form" and turn this form in to the customer service desk at the store. The service clerk punches the data into the SYSTEM, and in just seconds, a personalized "price list" is made available.

A typical printout for an average middle-class father of three, who is already saddled with mortgage and car payments, tuition costs, medical bills and other expenses, might look something like this:

The parent then, after prayerful perusal, selects those items on his list which he feels he can afford. He writes the item numbers on an official order form and hands it to the service clerk, who enters the numbers and the parent's finance code into the SYSTEM.

After that, the parent is led to a back room where he is photographed with his finance code displayed across his chest. This picture is also fed into the SYSTEM. Instead of a conventional invoice, THE TOYSTORE issues the customer an official CERTIFICATE OF YEARS on which there appear an itemized printout of purchases, total term of indentured service, and the parent's picture (with numbers). The parent adds his signature and thumbprint to this document and re-submits it for final approval. Once the CERTIFICATE is approved, a number of copies are automatically run off. The store and the parent each keep a copy; additional CERTIFICATES are filed with the parent's employer(s), the state police, and the FBI.

Before the parent is allowed to leave the store with his purchases, however, he is led to yet another room where an electronic tracer is surgically implanted somewhere under his skin. This tracer transmits specially coded signals to a vast network of tracing terminals throughout the United States, Canada, and Mexico, so that the I.P. SYSTEM can monitor the parent's activities and general whereabouts. No transaction is complete until this tracer is installed.

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**Your Personalized Estimate Sheet**

**Customer Name:** Samson L. Fritch  
**Finance Code:** 12-8592-130-909

<table>
<thead>
<tr>
<th>ITEM#</th>
<th>DESCRIPTION</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>5374</td>
<td>SUZY SVELTE WRIST WATCH</td>
<td>1 yr. 2 mos.</td>
</tr>
<tr>
<td>6114</td>
<td>CRUPPETS PASTRY MAKER</td>
<td>2 yrs. 9 mos.</td>
</tr>
<tr>
<td>9133</td>
<td>MOTORIZED BESSY MESSY DOLL</td>
<td>2 yrs. 1 mo.</td>
</tr>
<tr>
<td>9134</td>
<td>WITH PIMPLES</td>
<td>6 mos. extra</td>
</tr>
<tr>
<td>4016</td>
<td>PUPPY LOVE PERFUME</td>
<td>4 mos.</td>
</tr>
<tr>
<td>2701</td>
<td>PUNKMOBILE</td>
<td>2 yrs. 5 mos.</td>
</tr>
<tr>
<td>7711</td>
<td>ROGER RIPCORD UNIFORM/GEAR</td>
<td>1 yr. 4 mos.</td>
</tr>
<tr>
<td>4340</td>
<td>SPIT 'N' SPEAK</td>
<td>4 yrs. 7 mos.</td>
</tr>
<tr>
<td>4341</td>
<td>WITH REPLACEMENT DISKS</td>
<td>4 mos. extra</td>
</tr>
<tr>
<td>2087</td>
<td>LONGO THE TALKING DOG</td>
<td>3 yrs. 3 mos.</td>
</tr>
<tr>
<td>1019</td>
<td>MONGREL OF LOVE T-SHIRT</td>
<td>3 mos.</td>
</tr>
<tr>
<td>1508</td>
<td>LARRY LASER GUN</td>
<td>2 yrs. 1 mo.</td>
</tr>
<tr>
<td>1509</td>
<td>WITH HOLSTER</td>
<td>2 mos. extra</td>
</tr>
<tr>
<td>9970</td>
<td>KISS MY DUST RACING OUTFIT</td>
<td>8 yrs.</td>
</tr>
<tr>
<td>8142</td>
<td>CITY IN A BOTTLE</td>
<td>7 yrs. 6 mos.</td>
</tr>
<tr>
<td>8143</td>
<td>WITH WARHEADS</td>
<td>1 yr. extra</td>
</tr>
<tr>
<td>6666</td>
<td>KAISERS AND CAVES VIDEO GAME</td>
<td>3 yrs. 8 mos.</td>
</tr>
<tr>
<td>5122</td>
<td>PLASTIC GALACTIC FACTRY</td>
<td>13 yrs.</td>
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Thank you for shopping THE TOYSTORE  
Have a nice day!

**THE TOYSTORE**
As soon as the incision has been stitched and dressed, the parent is free to leave. From here on he is under constant surveillance. Now, while it's true that the SYSTEM's tracking capabilities are still being perfected, there is relatively little pertinent information (short of the parent's precise location) that its sensors and reasoning circuits cannot deduce. The SYSTEM will know, for instance, if an individual is at home or on the job, or if he has switched jobs. A series of positive signals are transmitted whenever he is hard at work. Overtime produces a sensuous electronic hum in the SYSTEM's monitors. Erratic behavior on the job—laziness, excessive lateness, goofing-off, etc.—grieves the SYSTEM and invites serious disciplinary action. Most of the newer implants are designed to dispense painful electric charges to an errant parent who needs to be kept in line. Sickness, personal injury, or any other unscheduled absence from the job will interrupt the flow of positive signals and place the SYSTEM on "stand-by." If normal feedback is not resumed within 24 hours, and/or if no word is received from the parent, a red "alert" is triggered and a team of investigators is dispatched posthaste. The same holds true for layoffs, unapproved resignations, or any crisis in which the parent fails to reach the SYSTEM's hot line: 1-800-I-AM-DOWN. That is why it is imperative for every Give-As-You-Liver to inform the SYSTEM of changes in his routine or situation. Sabbaticals and mental breakdowns are absolutely frowned upon. Some earn penalties of up to two extra years' indentured service. Faithful and slavish persistence, on the other hand, is encouraged and rewarded. Working holidays and weekends or taking on an additional job can earn a parent future credits, or CERTIFICATES OF GRACE, which may be applied to future purchases. Some stores grant their customers rebates of up to 6 months for working Christmas Day!

"'Workaholia' is its own best watchdog," says I.P.'s chief security analyst, Nelson J. Kazootie. "A person whose imagination has been blunted by drudgery and family pressures is less likely to think his way out of a commitment than one who has been enlightened by alternatives."

Even so, there have been a number of occasions when parents have attempted to beat the SYSTEM. None, thus far, have succeeded. For one thing, it is a federal offense for any doctor or lay person to remove the surgically implanted device. However, it is possible at the present time to confuse the SYSTEM's device by starving oneself. There are underground surgeons who will remove the implant for a price—cash only—but starving oneself is cheaper and a lot less dangerous. Besides which, the SYSTEM can sense when the device has been starved or tampered with, and in the time it takes a parent to ditch his job and make a run for it, I.P. will already have dispatched its own security task force. If a fugitive parent has not been apprehended in two days, state and local authorities are brought into the investigation. After a week, the parent is the target of a nationwide manhunt. His picture and finance number will begin appearing on the evening news, on milk cartons, on tree trunks and in post office
lobbies. Airline terminals will step up their security. Canadian and Mexican border patrols will be put on emergency alert. Bus and train stations, motels, brothels, bars, and rent-a-car agencies: all will be sent fliers displaying the parent's picture and finance number. Any citizen who may have seen him will be urged to contact the I.P. security hot line: 1-800-RUN-AWAY.

After two months, the fugitive's entire family is taken into custody and held at gunpoint. The SYSTEM then sends out a transcontinental multi-media dispatch informing the wayward parent, wherever he may be, that this most desperate action has been taken. This almost always brings the culprit to the bargaining table within 24-48 hours.

Once the parent has been apprehended, or has turned himself in, he must sign an ADMISSION OF GUILT before his family can be released and his children allowed to return to their playthings. He is then slapped with an upgraded CERTIFICATE OF YEARS which includes the unpaid balance on the toys, late fees, corporate damages, accrued interest on the late fees, interest on the damages, and interest on the interest—plus the cost of the investigation, legal fees, state and local fines, federal "involvement" taxes, and other applicable penalties. His trial, should he decide to plead his case before a judge and jury, is but a formality since his guilt is already a matter of record. But the SYSTEM thrives on such formalities in that the lawyers, the court clerks, the bailiffs, the jurors—even the judge—are all working to pay off their debts to THE TOYSTORE. So are the police. So are the members of the security task force. So are the legislators who voted in the I.P. SYSTEM. And the media reporters who covered the story of the fugitive parent. And the printers who ran off the handbills containing the parent's picture and finance code. And so on and so on.

All men, high and humble, are somehow bound up in the SYSTEM. The SYSTEM cannot fail.

The parent is then carted off to one of PLAYDAD's maximum security labor camps where he is kept in custody until he has worked off his debt to society. His term will depend on the length and severity of his transgression. There are no rebates or reprieves to be earned here. Only one concession may be granted, though. If the parent will agree to let THE TOYSTORE confiscate any merchandise that hasn't been damaged (or thrown away in anger), then PLAYDAD will allow him to spend one weekend, every other month, at home with his family. The offer is not as gracious as it sounds. For these visits, brief and infrequent though they may be, would force the guilty parent to endure his children's wrath and disappointment. No parent that we know of has ever been that desperate for a vacation. All have preferred the peace and safety of the labor camp. The SYSTEM never fails...

...Which finally brings us back to our original theme: toys. For it is here in these labor camps that some of the most ingenious and significant new toys are being produced. As more and more parents across America and the free world leave their homes in order to take up full time residence at their jobs or in labor camps, these special toys will be turning up in greater abundance. They represent PLAYDAD's solution...
to the missing parent. The supreme apology! Conceived and developed by Playdad Industries, a division of INTERNATIONAL PLAYDAD, this prize-winning series is called, appropriately enough, "Play-Dad." This is what it consists of:

A remarkable smallscale replica of the child's home, made to order of course, and a two-foot-tall dummy fashioned into the likeness of the child's father—a play-Dad! This dummy can be made to act out all the things around the home which the child's real Dad used to do when he lived there. The dummy comes with a cassette tape on which Dad's voice (or a reasonable facsimile) has been recorded. Depending on what the child instinctively desires, the "play-Dad" can be tender or authoritative, angry or forgiving, kicked around, punished and abused without caving in like the frail dummy that once ran the house. (The manufacturers were wise in realizing the child's need to rid himself of aggression.) The "play-Dad" can even be made to go to work; replicas of Dad's workplace or labor camp are also available.

The "play-Dad" comes with age lines that deepen, hair that turns gray and falls out, shoulders that hunch, and a back that can be thrown out of joint. And for the precocious child who enjoys poetic realism, there's an advanced model of the "play-Dad" that comes with a fractured chest cavity symbolizing a failed or broken heart. The "play-Dad" can be made to lie down and rest, or die, which the child's real father, no doubt, wishes he could do. Still in development is an even more sophisticated model of the "play-Dad" that eats, sweats, goes to the bathroom, and breaks promises. The possibilities are endless.

In response to the growing demand for toys that represent the women's role in the home, there is now a "play-Mom" available which does (or attempts to do) all the successful and lucrative things that the "play-Dad" does. For the older children, the two dummies come packaged together as "Play-Folks," replete with special features that are obvious and need not be elaborated on here.

The price? A life-term in the workplace or labor camp.

The Age of the Replica is at hand, say our experts at PLAYDAD. What we have seen is only the beginning. Imagine a world in which every employable adult has been pressed into full-time in-residence labor. Solutions to every problem would be financed by diligence and hard work—while all the woes and conflicts of the world were being acted out at home on a miniature play-globe... by children!

PLAYDAD is toys.
PLAYDAD is jobs.
PLAYDAD is justice.
The future is PLAYDAD.

"Apologies open doors. Be sorry today."

... INTERNATIONAL PLAYDAD.
Cheruboom

Shirley Powell

According to well-documented sources, nearly 84 percent of infants born in every part of the world from May 1 to October 31, 1988 were found to have an astounding genetic modification.

These babies seemed normal in every other way; their abnormality was that they all had wings.

Doctors at first believed the small furry appendages were vestigial and would never serve any useful purpose. A few cut off the wings close to the shoulder blades of the babies, but in each case, new ones grew back within weeks.

There was great interest in the Cherubs, as they were dubbed by an unknown reporter. Nearly every winged infant in North America was scrutinized almost constantly for signs of other differences in development. Doctors of medicine and many other scientists convened in Geneva and Tokyo alternate months to discuss the progress of the mutants.

Within a month of birth most Cherubs exhibited wings as large as their heads. The predominant color was white streaked with gray or brown. A few flamboyant parents dyed the already amazing appendages more exotic colors, but such attempts soon wore away. Cherubs characteristically lay on their stomachs, exercising their wings much of the time. Generally they had two sets; one on each shoulder. The inner pinions were smaller than the outer ones, and of finer feathering.

By the time the Cherubs were six or seven weeks old, most had been aloft in their nurseries, and a few were able to flit about the house with a minimum of crashes into windows or furniture.

A goodly number of these flying children spent much time in clinics and laboratories. Prestigious pediatricians each hoped to complete the first definitive study of the infants.

In November and December of 1988 a few more Cherubs were born, but by the end of January in 1989 it was clear the Cheruboom had all but disappeared.

Meanwhile, what to do with the Cherubs now bedeviling parents throughout the world? Cherubs learned to talk readily but they wouldn’t bother crawling. Instead they used their legs as they did their arms, to cling to wherever they happened to be resting between flights.

Even those Cherubs under scientific study were usually permitted to use enormous outdoor cages. These cages became immensely popular in 1989 and 1990. Some were handsomely gilded, and almost all were equipped with expensive exercise bars, smooth tree trunks and (for inclement weather) oversized

Shirley Powell has always liked fantasy: "I like putting characters into strange situations to see what they will do." Her stories, she says, are likely to be fantasies with a scary tinge. A feature writer for the local newspaper in Stone Ridge, New York, and director of the Stone Ridge Poetry Society, she has published stories and poems in literary magazines and anthologies, as well as three books of her own work, one of them a novel, Running Wild (Avon, 1981). Born in East Monroe, Ohio, Powell has lived in California as well as New York. She earned a degree in education at Miami University, and an M.A. at New York University, and has taught school, though she now lists her profession as writer. Powell's view of the future is mildly pessimistic: "There's still a resistance to change—that's what the future means. People tend to ignore or destroy what they don't understand. I don't think the people of the future will embrace changes willingly."
birdhouses. Since the cages were not cheap, neighborhoods took to buying one or two each, for placement in a municipal park where parents could bring their offspring for a safe sunning and fresh air. Cherubs were mostly conveyed to these parks by means of charming harnesses; some rhinestone-studded, others cloth-covered with paisley or polka dot designs.

Cherubs characteristically didn’t learn to walk. A few did become adept at running and frequently came to earth with legs swinging wildly. Professor Van Wooten of Rotterdam found that when Cherubs landed in water, they would sometimes run several steps before sinking to their waists. Legs pedaling furiously, cherubs swam like ducks and seldom used their arms except for turning maneuvers.

Toilet training was a nightmare for parents of Cherubs. It had been hard from the first to get the infants to lie still for diaper changes.

Cherubs tended to eat “on the fly” and very few were breast-fed. Many developed teeth early and before long were able to digest an incredible array of foods, particularly plants. Inevitably, most escaped their homes to become flyaways; in fact, many had broken all ties with their earthbound families by the time they were three years old. They seemed able to fend for themselves rather well and practically all were drawn from their beginnings to the limitless skies beyond walls and cage bars.

Those in and around Los Angeles, City of Angels, had to have their wings washed frequently because of smog. Most Cherubs found flying conditions intolerable there and difficult at best around many cities. As a result thousands upon thousands of Cherubs flew to the suburbs and surrounding countryside. Many were fascinated with beach areas.

It got so that on a sunny day on Long Island’s South Shore one could count a high number soaring with the gulls or tumbling in the sand at such places as the 90s nude section at Jones Beach.

In winter, clothing was necessary but a problem. In order to function the wings had to be free, making it hard for Cherubs to keep warm. Many took on a bluish tinge, wings and all, from December through winter. Most, however, merely flew to Miami Beach or some other more comfortable climate where they picked up Spanish easily.

They got used to a bird’s-eye view of things and were not good at any sort of serious thinking. Birds in fact were their special friends. Cherubs were often sighted among flocks of grackles and the like and seemed able to communicate well with the avians. One wag spoke of their attempts at bird chirps as “pidgin English”.

~

Cheruboom/47
Efforts to manipulate Cherubs were usually fruitless. They would not attend nursery school or any other earthly groupings. They preferred their own aerial games. For example, a few could ordinarily be found loafing around airports waiting to race the jets. They didn’t seem to mind losing practically every race. Cherubs were never clocked tofly in excess of 55 miles per hour, and so had no chance at outdistancing the planes unless in landing. Aloft, Cherubs grew faint and had to drop lower when trying to accompany jets to altitudes of scant oxygen.

Philosophers and educators as well, of course, as psychologists wrote much about the Cherubs, predicting in most cases what would happen when the youngsters came to puberty. Would they mate? If they did, would two winged parents get a winged offspring? Were more Cherubs in the works? And if so, what would additional flying folk mean to the WOWs? (Without Wings, a designation made by a playful Cherub and taken up at once by the media.)

A few WOWs talked of eliminating the Cherubs while they were young and relatively defenseless. Most earthbound people wished to make friends with the young flyers, but though Cherubs were in general kindly disposed to WOWs, the flyers were at most times airborne and hard to get next to. Cherubs grew to prefer their own society more and more as they matured.

The great anthropologist Greta Grotto managed to observe life among the Cherubs more closely than any other WOW. Thanks to her, we have learned countless details about their colonies.

By the year 2000 a few Junior Angels, as Grotto called them, began to mate. It appeared that at age twelve, the Juniors were full-grown (about four feet tall) as well as sexually developed. Grotto had told us that the females became a brilliant red when they were ready for copulation. These fiery maidens she dubbed Seraphs.

Newborn Cherubs were deposited by their parents in crude nests atop tall trees or deserted towers. The colony particularly observed by Grotto was among the giant redwoods and sequoias of California where Grotto built herself an all-season treehouse.

Other scientists hired gliders or parachutists to try to get a view of the new infants, but few ever saw them. One question was answered quickly though, by Grotto: two winged parents make a winged child.

In the early days of the new century, there were known instances of copulation between WOWs and Junior Angels or Seraphs. WOWs were wont to claim rape in these cases, but it is admitted by Grotto and others that there was a certain romantic aura about the chiefly naked fliers that entranced not a few WOWs. Perhaps the flying maidens and young males were also curious about the less fortunate humans who scrambled around on the earth below. In any case, a discovery was shortly made: one winged parent assured a winged child. The aberration was proved dominant.
By the 2030s, in spite of the overall friendliness of the Cherubs and their older flying relatives, there were often displays of open hostility by the WOWs, still of course, in the majority. Young Angels were sometimes hurt, and if grounded, as a rule died shortly. Most of the fliers set up permanent colonies around this time. Some waged guerrilla warfare of a type against WOWs. They would stuff up chimneys with wet feathers and dung or command a band of eagles to practice diving techniques over a baseball field in the middle of championship games. They managed to cancel several airline flights by flying erratically about control towers, too. But most winged people merely took off to the tall trees and let the rest of the world drift on without them.

Grotto had, by this time, rather lost her grip. She tried a flight of her own and ended sadly in a hospital room without windows.

Typically the aging parents of the original mutants continued to be traumatized by their experience with the winged children. Early on, quite a number hired helicopter pilots and raced about trying to locate the missing members of their families. Later some demanded sterilization at the state’s expense in order to avoid bringing more “defective” children into the world while others resolutely had as many children as their legislatures would permit in hopes of bringing forth more winged ones.

And as one might expect, there were those who made sizeable fortunes from their “kiss and tell” stories such as the book by Seymour and Henrietta Swan: *Our Son Is An Angel.*

It is said unusual religions thrived among the angel communities. Some fliers thought they were the Elect of God. Others formed bird cults, worshipping cardinals or starlings. Among the WOWs, rumors flew that Angels—Cherubs, Seraphs and all—were planning to end the world as we know it. Other WOWs hoped for an Angel takeover, speculating that the fliers would herald the Second Coming. Among these believers were the famed Lookouts of the 2040s who stationed themselves on rooftops and mountains, scanning the skies for Archangels, though Grotto had made it clear years before that Angel colonies made no attempt at developing a hierarchy.

Since 2085 it has been indeed rare to see a genuine angel in our crowded skies. Most WOWs, to use the outmoded expression, are content to believe the abnormals are practically extinct. After all, how could they continue to hide in large numbers within our teeming world? For that matter how could they have avoided the peak of the avian flu epizoodic of 2043? At the time, many birds fell from the trees and even more crumpled bodies of winged folk were reported throughout Europe, Asia, and the Americas.

Yet there continue to be occasional reports that on certain quiet nights, starlit or cloudy, when a solitary WOW with a permit stands within the U.S. National Park (the only one in existence inside this hemisphere), sounds of odd flutterings can be heard among the treetops. Some WOWs swear to have heard also an accompanying but distant laughter.

So it is that even in these enlightened times, legends of flying people continue.
Occasional Aromas

Nancy Potter

It began as a slow-moving virus in the 1990s when I was in junior high. It moved so gradually that hardly anyone noticed at first, and for all the genetic scanning, they never found out how I escaped or got passed over. I wasn’t alone then—some guy in Topeka, a family in Irkutsk—but either they caught it finally, or we simply stopped making news. They slipped out of sight. It’s anniversaries or public deaths, like the last Viet Vet some years back, that recall the old days.

At the start when the virus was moving slowly over the continents like drought, the cosmetic manufacturers sat in their board rooms staring at the maps of devastated markets. Deodorant sales remained steady. But those who did wear perfume poured it on. I got awful headaches in any closed space—elevators, travel tubes, and such. In the last desperate days before they became flavorists (and that gave out too) the great noses were testing concoctions on me that they couldn’t smell themselves any more—cinnamon leather, coconut gardenia, chocolate musk.

I never went commercial. There’s no charge for what I call my aroma meditations. Call it superstition, I thought I shouldn’t trade on it. Otherwise there is absolutely nothing exceptional about me. Millions of other eighty-year-olds put on their uniforms every morning and go out to work their assigned tasks. As a sort of national resource, I’m eligible for free flights anywhere. But where’s to go? Flowers are bred for size and color, and skunks are the same all over.

Now and then a younger one comes up and asks—how does snow or fog or rain or grass smell? I make up some parallel with food or texture. If I say velvet mushrooms or green silk balloons, they go away and don’t repeat the question. Or they’ll hold out a potato or a pine cone or a sea shell, forgetting to point it toward my nose. They just hold the thing in their hand and ask, “What about this?” And I’m tempted to exaggerate and make some outrageous claim like “Imagine five thousand photocopies of War and Peace a minute or the smallest moon of Jupiter on your bedroom screen.” But their faces are too trusting. So I look at the potato or the cone or the shell and tell them it’s like earth or air or ocean. That seems to satisfy.

But as for me, I am not satisfied. I want to talk to them not about generic or cosmic smells but about the only ones that mattered to me. One person’s sweat when my face was pressed against his back on a summer night. Or the scalp and ears of my babies. But no one wants to hear about that.
The Goodness Pill

Ralph Mendelson

Once upon a future time, a woman named Gertrude lived in a little Eastern town with her husband, an executive in a big financial institution, and her two little children. Gertrude had studied chemistry, and she worked in a laboratory on Tuesdays and Thursdays. She worked hard, even though her husband was rich, because she liked her work, and she wanted to keep up her chemistry.

Sometimes Gertrude worked on independent projects of her own. She was such a good worker that Dr. Gottlieb let her use the laboratory for her own work during off hours. It was in this way that she invented the Goodness pill—a pill which, when swallowed, makes one good.

First she tried it on her pets to see if it would work. The dog stopped doing all over the living room, and the cat stopped scratching the upholstery off the chairs. She tried a very small dose on her seven-year-old son, who immediately stopped pulling the hair of the girl who sat in front of him in school, and his grades went up two full points on his next report card. She tried a teeny weeny pill on her fourteen-month-old baby, who became toilet trained instantly.

Then, with the cooperation of the sheriff and other proper authorities, she administered the pill to the criminals in the county jail. They immediately confessed their crimes, which they had denied under oath in court, and admitted to dozens of crimes that the police had never suspected them of. They were all given far stiffer sentences, but they had become so good that they did not mind in the least. They approved of being punished for the welfare of society as a whole.

Then—the big question: What would the effects of the Goodness pill be on society as a whole? Trial doses were administered to control groups of selected volunteers. They were all good people to begin with, but what a change for the better! Lawyers wrote complete contracts on single sheets of paper in language that people could understand; doctors found time to make house calls; butchers stopped weighing their thumbs; TV servicemen reduced their rates—and actually repaired the sets; huge corporations, embarrassed by the tremendous profits that accrued when their executives stopped padding their expense accounts, reduced prices to reasonable levels; unions negotiated wage contracts based on the productivity of the workers; corporation presidents, not to be outdone, reduced their salaries to levels commensurate with their productivity; politicians limited their speeches to promises.
they could actually keep—and that reduced the size of newspapers—and that decreased the number of trees felled each day to make newsprint—and that restored whole forests, with their luxuriant growth of trees and their once-more-abundant wildlife.

Crime as we know it came to an end. It should be noted that the effect of the Goodness pill was to make people feel good to be good. Although the pill was not habit forming in the medical sense, it made being good so much fun that people took the pill over and over, even though one dose would last several years. This, of course, simply made people better and better. When the criminals at the county jail received stiffer sentences, many of them were transferred to the state penitentiary, where they took the pill with them. The old inmates, seeing how happy the new arrivals were, eagerly took the pill themselves. In no time at all, the pill spread through the underworld, bringing about the sudden and complete annihilation of that ancient institution.

But while crime as we know it stopped, new crimes appeared on the books. New laws required everyone to greet his neighbors with enthusiasm; but no one ever violated the law. Laws were passed requiring accuracy of news. Reporters spent hours checking their facts. For important news stories, they would sometimes spend an entire afternoon. The news media faltered under the strain. Many failed financially. Then laws were passed against business failure. Many businesses closed down to forestall breaking this new law, for they were run by good people.

Economic life declined rapidly. Advertising vanished overnight. Former account executives and copy writers became social workers and monks. Bars closed, and distilleries turned to producing health foods. Discotheques featured the late string quartets of Beethoven—and you know what that did to their business. Adult bookstores sold only the classics of the Victorian period—mostly Dickens and Thackeray—with similar results. But no one, not even the owners of the affected businesses, cared. Everyone was good, and their goodness made them happy.

Goodness came before all else, and people revelled in their goodness. Beauty shops closed as women ceased taking undue pride in their appearance. Savings and loan companies closed as people ceased being covetous. Topless restaurants closed as men curbed their lust. Munitions factories closed as people learned to control their anger. Restaurants of all kinds, from fast food to gourmet, closed as people curbed their gluttony. The automobile industry shut down when people stopped buying cars out of envy of their neighbors. But everyone worked—mostly to improve the quality of the environment—because they had freed themselves from sloth.

The economic decline did no harm, because the population of the world declined at the same time; business and people dwindled concurrently. Three general reasons can be found for the sharp decline in population.

First, many people found greater satisfaction in refraining from meeting the needs of life than in living. To begin with, everyone became a vegetarian as soon as they took the pill.
Thoroughly good people could not bear the thought of having animals killed so that they could enjoy the resulting meat. No one ate merely for pleasure. No one was overweight, and most were perilously underweight. Even the thought of robbing a hen of its potential brood repelled many from an otherwise healthful food. Their weakened condition left many people prey to the mildest disease or slightest accident, even though the medical profession was teeming with eager, altruistic doctors and paramedical technicians. But beyond that, although vegetables and fruits are not sentient beings as we usually think of sentient beings, many millions preferred death to a life that could only be sustained by violating the rights of innocent fruits and vegetables.

The second reason for the declining population lay in the declining birthrate—which dropped almost to zero. The birth control pill was not needed in an age of saints. Only a few backsliders reproduced to the extent of replacing themselves.

And finally, the average length of life declined as the prospect of heaven beckoned to souls entirely free from sin.

The animal and vegetable world flourished as mankind declined. World population (of human beings) disappeared, first in the inhospitable regions around the poles, but eventually throughout the temperate zones as well. Finally, only a few people remained alive, and they only in the most naturally mild and fertile areas.

At last only two remain: one man and one woman. They find one another in a garden. It is the only place where they have been able to live at all, although they are at death's door, weakened by lack of sustenance. They share their noble thoughts, their concerns for the future. They are alone together, naked, but in their predicament they are not ashamed. They want to dedicate their lives to the good of mankind. But what, now, is that good? They must choose either to live—or to die, and with their deaths to extinguish the human race from the face of the earth. Which is better, to continue the human race, or to let it come to a quiet, peaceful end?

It would be so easy to let it end. They need only lie down and let sleep overcome them, a sleep from which they would never awake. It is a tempting thought.

It would be so much more difficult to choose life. Alone, without the tools and devices of civilization, they would have to make their way by brute force, eating their bread in the sweat of their brows. And how can they begin? They are so weakened from hunger that they cannot even make a start. If they choose life, they must find nourishment at once—something to sustain them, to give them enough strength that they will be able to carry on.

They look about them in despair. And lo, in the midst of the garden they spy a tree. And they see that the tree is good for food, its boughs laden with fruit. Even in their distress, it is easy for them to take of the fruit. And to eat thereof.
Apocalypse Postponed

Erica Frances Obey

The Great Red Dragon with seven heads and ten horns and seven diadems upon his heads was in a very foul mood. Abbadon, his ally, had gone back to rule over the bottomless pit; the white, red, black, and pale riders had all gotten themselves lost in pleasure somewhere in the Middle East; and the Son of Man, who you'd think would be rather easy to find, as he was supposed to be standing in the midst of seven lampstands, with a sword issuing from his mouth, among other things, was nowhere to be found. And on top of all that, it was the middle of the rush hour on the 1 train, and a particularly obnoxious secretary from Flatbush was standing on the Dragon's foot.

The secretary flipped a page of the *Enquirer*, and nudged her companion. "Jesus Christ, can you believe this?" she said. The Dragon wondered if the voice of the Son of Man, which was supposed to sound like the rush of all waters, could truly be more terrifying than the secretary's Brooklyn accent.

"I came face to face with Satan," the secretary read. "In a horrifying seance a famed Ivy League paranormal expert came face to face with the Prince of Darkness himself. Jesus, the trash they print and call it news."

The face-to-face with Satan article was another reason the Dragon was in a foul mood. He didn't understand. Even though the world he'd come to wasn't exactly what St. John had promised, he'd tried to make do. The Dragon had never really trusted John anyway. You have to take people who can come up with things like eating little books out of angel's hands with a grain of salt.

So the Dragon had done his best to gear his apocalyptic attack to the twentieth century. The logical thing to try for was media exposure. He'd mistrusted the famed Ivy League paranormal expert on sight, but it was the only interview he'd been able to schedule in twenty-eight days.

The Dragon could not contain a modest roar of irritation. The first secretary glared at him. "What's with the creep?" she asked her friend loudly.

"Forget him," her companion counseled her. "He's just a publicity stunt. Remember the guy in a gorilla suit on 34th street?"

A photo caught the Dragon's eye. "Prince of Darkness revealed for the first time in this shocking photograph!" the *Enquirer* screamed.
If there was one thing the Dragon could not understand, it was why the famed Ivy League professional had not used the 8 x 10 glossy the Dragon had thoughtfully provided. It had shown a fully-grown apocalyptic dragon, complete with seven heads, ten horns, etc. The only supernatural evidence in the "shocking photo" in the *Enquirer* was a grayish blur in the corner of the room. The newspaper helpfully supplied white arrows that picked out the daemon’s salient features.

"God damn it," the Dragon swore, mentally excusing himself to Beelzebub. He'd known the paranormal expert was a bad risk. The Dragon read on. "I felt a chill, like a cold, menacing finger of Death, trailing across the base of my neck."

And that was another thing, the Dragon thought sulkily, Death, the Pale Horseman, was always getting the credit for everything.

Death was nothing more than a common hooligan anyway. That had been proved the minute they all erupted from the ground in the Great Desert of their forefathers, snorting fire and gouts of smoke, spoiling for a fight with the Son of Man. The four horsemen started quarreling among themselves the minute they saw there wasn’t a fight to be had. It started with some wild horse races across the desert. Then Famine accused Pestilence of cheating, and War accused Famine of taking sides. Death stayed neutral. Death’s idea of neutrality was riding around, impartially taking sword swipes at everybody.
“Amateurs,” Abbadon sniffed, his saturnine face dark with
disgust.
The Dragon was the first one to wonder who the people
were. Abbadon was too busy wondering what tortures he was
missing inflicting on the Underworld. The Four Horsemen
were wrapped up in their charges and countercharges. The
people were just milling around the horses' hooves, roaring
wildly.
“What's that?” the Dragon asked, pointing at a weapon
that had nothing to do with the longswords and slingshots he
was used to.
“I believe they call it an Uzi,” Abbadon said boredly.
Death gave a whoop and charged off across the desert.
Several hundred men wearing turbans followed
him.
Pestilence howled a challenge and followed
him, beret-wearing
men in hot pursuit.
“Amateurs,” Abbadon said gloomily, and he dissolved into
the ground in a puff of smoke.
“That's just great,” the Dragon yelled. “And who's sup­
posed to go fight the Son of Man, huh?”
The dying thunder of the Horsemen's hooves was the only
“T'll just go find him myself.”
The Dragon shook himself out of his reverie. The impor­
tant thing now was he was lost in the city of New York. He
wouldn't have even come to New York if the old crone in
Bethlehem hadn't told him it was Sodom and Gomorrah.
Sodom and Gomorrah indeed. The Dragon hadn't found so
much as a lousy pillar of salt.
He wandered out of the subway into the street, wondering
rather aimlessly what Abbadon was doing now.
A voice arose from the garbage cans he was passing.
“Wow, man, great stuff,” it said. “A fucking dragon.”
The Dragon stopped and glanced around. Three boys were
lounging by the garbage cans, sucking on a hand-rolled ciga－
rette. “I beg your pardon,” the Dragon said politely.
“Holy shit, man,” the second boy said. “He fucking talks.”
He took another drag on the cigarette.
“Hey, Luis, what kind of weed is that?” the third boy said.
“Why don't you share . . . “
He stopped, his eyes widening. “Fucking A. It is a
dragon.”
“I beg your pardon,” the Dragon said. “Have you by
chance seen the Son of Man?”
“Fuck, no,” Luis said. “He a friend of yours?”
“What's he look like?” his friend asked.
“Well,” the Dragon said seriously. “He'd be standing in the
midst of seven golden lampstands, clothed with a long robe,
with a golden girdle round his breast, his head and hair white
as white wool, his eyes like a flame of fire, his feet like bur­
nished bronze, refined as in a furnace, holding seven stars in
his right hand, and a sharp two-edged sword issuing from his
mouth.”
"Holy shit," Luis said. "The last place I saw anything like that was at Disneyland."

"Disneyland," the Dragon repeated. "Can you tell me how to get there?"

The Son of Man was not at Disneyland. The Dragon could not figure out exactly what was supposed to be at Disneyland. He had already swiped the head off of a pirate and jousted with an unidentified hero. Most terrifying of all, he had been pursued by thousands of small, mechanized daemons who chanted, "It's a small world after all . . ."

The Dragon was tired. He slumped on his bench, dreaming of the pits of fire he had left behind. In the distance, a figure approached. He was ugly, with an oversized head and great black ears, but somehow, there was the air of an unstoppable force for the good about him. Perhaps it was the unyielding smile of good cheer on his face, even as venomous children surrounded him, shrieking, "Mickey!"

The Son of Man had come at last. The clumsy bounce and the silly wave were a little disappointing next to the promised power of a thousand unsilenced voices, but the Dragon was too relieved to care. Wearily, he lifted each of his seven heads, wondering how best to penetrate the mass of small children.

"Fabulous," a voice shrieked. An elfin, bearded man scammed across to where the Dragon sat. He circled the Dragon admiringly, then clapped his hands. "Fabulous," the elfin man repeated.

"We've found the star of 'Return to Tartuni,'" he shrieked to the two assistants that dashed up behind him. "Can't you see him defending the rebel base?"

He plumped himself down next to the Dragon. "Can we talk?" he asked confidingly. "I can get you out of this crummy place. I can make you a star."

Irritated, the Dragon tried to peer past the two assistants. The black-eared Son of Man had disappeared back into the crowd.

The elfin man nudged the Dragon and nodded significantly. "There's more than just the movie fee. There's licensing—stuffed animals . . . Lunchboxes!"

The Dragon sucked in his breath for a roar that would knock even the two-edged sword right out of the Son of Man's mouth. He opened his mouths and bared his 322 fangs.

"Fabulous," the elfin man squealed.

Then the Dragon stopped and thought. He thought about the Four Horsemen galloping somewhere in the Middle East. He thought about Abbadon back in the pit, happily torturing damned souls. Mostly, he thought about the Son of Man, who hadn't even bothered to show up. The Son of Man, and a Malibu beach house, with a deck for drinking Pina Coladas. The Dragon had always had a weakness for Pina Coladas.

"Let's talk," the Dragon said. "I may be able to help you out. At least until the Son of Man comes."
"As I watched, all the stars in the sky drew together into a glittering dance that filled my eyes, a moving cathedral of multicolored lights around which the shapes of angels flashed and sped. The whole cosmos spun as I felt myself drawn toward the core of the dance. As it rested, the deep harmonies of divine music filled the air and the image began to open itself, letting the blinding light of heaven turn the night into day. In that glowing column transcendent figures moved, and I let myself be drawn toward it. The light enclosed me, an angel took my hand, and I entered into the light..."

Those words might have been written by Hildegard of Bingen, Saint John of the Cross, or any of the great Christian mystics of the last millennium. In fact, I have only used their style to describe the final scenes of Steven Spielberg's 1977 film, Close Encounters of the Third Kind. The encounter is with the aliens, creatures from beyond the stars; but Spielberg's imagery is clearly that of the mystic's communion with divinity.

This is not the traditional imagery of "alien encounters." Since science fiction had its beginnings as a genre late in the nineteenth century, the image of the alien has been, to say the least, negative. To anyone who grew up eagerly reading pulp magazines like Amazing Stories and Weird Tales, the BEM, the "bug-eyed monster" who appeared in a thousand forms on the covers of these magazines, was the alien. The spidery forms of H.G. Wells's Martians in War of the Worlds (1898), scary enough at the turn of the century, still frightened people when Orson Welles and the Mercury Theatre broadcast their version of the story on Hallowe'en in 1938. Ridley Scott's 1979 film Alien further intensified the horror as its title turned image into archetype; and now in 1986 we have its sequel Aliens, which one critic called "the most terrifying movie I have ever seen."
Why has the extra-terrestrial alien been pictured for so long in such terms? One answer might lie in the Western [and especially Anglo-Saxon] tradition of xenophobia, "hatred for the foreigner," a term to which the Greeks first gave concrete meaning in their assumption that anyone who didn’t speak Greek sounded like a dog barking: "bar! bar!"—whence our word barbarian. Whatever the Greeks may have thought of them, however, those barking barbarians were in fact human.

Intra-human xenophobia has been systematically analyzed by anthropologists in recent years in terms of a culture’s tendencies toward the esoteric (that which defines "us" as a group) and the exoteric (that which defines "them" as "not like us"), and it hardly seems strong enough as a source for the monster images that terrify us in films like War of the Worlds and The Thing.

For as long as the BEM has dominated its stories, however, science fiction has also shown an undercurrent of imagery that perceives aliens in neutral or even positive terms, and I believe that one particular work, Arthur C. Clarke’s novel Childhood’s End, is not only crucial in changing that undercurrent to a major trend, but suggests an alternate explanation for the negative imagery.

Published in 1953, four years before Sputnik, Childhood’s End begins in 1975. The USA and the USSR are racing to be first to dominate space. Suddenly, over every major city on earth, a giant spaceship appears in stationary orbit. The aliens on board announce that war on earth, as well as most social injustice, will end now and they demonstrate they have the power to enforce their will. These aliens, the Overlords, do not descend from their ships, communicating their will by radio. Only in 2030, after the rule of the Overlords, in spite of some opposition, has produced a "golden age" on earth, does Karellen, the Overlord Supervisor, finally appear on earth, and the Overlords turn out to have the shape of horned devils.

They are, we learn, servants of the Overmind [a kind of cosmic consciousness] sent to preside over the birth of a new entity out of the human race, its merging with the Overmind. Themselves incapable of such a development, the Overlords have served countless times as midwives at the emergence of new races; and our archetypal fear of "the devil" comes from the Overlords having conquered this world after being forced to leave another," and the contrast between their appearance and their intentions does reflect the supposed ambiguity of Milton’s attitude toward the Devil.

The Overlords, in spite of their appearance, are clearly benevolent aliens. The Overmind, on the other hand, is something transcendent, beyond human comprehension. The "childhood’s end" of the human race, its merging with the Overmind, involves the death of humanity as we know it. As a concept, the Overmind is something like a Unitarian’s view of God. The human race’s "merging with the Overmind" through its own death is remarkable similar to the "becoming one with God" postulated as the goal of Christian salvation.

"The words quoted are the title of a story published in 1950 by Eric Frank Russell. Alien Encounter was the initial title of a 1978 UFO invasion film with Christopher Lee that hit the theaters shortly after the success of Close Encounters of the Third Kind. Under threat of a lawsuit by Steven Spielberg, its name was changed to Starship Invasion: See Gene Weight, The Science Fiction Image (New York: Facts on File, 1983), p. 285.

The "BEM" image of the alien has not been studied with any care, though it appears as an entry in The Science Fiction Encyclopedia ed. Peter Nicholls, (Garden City NY: Doubleday, 1979), p. 65. In J.O. Bailey’s classic Classics Through Space and Time: Trends and Patterns in Scientific and Utopian Fiction (Westport, CT: Greenwood Press, 1975; orig. 1947), the term "alien" doesn’t even appear in the index, though one subsection (pp. 216ff.) is titled "The inhabitants of a strange world." Joanna Russ’s 1966 speech to a science fiction conference in Philadelphia titled "Alien Monsters," published in Turning Points: Essays on the Art of Science Fiction, ed. Damon Knight (New York: Harper & Row, 1977), pp. 132ff., in fact applies the term to the "because" stereotypes—aliens are too prevalent, and Peter Nicholls’ essay "Science Fiction: The Monsters and the Critics," Science Fiction at Large, ed. P. Nicholls (New York: Harper & Row, 1976), pp. 150ff., deals with a whole group of SF stereotypes, of which the BEM is only one. Mark Rose’s Alien Encounter (Cambridge, MA: Harvard University Press, 1981) generalizes the image so that it becomes a metaphor for the whole genre. The best survey of the alien image I have found is the entry "Aliens" in Nicholls’ SF Encyclopedia (cited above, pp. 228ff.).

Ovion, one of the menacing Bug-Eyed mistres in Battleship Galactica, ©1978 by Universal City Studios, Inc.


©1978 by Universal City Studios, Inc.
Are we dealing here with theology rather than science fiction? In his two films, 2001: A Space Odyssey (1968) and 2010 (1984), Clarke carried both the imagery and the "theology" of Childhood's End further. In the earlier film, a mono­lingual "sentinel" left on the moon millennia ago by alien intelligences is found by lunar explorers. It sends a message traced as heading out to Jupiter, and an expedition, the "space odyssey" of the film's subtitle, is mounted to investigate. The quest involves a conflict between astronaut David Bowman and the ship Discovery's computer Hal, which George Slusser describes as "a Cain and Abel situation." Reaching Jupiter, Bowman finds in orbit a gigantic monolith like the one on the moon, a "star gate" that takes him on a "light show" trip through hyperspace. The trip and Bowman's return to the vicinity of earth as a cosmic infant are a restate­ment in individual terms of the "emergence" of the human race into a new stage of existence at Childhood's End. (The scenario is obscure at the end of the film, but explained more clearly in Clarke's books based on the movie.)

In 2010, telemetry shows odd disturbances in the orbit of the Discovery, still circling Jupiter, and a second quest is undertaken, a joint American-Russian venture that departs in an atmosphere of severe and mounting superpower tensions. The crew discovers that there is indeed "someone out there," and the film ends with the ignition of Jupiter into a new sun and a message of peace and warning from "David Bowman" and the ship Discovery's computer Hal, which sends a message to humanity. Both films, and the latter especially, imply something like the Overmind as a component of Clarke's filmic cosmology.

Clarke was not, of course, the first to tie themes of alien contact to matters of theology. H.G. Wells had implied God's plan as the source of defeat for the Martian invaders. The Ransom trilogy of C.S. Lewis (Out of the Silent Planet, 1938; Perelandra, 1943; and That Hideous Strength, 1945) start as tales of trips to Mars and Venus and alien contacts, but turn out in fact to be thinly disguised Christian apologetics. The impetus given by Clarke did not, however, have an immediate impact on science fiction films and television.

Where many Americans met the most aliens, of course, was on the numerous episodes of Star Trek, which first appeared on television between 1966 and 1969, and continued in a cartoon series [1973-1974], infinite re-runs, and three theater movies, with a fourth one now in the works. While the authors of its episodes, many of them well-known science fiction writers, generally avoided theological overtones, they also avoided the "BEM" syndrome. Most of the alien races encountered by the crew of the Enterprise were, while not necessarily benevolent, at least neutral. The typical problem was of stereotypes vs. understanding, and the only consistently hostile aliens, like the Romulans and Klingons, were nearly humanoid, very similar to Mr. Spock himself. While the series generally avoided explicit theology and the focus of all three of the theatrical films was on essentially human conflicts, Star Trek III: The Search for Spock implies resurrection.

15The image of the herd ad, archtype was also used by Nigel Kneale in his Quater­

man and the Pit (1968), released in the United States as Five Million Years to Earth, since the source of the archetype lay in "recruiting" visits to earth by insectile Martians at a time when man was just evolving from similar ancestors. In Kneale's story, the Martians intervened in the evolutionary process, an idea that Clarke may have borrowed for 2001.


18The 1951 short story of Clarke's which is generally taken as the basis for 2001 was called "The Sentinel": see The New American Religion through Science Fiction, ed. P. Warwick and M.H. Greenberg (New York: Delacorte, 1979), an anthology of stories, and The Transcendent Adventure: Studies of Religion in Science Fiction/Parody, ed. R. Reilly (Westport, CT: Greenwood, 1985).

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22J.R.R. Tolkien liked the first two books precisely for that reason, though he later rejected Lewis's Narnia fantasies because the apologetics had come to override the stories: see Humphrey Carpenter, The Inklings: C.S. Lewis, J.R.R. Tolkien, Charles Williams, and their Friends (New York: Ballantine, 1981), pp. 200, 246.

23Of the 78 episodes of the original series, only ten involved BEMs of the traditional sort; indeed, only 33 involved aliens of any sort other than Spock. One might have expected more aliens in the cartoon series, where expensive special effects weren't needed, and indeed thirteen of the 32 episodes do involve aliens of some sort, including one with "Bens" (broadcast September 14, 1974), but "Bens" is here the name of a neutral not benevolent alien. For information about these episodes, see Bjo Trimble, The Star Trek Concordance (New York: Ballantine, 1976). See also Peter J. Clark, "A Structuralist Appreciation of Star Trek," in The American Dimension: Cultural Mythos and Social Realities, ed. W. Armstrong and S.P. Montague (Port Washington, NY: Alfred, 1978), pp. 151.

24In the episode "Bread and Circuses" (broadcast March 15, 1968), they find a planet where a Roman-like civilization persecutes a small cult of "sun-worshippers," only at the end do Kirk and his crew realize that they are in fact "Son" worshippers. This is as close as Star Trek ever got to dealing with Christian theology. See Trimble (note 44, p. 69).
Some of the aliens in the television episodes indeed needed the help of Captain Kirk and his crew, and the friendly but helpless alien has become a frequent theme in more recent movies. In Spielberg's ET: The Extra-Terrestrial (1982), the alien has become a winsome waif befriended by children, though here too ET has the power to save his human friends (and, apparently, to return from death as well). Starman (1984) tells a similar story, though the alien is here able to take on human form, a positive inversion of the incubus image exploited in Invasion of the Body Snatchers and other films. In The Last Starfighter (1984), one of the more delightfully non-serious of recent science fiction films, it is no individual alien, but a whole transgalactic civilization that needs the help of one human being.

The theological implications return, however, in the Star Wars trilogy of George Lucas, which may be unique in film history in having been conceived as a trilogy. Luke Skywalker's quest to save the Princess and destroy the Death Star in the original 1977 film Star Wars (Part IV, according to Mr. Lucas, of a projected nonology) was only an apparent victory. In The Empire Strikes Back (1980) Luke is defeated but escapes, while his aide Han Solo is captured. Only in Return of the Jedi (1984) do we see Luke's final battle with the evil Emperor and the victory of the Rebel alliance.

The story was already recognized in 1977 by Daniel Melia as "one of the most common and oldest folk tales in the Indo-European world: 'The Dragon Slayer,' but Andrew M. Greeley quickly called attention to its religious implications: the transcendent but morally neutral Overmind of Childhood's End becomes an infinite power that contains, in Zoroastrian fashion, good and evil aspects in balance. The "dark side of the force" is explicitly imaged in Darth Vader's costume as well as his name; while the good side is never overtly or verbally identified with light or brightness, the weapon of the Jedi Knights, who serve The Force as the Overlords do the Overmind, is a sword of living light.

The trilogy is full of alien creatures, many of them anything but benevolent; some of them are BEMs indeed, Lucas's homage to the thirties tradition and to audience taste as well as exercises in "industrial light and magic." Alien encounters are not central to the narrative, however, but rather decorative demonstrations that the ultimate conflict of good and evil reaches far beyond the merely human.

The shift from a heavily negative image of the alien to the possibility of benevolent aliens and, indeed, aliens as saviors of man, has resulted in a clustering of alien figures in recent science fiction around two extremes, a polarity that could be defined most sharply, perhaps, by a detailed comparison of Close Encounters and Alien (1979). It does not, of course, exclude a middle ground of neutral aliens who are neither malevolent nor benevolent, but simply different. But the polar extremes are the images that persist in the mind and the media, and that have the power to move us.
Let me turn now, therefore, to some consideration of what this pattern may mean. Most of the stories I've mentioned, whether in film or prose fiction, belong to the type known variously as "the hero tale," "the quest," or (for Joseph Campbell and his Jungian disciples) "the monomyth." It is surely that narrative pattern which, for Western culture at least, has been most exhaustively studied by scholars of every kind. 21

The overall pattern of these tales is simply a journey and return: as Bilbo Baggins called his own quest in J.R.R. Tolkien's The Hobbit, "There and Back Again." But the pattern is complex in its details. 22 The action of its hero begins in a scene that, to the tale's audience, seems familiar "home grounds." From this refuge the hero is called by some intrusive threat or villainy, or by a mortal need. On the outward journey the hero must be tested, and sometimes obtains "magical" assistance, often in the form of an unusual companion, as a result of passing a test. The journey is difficult: a great distance, barriers that must be crossed in special ways. The object of the quest lies in a region very different from the "home grounds" familiar to hero and audience, what Tolkien called "faerie." 23 The hero's return journey, after defeating the forces protecting the quest object, is equally difficult, though different in nature: pursuit, return in disguise, claims of a false hero, revelation and transfiguration of the true hero, are events that often occur.

Joseph Campbell called this pattern "the monomyth," the ultimate Jungian archetype of human psychological development; for the literary critic Northrop Frye it was an overarching structure informing all of Western literature. 24 The pattern may have its sources in rituals practiced by the paleolithic

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hunters of ice-age Europe, but two aspects of it are especially interesting: the generally accepted assumption that this pattern has its roots in Indo-European myth, and the typical role-types that play out its action.

Both the roles and the imagery used to describe them are, I believe, far older than merely Indo-European. In The Gate of Horn (1948), the British archaeologist Gertrude Levy reconstructed the pattern of religious belief that produced the paleolithic cave art of Europe, and showed the transformations of that pattern down to the dawn of history in the eastern Mediterranean. What is most startling in her account is the persistence of imagery. The horned figure, the gate, the cave, the winding path, identity tests, the animal-human-divinity link, and the struggle between death and life formed a cluster of images already present in paleolithic European culture; and, though the outward beliefs and the rituals associated with this cluster changed over thirty millennia, both the images themselves and their interrelationship survived almost unchanged. As the modern forms of the quest myth described above suggest, the cluster is with us still, as an inevitable component of hero stories.

But what do these images mean to us? Students of the quest myth, beginning with Frazer in The Golden Bough, have progressively made clear that the hero's quest journey is from diurnal reality into the transcendent realm of divinity and death, and his divinity-aided struggle is with death, for individual and racial survival. In this mythic (or perhaps theological) context, the absolutes of life and death are the only referents for the terms "good" and "evil." The borderline between them, however, is difficult to define: a problem which has lain at the center of both theological argument and much poetic metaphor for centuries.

And so Arthur C. Clarke, in giving his benevolent overlords the form of horned devils, has called up associations, not simply with Christian theology, but with archetypal patterns far older than Christianity, patterns which strengthened Christianity as it absorbed them. Those concerns in the human psyche that led to the BEMs of early science fiction are the same that had created the image of the devil and the bogeyman. "Love thy God and fear Him," says the Old Testament. The God that we fear is the ultimate image of alienness, just as the God we love represents transcendent salvation. Clarke recognized this duality, and so has the recent tradition of the benevolent alien in science fiction.

With that context in mind, let us look, by way of conclusion, at two examples of this tradition: a very recent comic novel which, though reviewed quite favorably as mainstream fiction, lies in fact in the realm of science fiction; and a Ron Howard's comic/nostalgic 1985 movie Cocoon.

The heroine of Carol Hill's The Eleven Million Mile High Dancer (1985) is Amanda Jaworski, particle physicist and astronaut in an indeterminately near future who, as the novel opens, about to make the first trip to Mars in the company of an overachieving chimpanzee who steals cars. She has a cat named Schrodinger who spends most of his time sleeping...
so deeply people think he's dead. In the first half of the novel the emphasis is on the comedy of Amanda's relationship with two lovers and her cat, and on an absurdist view of the space program. But Amanda is also psychically sensitive; she is aware of things happening that she cannot understand, and by the middle of the book she learns that earth is simply a chance creation of GCB (the Great Cosmic Brain), and that its current difficulties are caused by a struggle between the Red and the Blue robots that seems to focus on which transgalactic group gets to ruin the earth first.

At this point the novel shifts gears and becomes a traditional quest. Amanda's cat is "stolen" by these cosmic forces and, sent off as planned to Mars, she takes her spaceship in search of Schrödinger, followed (by means too complicated to recount here) by her lover Donald Hotchkiss and an odd band of "magical" helpers. They are all plunged into the middle of a struggle between Universe 2 (our own), dominated by the masculine and mechanical GCB, and Universe 1 dominated by the female force Radiant 1. Amanda's central and heroic struggle is with "the Eleven Million Mile High Dancer," GCB's incarnation of a metaphoric image Amanda herself had used to explain Einsteinian relativity to schoolchildren early in the book. With the help of Radiant 1, Amanda and Donald successfully defeat GCB and the robot powers and escape back to earth with Schrödinger, having saved the earth from destruction.

One of the characters, a New Mexico sheriff named Rufus, watches Schrödinger return to earth like a meteor, cured of his sleeping syndrome. He speaks the novel's final words, in answer to his deputy's question, "Never saw a cat fall outa the sky like that, did you, Rufe?"

"Nope, never did, Eb," Rufus said. It wasn't the first and it wasn't the last of things Rufus had never seen before. He knew that now. And he knew he wasn't loco for seeing it. Seeing things that nobody else saw wasn't the stuff that made a man loco. Rufus knew that now. Not seeing things was what made men loco. He thought about that. Though they'd gotten all of it, the blue dots, the NERPs. But you never knew. Had to keep your ear out. And your eye. Catch 'em quick as you could, turn 'em upside down, and clear 'em. The only way. He was feeling better about things now. He knew he'd never see Maria again. But here was something. Hope. A little vigilance, and there was hope. He figured they might just make it now. Mebbe."

What Rufus knows is the lesson of most hero tales. The enemy is not the alien, but the human. The bogeyman is the creation of our own consciousness, the dark side of the cosmic force that is also our salvation. The questing hero, whether he fights the life-and-death struggle in the Cosmic All or in the wilderness of his own subconscious, must return to present reality, and the quest makes sense only when mythic imagery is translated into the painful grind of daily action.

A different approach to the alien image appears in Cocoon. In this film, several golden-agers in a Florida retirement home discover a functioning swimming pool in an apparently vacant mansion nearby. Undeterred by some large rough rocklike objects in the pool, the men swim there regularly and
discover that they are becoming rejuvenated, both physically and sexually, an occurrence that delights their wives. They soon discover, however, that the "rocks" are actually pods ("cocoons") containing aliens left in suspended animation by a failed interstellar expedition centuries earlier, and the commander of that expedition has finally returned to rescue his colleagues.

Though these aliens wear human "body masks," they appear as "angels" when they take on their own form: the sylphlike creatures of light we saw at the end of Close Encounters, but here more beautiful, powerful, and capable of flight. Their commander reluctantly permits the golden-agers to continue using the pool whose effects on them are so startling, and the men bring their wives. But the rejuvenation has negative effects on one of the men, resulting in a brouhaha that destroys the alien pods. These aliens, however, are not simply benevolent but understanding. The golden-age couples have rediscovered love and now fear its loss through death. The aliens offer to take them to their planet, where they will live long and happily—and in a scene that parodies the end of Close Encounters, the boat in which the couples are fleeing human authority is drawn upward into the light that will take them "beyond."

The aliens of Cocoon are saviors not of the human race but only of a few individuals, and the film is comic rather than epic; but the theological imagery remains. And so does the narrow line of perception that divides gods and demons; to a relative of one of the golden-agers, they are going to hell rather than heaven. We remain forever conscious of the dark side of transcendent forces, and so the devil, the bogeyman, and the BEM will continue to populate our fictions. But in an era where formal religious belief has either faded or renewed itself in a born-again fundamentalism that harks back to "us vs. them" tribal religion, it is not surprising that we have also found a renewed interest, through fiction, in the notion of a benevolent savior from "beyond the stars" who is not bound up in the dogmas of formal religious beliefs.
Word Dance

Electronic Creative Writing
and the Digitized Word

Richard M. O'Donnell

It is early in the century and you are on your way to the theater when your best friend pulls you aside.

"You don't want to go there," he tells you. "Come with me and see a moving picture show."

You are puzzled.

"What is a moving picture show?" you ask.

"Well..." says your friend, groping for words. "It's like a play only it's not. It's made of pictures that move."

Pictures that move? What an absurd idea.

"Don't try to figure it out now," says your friend, pulling you along. "Just come and see for yourself."

This is the kind of problem I face in trying to introduce electronic writing to most people. If I recommend that they buy bookware instead of a book, I meet with the same blank look.

Electronic writing is a technique for graphically presenting text on a video screen in a cinematic way using a microcomputer. The words themselves may move and change as in television commercials or the opening credits of motion pictures. The text may also be combined with sounds, music, graphics, and other special effects not possible on paper, but common in the electronic media. Sesame Street and The Electric Company, shows our children watch on PBS, have always tried to present the words of the day's lessons in an exciting manner. On these programs, texts fly across the TV screen. The word "fox" might chase the word "rabbit" until it jumps into the top of the "u" of "bush." Similarly, the opening credits of a horror movie may present blood-dripping titles and names wriggling onto the screen like ghosts until they suddenly come into focus.

Of course, creating cinematic texts for television or a motion picture takes the collective efforts of screenwriters, cameramen, directors, editors, plus thousands of dollars. But creating electronic literature of the sort I am talking about, from conception to the completion of a master program disk, takes only one person, the writer.

Any writer with access to a microcomputer can begin to program stories and poems in a matter of days. There are no
hidden tricks or mysteries about it. I may consider myself an
electronic fictioneer, but I am not by any means a real com-
puter programmer. All my work has been programmed
entirely in BASIC, the simplest computer language, which
anyone can learn in a few days.

Growing up in the early fifties, I am a charter member of
the first television generation. In my reading, I was weaned on
Wells, Verne, Burroughs, Asimov, Heinlein, and other science
fiction writers. It seemed only natural to me that on Star Trek
a crew member in sick bay would do all his reading off a
book-sized computer terminal. There was never any question
in my mind that computer fiction would be in my future; the
only question was, when would the technology progress from
science fiction to science fact?

The opportunity came in 1981 when I was enrolled in the
writer's workshop at Bowling Green State University. We had
just finished reading selections of fiction from a book called
Breakthrough Fictioneer. This is a collection of stories and prose
pieces that defy traditional conventions of storytelling. In some
pieces, words seem to appear anywhere on the page. There is
text on text. There are stories using photographs that have few
or no words in them at all. The works seem actually kinetic
and ready at any moment to leap off the page.

There was sharp debate as to what value, if any, the col-
lection had as fiction. At this point I noticed that according to
the copyright dates most of the stories were written just a few
years before the introduction of the microcomputer. I specu-
lated that some of the pieces failed not because of their con-
tent or form, but because the words were trapped on paper.
By the very nature of the medium, many of these stories
could not take full advantage of their kinetic energy. Program
them so that they could perform on a video screen and the
stories would really be able to leap off the page. These
authors, without realizing it, had anticipated computer fiction
and poetry.

Since the concept of cinematic creative writing was so
foreign to most of the members of the workshop, I decided to
bring examples of computer fiction to the next meeting, but I
could find none. In 1981, video games like Space Invaders and
Asteroids were the craze. But it was clear that publishers were
also aware that computer fiction was coming and that it
should be extremely lucrative. Robert Dahlin wrote in the
March 20, 1981 edition of Publisher's Weekly that "publishers
are seeking electronic rights to books whenever possible these
days. In other cases, an author's literary agent may retain
electronic rights to exploit later or to dangle before the publi-
sher for an increased advance." In the same issue, the direc-
tor of corporate development for Harper & Row was quoted as
saying that he was not threatened by the coming of electronic
books "because conventional publishers have the 'quality
authors' among their assets." This comment seemed irrelevant
to me.

The question in the publishing industry in 1981 was not
whether electronic books would become a reality, but what
form the electronic book would take. The more I read, the
more I realized that no one had the answer. There seemed to
be an assumption on the part of many in the publishing industry that you could take an already published book and program it to be read one page at a time off a video screen. This would be akin to the director of a motion picture assuming that a movie was the same as a filmed stage production. Ann Dilworth, editor-in-chief and general manager of Addison-Wesley, recognized this:

It's a trickier business than a lot of people thought . . . . The thing we're finding is that no book translates directly into a visual medium, so it's not just a matter of selling the rights to a book. It seems more and more that you require a totally new program. It's almost like you need a whole new way of looking at things. You can put the Scarsdale diet on the computer, but that's not enough. You have to do something creative, something jazzy with it to make it interesting."

Without ever having touched a computer, I had come to the same conclusion as Ann Dilworth. It was time to move ahead from the fifteenth century, when Gutenberg's press was the latest technology. When I suggested this to members of my writing program, several scoffed at the idea. When I pursued my interest by actually writing original electronic stories and poems as part of my thesis, I became an outcast. It wasn't that I was shunned by the others in the program or openly discouraged by the faculty; it was just that no one seemed to know what I was trying to do.

This was not true of the Computer Science Department. From the head of the department right down to the students, my thesis received enthusiastic support. I was allowed access to an Apple II microcomputer and the ears of Bob Fyfe and other computer programmers, consultants, faculty, staff, and student aides. To them, computers were a way of life and they were on the ground floor of a bold new communications revolution. The expression I heard over and over again was that with a computer nothing was impossible.

Within two days I was able to learn enough BASIC programming to create my first computer poem, "HELP!", which is still one of my most popular pieces. In this poem, three statements of a maniac chase the reader's eyes across the screen or "window," to use the computer term. The words of the poem are simple:

HELP!
I AM GOING TO KILL YOU
BUT I WANT TO LOVE YOU
PLEASE, COME TO ME NOW
HELP! HELP! HELP!

On paper this is unimpressive, but when presented cinematically the words take on a dramatic energy. The word "HELP!" flies out of the upper left corner of the window and races toward the center of the monitor. It is obvious to the reader that someone is in trouble. This is repeated until a diagonal column of "HELP!" is stretched from the top to the bottom of the screen. Next, the entire column is pushed up out of view by a second column of "HELP!" appearing at the bottom and ascending upward. It seems to the reader that the victim is changing directions as if unsure where the attack will come.
As the second column reaches the top, the word "HELP!" enters again from the upper left hand corner and flies downward forming a second descending column, but this time the letter "H" is left trailing after the word as if a victim is screaming. Suddenly a montage of the poem's three central clauses pounces from above. It descends, filling half the window completely, but the words change and intermingle so swiftly that the reader has difficulty determining what is being said. This confusion is intended to mirror that of real victims when they are first attacked. The montage disappears suddenly and, repeating the same technique of descending columns, each line spoken by the maniac falls on the victim one after the other. This is repeated twice. Although the lines are moving very rapidly across the window, the technique of forming a column allows the reader to clearly see what is being said before it is erased. The poem finishes with a triple cry for help, again using a descending column. The duration of the entire poem is 30 seconds. On film, this would take hundreds of frames to complete, but using a computer, it took only a small BASIC program.

The computer I was using was right next to the front door of the lab. Every day someone would stop and ask me what I was doing. It was not unusual for me to look behind me and find someone staring over my shoulder. Some would even pull up a chair. Most had never thought of the computer as a fine arts medium, and I took advantage of their interest to get feedback on the stories or to discuss programming problems. Before this, all my conventional writing had been done in private; for the first time, I felt as a painter must feel when he paints in a public place.

For a year I was isolated from the creative writing program. Although I was in a building just a short walk across the commons, I was unable to persuade anyone to come over and read the electronic portion of my thesis. Several were honest and told me they hated computers and all they stood for, but others would be vague and put me off. One faculty member read my print stories but refused to read my electronic ones because computers numbed his "artistic sensibilities." Then in 1982 the English Department bought an Apple Ile microcomputer to be used primarily as a word processor and put it in the General Studies office right under the nose of everyone in creative writing. I deliberately divided my computer time between the Computer Science Lab and the English Department just so members of the department could look over my shoulder the way students were doing in the other lab. I received the same reactions from people in the humanities as from those in computer science. Still, several members of the department refused to look; one graduate student even held his hands over his face when he came into the General Studies office so he wouldn't accidentally glance at the computer screen.
But these diehards quickly became the minority. I discovered that there were computer enthusiasts in the English Department popping out of the closet, primarily for the introduction of Computer Aid Instruction (CAI). Foremost of these was Jim Karpen, a doctoral student, who was put in charge of introducing and helping the faculty learn how to use computer systems. He was in the middle of writing his doctoral dissertation, *The Digitized Word: Orality, Literacy, and the Computerization*. In it, Karpen describes "a word stored in a computer as a 'digitized word' because it ultimately exists not in the form of alphabetic characters on paper but as electronic binary digits in computers. The digitized word is fundamentally different from the printed word and is having . . . revolutionary consequences for literature, information management, thought processes, and education—just as the printed word had revolutionary consequences in these same areas in an earlier time."

I have described how, in "HELP!!" digitized words appear on a screen in a cinematic manner. David Hughes of Chariot Communications and former editor of *Sourcetrek*, an on-line literary magazine electronically based in The Source computer network, describes the way digitized words appear on the screen as a "Word Dance." In a recent letter to me he wrote:

> Word Dance springs from my sensitivity to what goes on between the eye, consciousness, and the mind when words appear in the form of light on screens, rather than ink on paper, particularly when there is one or more human intelligences connected in real or "close" time to the system.

> The notion is fairly simple . . . Ever since Man first tried to put down marks on a cave wall, representing voice sounds, he was compelled by the characteristics of light on fixed surfaces to place a second mark next to the preceding one and another mark next to that one (else on top of each other they would have merged into unintelligibility) and so on until the utterance was finished. We went left to right, the Arabs went right to left, the Chinese went up and down.

> In computer stories using digitized words all variations are possible in the same piece. An author may choose to have the reader read right to left, then left to right, or up and down, or down and up. In some stories, I have presented my text from a center point moving out right to left simultaneously. James Karpen has suggested "that the major reason fiction developed such a rigidly sequential structure is simply that the printed characters necessarily occupied a fixed position in a page, which necessarily occupied a fixed position within a book, which necessarily remained within two covers, physically separated from other books." In contrast, bookware using the techniques of electronic creative writing is based on the fluid manipulation of "digitized words" instead of the permanent linear placement of words on paper. The number of variations is limitless. In electronic literature, language programmed with digitized words is versatile, instantaneous, and exists in a continuum of time instead of a sequence of pages.

In March of 1983, I learned that a literary journal in Canada called *The Alchemist* was accepting electronic stories and poems for a special issue on floppy disk for the Apple II Microcomputer. I contacted the editor, Marco Fraticelli, and
discovered that he had developed an electronic technique for poetry similar to the one I had developed for the electronic portion of my thesis. He had also published a short electronic chapbook of poems, *Deja Vu*, through Guernica Editions of Canada, 1983. In our correspondence, Fraticelli talked about how he developed his "Poems for the Computer Screen":

I pretty much stumbled into the whole thing. Initially, I bought a secondhand computer because I was fascinated by its possibilities as a word processor and filing system. Like most artistic types I felt an almost instinctive distrust of the computer. . . . Once I started playing with the computer, I realized that it provided certain capabilities that the typewriter didn't—namely SOUND, CONTROL OF TIME, AND MOVEMENT. Once I realized how really easy it is to manipulate these, I saw that I could not only take visual poetry one step further, but actually evolve an entirely new form, one that had not been possible previously because the technology had not been available to the public in general until recently.

Instead of publishing a special issue of *The Alchemist*, Fraticelli decided to publish my electronic stories and poems in a single volume titled *Rice Wine, Prose for the Computer Screen*, 1983. To our knowledge, *Deja Vu* and *Rice Wine* were the first two examples of electronic literature bookware ever published.

Finding Marco Fraticelli confirmed a suspicion I had had even before I began developing electronic creative writing in 1981: once writers began using computers, it was inevitable that a certain percentage of them would recognize the medium's unique possibilities and how they could apply them to their fiction and poetry: Thus David Hughes "stumbled into the whole thing" in much the same way that Marco Fraticelli did: "By the time I put my hands on my first microcomputer ... producing creative electronic literature was furthest from my mind. But from the minute I saw the back-space-and-blot-out of my first word processor ... I felt this was a revolution in the English language." 8

Because writers have various approaches to their material, it is understandable that many forms of Electronic Creative Writing should develop. I would divide these forms into four genres: Collaborative Writing, Interactive Fiction, Cinematic Writing, and Computer Assisted Writing. They are being published on software, electronic bulletin boards, and in on-line service networks such as The Source and CompuServe. Before I discuss the different genres, let me comment on these methods of publication.

**Methods of Publication**

The least effective publication methods for electronic literature are the electronic bulletin boards and on-line service networks. These are essentially large central computers to which users gain access through telephone lines and a modem (telephone hookup). In this medium, stories and poems are presented in much the same fashion as you would read them on paper.

David Hughes was the first writer to create an on-line, royalty-paid electronic vanity press, using The Source as its base, thus earning the title "poet laureate of the network nation" from...
Popular Computing in 1984. But he quickly realized the limitations of this method of publication. "I was convinced this medium was far from realizing its potential. I could not do more than the most primitive creations in Word Dance." The reasons are twofold: first, these services are primarily information storage and retrieval systems whose purpose is the management of information. For these purposes, it is usually most efficient for them to use the American Standard Code for Information Interchange (ASCII), which unfortunately is very limited for electronic creative writing applications. Second, online services can be very expensive. Not only is there usually an initial membership fee anywhere from $29.95 to several hundred dollars and a monthly service charge, but also a charge for the time you are on the system, plus long-distance phone charges.

To solve the first problem, David Hughes in late 1984 started a regional subscription conferencing system called CHARIOT, which uses a dual NAPLPS-ASCII system much more useful for literary purposes. There is little question that in time, network fictioneers and poets like Hughes will create powerful on-line services that will allow for electronic literature of all kinds, but until the second problem, that of cost, is dealt with, this medium will remain primarily a means for passing programs from one computer to another.

The best publication medium for electronic literature today is on software. Software is simply the sets of instructions that make a computer work. These instructions may come in different forms, but the most popular are the 5 1/4-inch floppy disk and the 3 1/2-inch diskette. After Rice Wine was published, it occurred to me that a new term was needed to describe software publication of fiction or poetry. Every time I told someone I had had a book published, he assumed I meant a paperbound book. So I coined the term "bookware" to describe literature that is written for the electronic medium and published on software.

Software is more portable, flexible, and adaptable than an on-line service, and costs less. Since many programming languages are available in floppy disk software form, the bookware fictioneer is not limited to any one language or one computer system, as with an on-line service. Interactive Fiction, Cinematic Writing, and Computer Assisted Writing are all bookware publications. Furthermore software, like a book, is very individual. The owner is secure in the knowledge that his bookware is safe on the shelf; he is not dependent on networks which may be down, fearful of costly long distance phone bills, or limited by inconvenient access times.

The real restriction in bookware publishing is the software's limited memory storage. An on-line service can house an entire library of information. A floppy disk can store as much as a novella, and a 3 1/2-inch diskette can hold a standard novel, but this is misleading. In electronic creative writing, the text and the computer program that runs the text must exist side by side in the same storage space. A poem with complicated visual effects may take up as much storage
space as a short story. Graphics in particular take large segments of memory on a floppy disk. The restricted memory space, more than any other factor, determines the form of a bookware.

**Collaborative Literature**

Collaborative Literature is the most traditional and least innovative of the four genres of electronic creative writing, partly because it is dependent on on-line services, but primarily because the finished product is traditional in form. While Cinematic Writing like "HELP!" must rely on computer programming (or the lack of it, as with ASCII), Collaborative Literature takes advantage of the computer's information management abilities which are innate to on-line services. In its simplest form, Collaborative Literature is an extension of the campfire story where one person starts the story and everyone takes a turn at adding a new installment. To write this type of fiction through the mail is time-consuming and cumbersome, and there is the expense of postage; but electronic mail is instantaneous and versatile, and since the writing groups are usually local or have immediate access to the same system, the bulletin boards are free. One such collaborative fiction is the EIES Soap Opera. In it, the network participants take turns making up characters and telling their stories. One character, Starv (a starving artist), "tried to hustle a grant, failed, fell in love, fathered a child, cloned himself, left his lover, tried in vain to return to his lover, attempted suicide, and battled a space creature who was trying to populate the earth with humanoid 'disco snakes.'" The emphasis in Collaborative Literature is on creation and the writing process rather than on the finished product. For this reason, I recommend Collaborative Literature as an excellent way to introduce beginning writers to traditional creative writing, word processing, and computer networking, while still offering established writers a new outlet for artistic collaboration.

I believe it is only a matter of time before writing workshops and authors around the world realize they have the potential for instant communication with every other writing workshop or author with access to a microcomputer and a modem. Indeed, following the same line, colleges and universities, most of which already possess powerful on-line services for their own communities, could standardize networking to the point of establishing fully accredited electronic colleges.

**Interactive Fiction**

The second genre of electronic literature mentioned above, Interactive Fiction, is published on software even though it requires a complicated computer program and large blocks of text and so is hampered by the lack of storage space on floppy disks or diskettes. Still, it is the most popular and commercially successful of all digitized literature. There are over one million Interactive Fiction readers and more than 150 text adventure titles available from a dozen software houses. There are also hundreds more text adventures circulating in
the electronic underground. One bookware item alone, ZORK, has sold over three quarters of a million disks since it was introduced in 1979. In Interactive Fiction, the reader is the protagonist and controls the linear movement of the fiction. The plot is fluid, and at frequent junctures the reader can decide what happens next. This can be done through a list of control words or phrases such as “take,” “fight,” “go,” “run,” etc., by which the reader actually “talks” to the bookware. The following is what happened to me, for example, when I came face to face with a mirror at the end of a long hallway in the underground empire of ZORK III. I was sure there was a way to go around the mirror, or through it, but I wasn’t sure how. The following is the way the text appears on the video screen:

> > LOOK IN MIRROR
A disheveled adventurer stares back at you.
> > ENTER MIRROR
You hit your head against the mirror as you attempt this feat.
> > TAKE MIRROR
You can’t be serious.

In drama, the notion of direct audience participation is not new; and this is, of course, the formula for television game shows. But for authors used to writing first- or third-person stories in the past tense, audience participation is hard to accept. It means giving up part of the control over the fiction to the reader. At a 1976 Symposium on Fiction, William Gass made it clear that he did not want a creative reader. “I don’t want the reader filling in anything behind the language,” he told Grace Paley.

Paley disagreed: “I think what you’re forgetting, what you’re underestimating, are the readers . . . . It’s perfectly true I can’t say everything about my block in the city. I never can, but I can say enough so that anybody . . . . can build up enough of the rest of it and recognize that block, maybe even in a better way than a kind of quantification of events and people and paving stones and rubble and pieces of brick. I think that is art . . . .” The deconstructionist school of literary criticism, deriving in part from the theories of Jacques Derrida, contends that the text and its reading are primary and not to be subordinated to considerations of the author, history, or other contexts. This trust in the reader’s ability to “fill in behind the language” and to “construct the fiction” is central in Interactive Fiction, and since there are numerous beginnings, middles, and ends in text adventures, description, settings, and characterizations take precedence over structure.

Unfortunately text adventures continue to be introduced to the public as games, so they have not been taken seriously as a new form of literature; many educators are reluctant to include them as reading assignments or course material. Nothing could be more misguided than this attitude. Although there is a game element, there is also plenty of opportunity for artistic use of language. The only limitation is the talent of the author.
While teaching junior-high-school English, I introduced non-traditional reading students to interactive fiction. They devoured it. During the week we read ZORK III, I had to drive the class out when the bell rang; they didn't want to stop reading. One of my problem students, who refused to even read instructions off the blackboard, moved from the back of the room to the front. He was so hooked by the stories and poems that he skipped lunch and study halls just to continue reading. Before I was forced to throw him out of the classroom, this "non-reading" student had read two chapbooks of electronic poems, three short stories, and all of The Alchemist literary electronic magazine besides getting a head start on ZORK. Many teachers are getting similar results. Dr. Chuck Dompa, a director of data processing for seventeen Pittsburgh area school districts, teaches a course on "Fantasy Simulation" for classes comprised mainly of elementary and high school teachers. They have reported "extraordinary results" with adventure games in their classes. Teachers have told me that once a student succeeds in the adventure game fantasy, he or she also begins succeeding in the other subject areas. Decision-making, deductive-inductive thinking, creativity, enrichment—every side of mainline instruction can benefit from the fantasy simulation in adventure games.” As readers discover that they have almost an author's control over the stories, they become intimately engaged with language in a way never possible before the digitized word.

Infocom, which published the ZORK adventure series, is the leading publisher of Interactive Fiction today. From the beginning they committed themselves to a format consisting only of text, defying critics who believe the future of Interactive Fiction is in graphics. They agree with Grace Paley, and have established a multi-million dollar corporation based on a faith in readers’ ability to create their own fiction beyond what is simply offered by the author. Infocom productions of ZORK I, II, III, DEADLINE, and HITCHHIKER, A Guide to the Universe, and other text and role-playing adventures are all true electronic novels and should be criticized as literature and not as video games. Unlike pulp novels, even the most poorly written interactive story has at least one complex, interesting character—the reader.

At present, the major drawback to writing a ZORK-style computer novel is that it requires not only an author, but a skilled computer programmer. This situation will change with the coming of self-programming computers, but that is still in the future. Also, most software houses are closed shops and will not accept submissions. Instead, they buy rights to a current best seller and hire a team of programmers to write the computer script, or the bookware is written by in-house experts and consultants; but, as in the motion picture industry, this is not a guarantee of either financial or artistic success.

The major drawback to the readers of electronic novels is their price. The $20 to $40 price range for interactive fiction makes it too expensive for most computer users to buy, and out of the question for most schools. To attack both the problems of cost and programming, Donald Brown created the world of EAMON and released it into the public domain free

Sources

Floppy disk publishers
Bookware Publishing
2219 Grafton Rd.
Grafton, Ohio USA 44044

The Alchemist
P.O. Box 123
LaSalle, Quebec
Canada H8R 3T7

UPTIME
*The Magazine on a Disk*
P.O. Box 299
Newport, RI 02840

Softdisk
3811 St. Vincent
Shreveport, LA 71108

EAMON Adventures
The Big Red Apple Club
1105 S. 13th St., #103
Norfolk, NE 68701
(402) 379-4680
[Membership fee required]

Adventuredisk
7210 N. Mercer Way
Mercer Island, WA 98040

Network
Chariot Communications
2502 W. Colorado Ave.
Colorado Springs, CO 80904
Modem: (303) 632-3391
of charge. He also created tutorials, or disk “utilities,” which allow any interactive fiction enthusiast the opportunity to write his own EAMON fiction. And Brown does this all with BASIC programming. There are over 100 free EAMON adventures and more are being written each month. These text adventures are so popular that an electronic disk magazine, called ADVENTUREDISK, was formed that is essentially an EAMON bookware-of-the-month club. The only cost to the reader is the price of a floppy disk and possibly a service charge from the supplier. I buy all my EAMON adventures from The Big Red Apple Club, Norfolk, Nebraska for $2.50 which includes the floppy disk. EAMON may not be as sophisticated or as long as ZORK, but the reader derives the same basic pleasure in reading.

Cinematic Writing
I have already described one of my Cinematic pieces, "HELP!,” in which the placement and movement of the words on the screen contributes to the aesthetic effect. In my other bookware publications, I combine the techniques of both Interactive Fiction and Cinematic Writing using BASIC programming even less sophisticated than EAMON. By adding “text-effects” I try to achieve a more dynamic presentation of the material than in other text adventures. I have tried my hand at bookware for children, in which cinematic effects are particularly valuable. They reward the children for making choices and keep their eyes focused on the screen. More important, cinematic text-effects accentuate the ongoing narrative for electronic fiction the same way concrete poetry accentuates the text in printed poetry. In my interactive story “Where's Santa Claus?” for example, the child must respond properly in order to restore the name of a missing elf to the screen. (See illustration.) By means of text-effects the dramatic action is heightened, the visual presentation of the material is more pleasing to the eye, and the story takes better advantage of the medium's intrinsic capabilities.

Computer Assisted Writing
If Interactive Fiction makes traditional authors uneasy, then they will find the notion of computer-generated poetry completely unnerving. The term implies that a computer can compose poems by itself, eliminating the author in the same way robots are displacing workers in the automotive and steel industries. This is wonderful science fiction, but let me say from the start: in 1986 there are no computers composing poetry. For now, the term computer-generated poetry is a misnomer; it should be Computer Assisted Literature (CAL). As Jim Karpen explains:

In this genre the poet writes a computer program and devises certain devices, certain sentence and phrase structures, without specifying the particular words which will fill the slot. Then the writer enters lists of words in data statements and the computer randomly selects words from the list and inserts them into a predetermined structure . . . . In other instances, the poet uses his computer program simply to help him juxtapose words
in interesting, new ways, juxtapositions that otherwise might not have occurred to him or her. In this case the poet uses the computer-generated product as rough material to be reworked and refined.  

An example of the former technique is "Dated Poems" by C. Orlock published in The Alchemist electronic literary magazine, 1984. In this poem the reader supplies his birthday and today's date and the computer program constructs a personalized poem based on the variables given. No two poems are ever alike. In the same issue, "31-It" by Michael Karl Ritchie is a poem based on a series of stanzas read in different orders. In both of these cases the computer does not create the poem; the author is "assisted" by a computer program which then constructs the poem.

One of the earliest programs of Computer Assisted Literature I am aware of is the ERATO program by Professor Louis T. Milic of Cleveland State University, 1971. ERATO is based on the first lines of modern poets databased to be retrieved in certain juxtapositions. Of the almost 1000 "poems" created by ERATO only the best 32 are included in the chapbook. On the issue of who is the poet, Dr. Milic is very clear. In the Foreword he writes, although random processes play an important part in the ERATO program, the success or failure of the effort is dependent upon a human agent. Someone has to choose the lines so that they will combine grammatically and so that they will make sense in the whole. Someone must select the alternative words so that they will be consistent with each other in almost any combination. Whoever makes these choices is the poet. The computer and the program merely carry out the decisions he has made. All the poems the computer and the program can produce are possibilities the poet has allowed to occur. In that sense the poems produced by this partnership are mine more than they are the computer's. But without the computer I would not have produced them.

ERATO, like Collaborative Literature, produces a Gutenberg-based finished product, but it is still electronic creative writing because it would not be possible without the assistance of a computer. This is different from the mere use of a word processor, which only facilitates conventional techniques.

One reason that I wish to encourage writers and educators to become acquainted with the electronic medium is so they can begin preparing themselves for the expert computer systems of the future, or AI, artificial intelligence. In The Fifth Generation: Artificial Intelligence and Japan's Computer Challenge to the World, Edward A. Feigenbaum and Pamela McCorduck write, "In the kind of intelligent system envisioned by the designers of the Fifth Generation, speed and processing power will be increased dramatically; but more important, the machines will have reasoning power: they will automatically engineer vast amounts of knowledge to serve whatever purpose humans propose, from medical diagnosis to product design, from management decisions to education." One of the purposes I propose to use these reasoning machines for is the creation of fiction.
Last Christmas a cuddly little teddy bear named Teddy Ruxpin took the country by storm. What made Teddy so special was that it was animated; its eyes and mouth moved while it told stories from a cassette tape placed in its back. I suspect few authors understand the real significance (or horror) Teddy represents. The Teddy Ruxpins of the future will not simply be an extension of an animated cassette player; they will be storytelling, reasoning robots with the ability to interact verbally and physically with their owners. When this occurs, the art of storytelling will have come full circle from the oral tradition of pre-literate times to a new oral tradition using artificially intelligent robots to deliver digitized literature containing the best of the writing and oral strategies developed over the last three thousand years.

Whether or not a robot, even a cuddly one, can have "intelligence" is not the question. The reality is that expert systems are designed to either assist or replace experts, and writers and educators are by no means sacred cows.

In the meantime, bookware is not going to replace books anytime soon. The cost of buying and maintaining a computer system is still too high. And people have a longstanding attachment to books that is simply not going to vanish overnight. When the motion picture was introduced, people still went to plays, and when television came along in the fifties, viewers still went to movies.

In fact, from my teaching experience, I have discovered that bookware does not compete with books because so many students don’t read as a leisure activity; but interactive fiction does directly compete with television viewing. Once a person is hooked on reading in any form, he will be more inclined to read materials in other media, especially fiction and poetry. Bookware, therefore, is not a threat to traditional books, but an alternative form of literature that I recommend highly as a means of introducing the television/video generations to reading.

What I do believe is that Gutenberg-based fiction is exhausted. Experimental stories today are so obscure and so seldom read, or are presented in a manner that is so unmanageable, as to be insignificant. Electronic creative writing offers a whole new range of techniques that in the hands of real literary artists can be at the same time profound and accessible. What is needed now is for more writers to start experimenting with the new medium. They will quickly discover that there are many disk magazines eager to publish good programs. There remain massive problems in the economic structure and practices of software publishers. Too often the present system proves the old adage “Garbage in, garbage out.” But serious artists in the new medium must not be deterred either by short-term difficulties in the marketplace or by the hostility of the more conservative members of the writing community. We will care for, study, and appreciate the legacy of traditional fiction, but we will not exhaust our creative energies as caretakers of the old forms. Our responsibility is to the expansion of our craft through the creation of stories that explore and establish the boundaries, if any, of the new electronic medium.
NOTES


2Publisher's Weekly, 20 March 1981, 27.

3Dahlin, 30.


6Karpen, 47-8.

7Letter from Marco Fraticelli, April 21, 1986.

8Hughes, p. 1.


10Hughes, p. 2.

11Hughes, p. 3.


14Hayes, 96.


17Hayes, 102.

18Hayes, 102.

19Karpen, 55-7.


21Beverly J. Jones, "Computers in the Arts and Humanities," The Computing Teacher [March 1982], pp. 28-31. A good program that bridges the gap between word processing and Computer Assisted Literature is "COMPULPOEM: CAI for Writing and Studying Poetry," written by Dr. Stephen Marcus, Associate Director of the South Coast Writing Project at the Graduate School of Education, University of California, Santa Barbara. This nationally recognized program aids the writer in the creation of the rough drafts. In this type of program the emphasis is on the writing processes and not on the finished poem.


23For the Apple II microcomputer, there is THE ALCHEMIST, which I edit, SOFTDISK, UPTIME, ADVENTUREDISK, and many club disk publications with readerships of several thousands like THE DISK NETWORK of The Big Red Apple Club.
No Pricetags, No Rejections, No Returns

The Creative Democracy of Mail Art

Joel Lipman

In the very midst of the arena of contemporary arts and letters, where competition for prizes, publication, and places in juried shows becomes fiercer every day, an international countermovement is taking place through the medium of the world's postal services. The participants in this subversive activity, whose creations are often called ‘mail art,’ instead of charging the highest possible prices give their works away; instead of seeking publicity and notoriety, they distribute their works without fanfare to a few chosen recipients—sometimes five hundred, sometimes only one; and when their works are exhibited in a show, as they frequently are, the one unbreakable rule is that every submission must be accepted and displayed.

Were I to tell the history of mail art, I’d begin archaeologically with primitive people hunting a common language, fashioning it out of the hodge-podge of grunts, glyphs, gestures, and strokes that evolved into alphabets and speech; I’d unearth the forms that have passed for messages between far-flung peoples, scour caves and ledges of hermits who scribbled cryptically to themselves, then comb the cells of medieval monks who wrote for their god. Somewhere in my historical miscellany would be a chapter on writs and letters carried by couriers across cities; another chapter would investigate signets and wax seals; in a blushing discussion, I would resurrect the romance of artfully perfumed invitations from lovers. The origin of mail art would be incomplete without an illustrated account of penmanship, calligraphy, incunabula, and type design. Handmade valentines belong somewhere in this lineage, and more than a note would be required to discuss the specific technologies: papemaking, woodblocks, rubber-stamps, varieties of movable type and printer’s cuts, stencils, photography and photostat. There’d be an appendix on phila-
telic design, another on concrete poetry, a third on collage, a fourth on artist’s books. And an essential chapter would consider the learning and unlearning of the academic curriculum of literature, art history, fine and commercial art.

Certain twentieth-century movements and artists, though they lack glue-on-the-tongue and the expectation of barking dogs as the postman rounds the corner, are important touchstones: Guillaume Apollinaire, André Breton, Tristan Tzara, Marcel Duchamp, Joan Miró, Max Ernst, Yves Klein, Gösta Adrian Nilsson, Kurt Schwitters; constructivism, dada, surrealism, and Fluxus. I locate the evolution of mail art in the above because of their attraction to found objects, collage, addresses, stamps, postcards, rubber stamps, and envelopes, as well as their penchant for artistic communication that often was marginal, ephemeral, collaborative, contrary to prevailing art politics—wild, disruptive, pattern-breaking.

Mail art (sometimes called postal or correspondence art) refers to a worldwide network of exchanges between creative artists. The term “correspondence” emphasizes text and letterwriting, and, spelled “correspondance,” as in an early 1970s group, the New York Correspondance School, suggests the constant flow of motion associated with dance. Labeling the genre “postal” art focuses attention on the mode of transmission, the international postal service, used to carry the artists’ work. The widely used generic term “mail” art lacks bias with regard to textual or imagistic intent and better suggests mail’s daily ephemerality.

Mail artworks almost always travel by conventional post and are sent without the expectation of their being returned to the sender; but there is an assumption of reciprocity—send and ye shall receive. Mail artists are usually not personal friends, but artistic correspondents committed to this medium of exchange and expression. The genre is non-commercial and for the most part ephemeral, and it ranges—sometimes ambiguously—from the sublimely personal to the overtly political.

Each year sees numerous mail art exhibitions in museums, private galleries, alternative arts spaces, schools, community centers, and private homes, and they range from formal and well-funded—such as the 1970 New York Correspondance School show held at the Whitney Museum of American Art or the XVI Bienal de Sao Paulo Arte Postal Exhibition displayed in 1981 and documented in a handsome, well-illustrated 136-page catalogue—to eccentric little theme shows like “Fake Contests and Other Mail Art Forms,” a display being mounted late in 1986 at an unnamed location in Greensboro, North Carolina. Exhibitions of mail art are governed by several fixed rules: all work received is displayed, thus assuring no jurying or censorship; documentation in some form is sent to all participants; the work is not to be sold; there are no returns. Violation of these well-established principles guarantees the offending curator loss of credibility and widespread ridicule.

Decorated envelope and letter to the author in reverse writing (1986) by mail artist Hedi Kyle, an artist’s bookmaker best known for her playful and intricate bindings. She lives in Philadelphia.
Exhibition participants are solicited by invitation from lists published in catalogues documenting previous shows, through general announcements in artists' newsletters and periodicals, and by word of mouth and mail. Once one contributes to a few shows he will likely be in the pool of those notified, by posted invitation, of upcoming exhibitions. This gallery process constitutes one aspect of the mail art network—its more public side. A second aspect is that of exchanges maintained, with considerably more privacy, between individual artists. There are artists who eschew exhibitions and send work only to individuals, as there are others who avoid personal exchanges and submit only to shows. Most do both.

Additionally, there are "circles" and "schools," as well as mail artists gathered around certain newsletters or periodicals such as the ARTCOMNET group of some three dozen artists worldwide who contribute to an irregular newsletter of that name [Larry D. Smith, editor; box 704, RD 1, East Freedom PA 15224]. The Fluxus artists of the 1960s were a prominent, visible group, some of whose members formed the aforementioned New York Correspondance School and displayed their work at the 1970 Whitney exhibition curated by NYCS members Ray Johnson and Marcia Tucker. Individual artists occasionally edit periodicals devoted to the genre: BILE is published irregularly by Bradley Lastname; Carlo Pittore edits ME; Mark Wamaling publishes Newark Press; Judith Hoffberg formerly produced Umbrella (the files of which are now archived in the UCLA Libraries). As is typical of small, independent periodicals, these publications come and go, depending on the interests, stamina, and finances of the editor.
The mail artist functions with two hands, each pulling in a different—though symbiotically joined—direction. One hand, in the studio where the work is fashioned and perhaps conceived, reflects the artist's particular methods and media. There are writers and poets, painters, conceptualists, photographers, sculptors and architects, video artists, printers. Frequently mail art crosses categories and mixes media and disciplines, experimenting with artistically irreverent technologies such as commercial quickcopy machines, blueprints, rubber stamps, and mailable constructions; there is considerable use of found materials and recycled imagery. Some artists constantly challenge postal regulations with unusual sized, shaped, or wrapped objects—plastics, soft forms, bottles, mannequins, and tubes. Others house their art in simple or suitably modified postcards and envelopes, frequently of short-run or one-of-a-kind design. Such fashioning of materials is the studio work necessary for any participant artist.

The artist's other hand is in the mailbox. It's here one finds the day's arrivals, with each incoming piece, if deemed worthy, generating a reciprocal creative response. The mailbox (or PO. box, maintained by numerous mail artists) is often jammed with mail of various dimensions. My own often cannot be shut because of the prominently marked "ARTWORK—DO NOT BEND" written or stamped across the packaging. The spirit of each day's creative post is constant stimulus for the postal artist—to me, Sundays and holidays lack a mail day's potential, for the lid on the box remains fixed.
Rather than pursue a comprehensive analysis of mail art, I'd like to proceed now by commenting on the work of several individual mail artists, as the best way to convey the principles, the democratic personality, the mixtures of media, and the playful charm of this art form.

Morris Edelson, a native of Beaumont who now lives, with wife Melissa Bondy at 1811 Marshall, Houston, Texas 77098, for many years has edited the irregular literary periodical QUIXOTE, an unusually personal magazine that publishes poetry, personal letters, manifestos, found mail and reprints. Issues are anti-academic, filled with ephemera, often one-of-a-kind. I had not yet heard of mail art when I received, in the early 1970's, a handmade rubberstamp and paste-up issue from Lodz, Poland, where Edelson was spending a year teaching. I did not know what to make of this handmade scrapbook of a literary magazine, an extreme example of *samizdat* literature. Its basis was a common university bluebook, the cover slightly faded from exposure to ultraviolet light, the text block bulging and disorderly from various paperworks tipped-in and stapled to its 32 pages. There were postage stamps, short rubber-stamped poems and phrases, snapshots, envelopes from a variety of Edelson's correspondents, short sections cut from Polish and American newspapers and magazines, union newsletters, handwritten notes—but the magazine's gestalt overwhelmed individual elements of content. I knew Morris Edelson personally, as we'd both attended the University of Wisconsin-Madison during the 1960s and he had published one or two of my earliest poems on the smudgy Gestetner press set up wherever he happened to be living. He was anti-establishment and eccentric—for a couple of years he had made his home in a boiler room—but he had fashioned an odd prestige as a publisher of underground texts and renegade manuscripts and as a promoter of ephemeral art events. His efforts brought the Cleveland poet and collagist d.a. levy to the Madison community's Free University as its writer-in-residence. Though I lacked the insight to measure the merits of

*Samizdat: hand-made artist's literature circulated without official sanction.
the Polish bluebook with "Quixote" scrawled across the cover, I was enormously moved by receiving it and I responded with correspondence of my own, correctly assuming that what I sent him would make its way into a document that would end up in the hands of yet some third person.

Edelson and I have continued corresponding with one another in artistic friendship. He's published—in his unapologetic, careless fashion—two chapbooks of my poetry, prose, and visual art. He's recycled my work into his own writings in a manner that one concerned with the purity of origins and subsequent derivation might consider plagiarism—but instead I applaud the affirmation his re-use grants my texts. In all correspondence we relinquish our intimate stories, characters, and lives, and in mail art these things are transformed, rebuilt, collaged, and placed in new assemblages. In this artistic genre there is nothing sacred, nothing fixed beyond manipulation. The mail artist expects to discover his words and images, in altered form, in the works of others. Many mail art collaborations invite derivative use of another's imagery or language. This loose attitude toward creative ownership or copyright encourages a participatory transmission system that expands into a worldwide artists' network.

Christina, like a celebrity “famous for fifteen minutes,” uses only her first name. In 1980, when I began corresponding with her, I didn't realize how pervasive the one-name handle or tag was in the mail art world. Now I hear from the likes of Dogfish, Random, Dazar, Richard C., and Xeno, as well as from artists operating with such noms de plume as Radio Free DADA, General Idea, Epistolary Stud Farm, Scarlatina Lust, and Chuck Stake. Occasionally I sign a mailing with only my last name (Lipman) and join in the masked whimsy that seems easier to assume when one casts off the conventional apparatus of a standard name.

A commercial artist, Christina works in the high-tech environment of advertising and graphic design, and her postal artworks exhibit a dazzling slickness of surface and mastery of materials and technique. To announce a change of address, an event necessitating planned communication for an active mail artist, she designed a marvelous pale-green-on-grey cardstock flyer, complete with halftone screens, bold numerals and a circular map, the centerpoint of which was her new address on Canyon Street. All elements of the folded sheet contributed to its visual beauty and motion, with the bullseye center the house where she now receives her mail. An earlier mailing displayed a similar keen sense of materials—a collage, uncluttered, with a combination of old and new images, a nineteenth-century engraving of a horse brush alongside IRS form 1040. These cleanly xeroxed materials were laminated in heavy plastic, 1/16 of an inch thick, one side's surface glossy as picture glass, the obverse cloudy and crinkled.

The effect of the juxtaposition—the impersonality of a plastic-encased mailing with my name handwritten beneath a thick layer of laminate—was astounding. In mail art there is a
consistent interplay between such personal and impersonal elements—an unsettling, collagelike quality that presents common visual or textual material in a surprising manner, not so much disorienting as reorienting. George Myers has written that in collage, reality becomes “the subjective vision of the artist.” My name was visible far beneath the plastic; I could cleanly see it, handwritten as the top line of an address (my street number, city, state, zip code), but could no more touch it than grasp the similarly buried details of the horse brush. The laminate’s depth changed the dimensions of the address, while the postmark’s stamp dated the work.

Like a garden that in Spring sprouts volunteers from the previous year’s surviving and forgotten seeds, a postal artist’s mailbox abounds with arrivals from dormant and distant plantings. The sleeping memory is called back to life; a correspondent is out there, who, three or four days earlier, lifted the steel handle of a mailbox and, with proper postage affixed, sent out his or her creation. It is time to reply.

**Dazar** ranks as one of my favorite mail artists. I generally send her drafts of poems I’m composing—ones close to completion, as opposed to copies rough and thick with the marginalia of penciled-in adjustments. I presume Dazar is female, an assumption which could be incorrect, though this prolific artist’s colors, choice of imagery and border art, as well as the tone of her short responses to my mailings all suggest femininity. She sends notes praising my verses and fills her envelopes with sheets of artist’s stamps, a delightful genus of work widely produced by correspondence artists. These perforated,
glue-backed sheets offer either a repeated image or variety of images one per section and can be affixed to envelopes along with the appropriate postage. Artist's stamps, sometimes spelled "artistamps," are usually designed by painting, drawing or collaging an image, then photomechanically reducing it to the desired size. Some stamps mimic historical, national, and philatelic designs, while others boldly ballyhoo their individuality. Some artists print their stamps on handmade paper. Imitating official postal services, artists coin identifying terms like "Doo Da Post," "FluxPost," "4-U-2 Post," "Post ME," and "BananaPost." Most of Dazar's are tagged "Dreampost" and printed with the glossy, distorted hues characteristic of color Xerox.

Her work is sensual and radiant, a fusion of regenerated and invented forms and techniques—a derby hat or collection of primitive sculptures framed by a mechanistic computer graphic, photographs of the moon's surface bordered by a crudely hand-drawn grid or a sheet of stamps with such unlikely juxtapositions as Einstein's eyes, a jackrabbit and a vintage B-movie flying saucer. From the mailbox at 5305 South 122nd in Omaha, she reaches out of the province of Nebraska and into the world beyond: the mail artist is only a few days from anywhere in the country, less than a week by air mail from a distant continent. Borders, whether regional, national, political, esthetic, or disciplinary, are leaped with a stamp and intriguing design. The international scope of this network puts the work of creative artists worldwide into one another's hands. Brooklyn mail artist David Cole recently curated Israel's first Mail Art exhibition, "The Scroll Unrolls"; in Budapest, artists have established the Artpool Archives and will display original stamp-sheets, postcard and envelope works at that city's Museum of Fine Arts in 1987; from Osaka, Japan, prolific silkscreen artist Ryosuke Cohen issues a seemingly endless stream of internationally-circulated mailings of remarkable variety and design; from Stockholm, through the mail art network's expansive reach, word of the Kulturhuset International Video Festival goes out from Peter Meyer, a well-known postal artist who corresponds regularly with nearly 1,500 people.

Which returns me to Dazar, who not only mails work under that name and Dreampost, but also under the imprints of "Neoist" and "Omahaha." She publishes the zany magazine Couch Potato, one of numerous Mail Art "zines." Somewhere behind it all she probably works for a living, at least to make postage. Regardless of her workaday life in that Nebraska city, her name[s], her dadaesque postal personality, and her whimsical imagery carry around the small ball of our planet infusing those temporary museums—the mailboxes of correspondence artists—with her generous creativity. Thus, the mail artist becomes an authentic citizen of the world.

ARTCOMNET is a mail artists' newsletter, edited by Pennsylvanian Larry Smith, and contributed to by over 30 artists from a variety of countries. It arrives on no particular schedule, produced by Smith or an occasional guest editor, when time, resources and submissions warrant publication. The
format is stark and simple, low-tech—8-1/2 x 11, white photocopied sheets stapled together. It's unpretty but functional, basic transportation for both commentary and illustration, and Smith has kept it going for over 20 issues, never asking for a cent, only for news, artwork and correspondence.

That he gets, and the 16 to 20 pages of a typical number are loaded with graphics, working models and drafts of designs, letters, notes and queries between participants, announcements of upcoming postal art exhibitions and projects, and editorial commentary. The editor prods the network with questions about techniques and objectives, offers suggestions as a kind of subtext to featured work, praises what he appreciates and prints without comment an array of submitted material. He routinely welcomes new members. As is the case with many mail artists, his interests are multiple and he maintains, as an adjunct activity, a "manifesto archive" of position papers and polemics.

The participating members of ARTCOMNET are a productive group, editing a variety of independent publications, operating small galleries in their respective communities, working in the graphic, literary, commercial, educational, and artistic worlds. Mark Block publishes Panpost and Mick Mather 4-U-2
Post, prototypical mail art magazines; both men have curated mail art exhibitions. Klaus Peter-Fürstenau is a skilled printer who designs small artists' books. David B. Greenberger is a therapist and artist who has designed record jackets, silk-screened pseudo money, and edited over 70 issues of The Duplex Planet, a unique periodical featuring interviews with residents of the Duplex Nursing Home, whose responses to mundane questions provide unusual insight into the minds and memories of the elderly (example: "What's going on in the news?" "Just the fact that I'm here—that's all I know."). Bern Porter, an active poet in his seventies, is known as the father of 'found' poetry.

ARTCOMNET is representative of the vast network—global, persistent, communicative, unapologetic, productive, and democratic. Its editor deems both the artistic work and the correspondence process valuable enough to warrant his time, creativity, and financial and organizational energies. Through ARTCOMNET's extensions, he reaches out from East Freedom, Pennsylvania, as participants Buz Blurr and Klaus Groh escape the artistic isolation of, respectively, Gurdon, Arkansas, and Edewecht, West Germany. Many artists live in localities far from their country's cultural centers.

While provincialism can provide a measure of tradition and isolate charm to one's artistic objectives, its impact can also be narrowing and, at worst, stifling. The mail artist, through individual correspondence, newsletters, and other networking publications, and through unjuried and adequately documented exhibitions, participates in and is nurtured by an international artistic dialogue. Because one cannot participate without producing and sending out creative work, the process of mail art combats artistic isolation and complacency.

Michael Kasper, an illustrator and writer residing at 106 High Street, Florence, Mass. 01060, produces typically humorous, contemplative broadsides, books, and postcards. His inventive lettering style combines the appearance of irregular typescript with that of the cartoon caption. His subjects spiral outward from a central concern with the tragicomedy of human experience. A mailing from Kasper caps any day, as he is intellectually provocative, as well as an excellent draftsman whose work exhibits the continuity of a pleasing and recognizable style. I'll receive single quick-copied illustrations from him and, a couple of months later, a book or tabloid placing the earlier work into an expanded sequence and more permanent format. Such correspondence art provides insight into the aesthetics and themes that obsess another's creative mind. Kasper and I have maintained the dialogue of our correspondence nearly seven years.

About five years ago, at a time when the volume of mail art I received threatened to overwhelm me, I established a couple of personal criteria: I would not respond to chain letters (yes, this phenomenon exists within the field of mail art) and would always write to my correspondents, as opposed to simply mailing a graphic or rubber-stamped card or envelope. I sought to encourage discourse and, as a writer, felt a special commitment to language and text. It was correspondence art, more than "postal" or "mail" art that intrigued me. Kasper
seems to share my focus upon language and our mailings routinely include letters, discussion of artistic concerns, problems, and breakthroughs, as well as personal chit-chat. I've developed a sense of his life that allows a fuller appreciation of his work. His letters have described reading excerpts from his witty book, *Billy Turn Down That TV*, between sets of a rock-n-roll concert; he's discussed being one of the editors of the *Northampton Herald*, an irreverent, well-produced, alternative newspaper; he speaks of accompanying his wife, a weaver, on the arts-and-crafts fair circuit. These concrete personal details provide a background for his art and speak to me of his concerns and pleasures, providing information that makes it possible to envision the man behind the mailings.

Mail art encourages active interplay between the artist's person and his persona, providing a respondent rare and intimate insight into the Janus-like dualities that inhabit the minds of many creative persons. Canadian mail art diva Anna Banana, in her essay "Mail Art Canada," (*Correspondence Art*, p. 263) writes, "The best part about mail art is that you don't have to be there in person to be in on the action." I would amend her comment, adding that, after a fashion, one is there with the artist, as the letters and personal commentary embodied in correspondence penetrate the artist's mask and technical apparatus. Michael Kasper, however, is unusual in exposing his personal affairs, and many mail artists elaborately disguise themselves through the use of pseudonyms, zany publication names, false corporate identities, and postal boxes.

**Carlo Pittore** is a prominent, internationally recognized mail art personality, a reliable correspondent whose gifts as a painter are unfortunately obscured by his outspoken championing of other correspondence artists and the issues that confront the network that binds them together. In a celebrated battle that ensued when, in February 1984, Dr. Ronnie Cohen used her position as curator of a mail art exhibition at New York's Franklin Furnace Gallery to violate mail art principles and exclude the work of numerous contributors from this prestigious show, it was Pittore who issued a ringing manifesto restating the important rule that everything contributed to a mail art exhibition must be properly displayed. He was noisy...
and alarmed about Cohen’s disregard for “this sanctosanct mail art concept” and he used the mail art network, art magazines, newspapers, and the WNYC radio talk show, “Artists in the City,” to expose her, declare her “no friend of mail art,” and force her to step down as the show’s curator. It was a flamboyant and multiple assault applauded by network artists around the world. "No rejections is synonymous with mail art, especially as the work is given and not returned," he rightfully exclaimed, continuing that her decision to reject and edit "denies perhaps the most unique and appealing feature of this universal movement" (Networking Currents, p. 1).

Ronnie Cohen had botched the job: no jury, no rejections, all work shown, and a catalogue of the show to all participants are the longstanding ground rules for exhibitions. These criteria protect mail art from the subjective censorship, starmaking, and critical tyranny generally present in the art world. They guarantee participatory democracy: if the third-grade class at PS 101 sends in 30 pieces to an exhibition, those efforts are displayed alongside the submissions of Christo, Bill Gaglioni, Jo-Anne Echevarria Myers, Leavenworth Jackson, and Richard Craven, technically mature artists with established reputations. The fallout from Pittore’s blast was considerable. Cohen not only stepped down as the Franklin Furnace show curator, she was forced out as moderator of the “Artists Talk on Art” panel discussion held that same month at a Soho gallery; the brouhaha was documented in The Village Voice (13 March 1984, p. 38); commemorative artist’s stamp sheets were printed inscribing the names of thirty-six of the contributors whose work Cohen rejected.

In late 1981 and early 1982 the mail art network was informed via announcements in periodicals, invitations from the organizers, and word of mail about an upcoming exhibition to be held in the town of Bergkamen, Federal Republic of Germany (West Germany). The community’s Department of Arts and Culture was sponsoring a mail art event, the theme of which was “Arts For Surviving” and it was expected that contributors would embody that idea in their submissions. Exhibitions developed around a particular theme are standard practice and active postal artists may receive several invitations a week to send compositions on various themes to galleries, cultural centers, museums, universities, and schools anywhere in the world. Bergkamen’s approach, however, was unusual, suggesting an extraordinary commitment of time and financial resources.

Artists were to send rubber stamp designs, from which rubber stamps would be made (the process is not complex, requiring essentially photography, a simple galvanizer, trimming and mounting). Then a book would be bound, with an introduction and contributors’ list printed and wrapped around a text block of blank pages; these unprinted pages would then be stamped by residents of Bergkamen, using rubber stamps fashioned from the contributors’ designs. A copy of this book was to be sent to all participating mail artists. Needless to say, this constituted an elaborate and rather costly project, requiring Bergkamen’s dedication and planning. A unique and handsome book resulted, 280 pages of well-bound text combining...
coated and uncoated paperstock, offset printing and hand-stamping, essays, and halftone illustrations. Artists from twenty-eight countries contributed: along with numerous participants from eastern and western Europe, the United States, and Brazil, material arrived from South Korea, New Caledonia, Cuba, Australia, Japan, and Colombia. Understandably, or perhaps ironically, the first pieces bore Argentinian postmarks—the deadline for submissions came at the time of the Falklands War.

Whether one is an exhibition curator, polemicist and signatory of widely-circulated manifestos, or participant mail artist, it requires courage, dedication, and technique to be counted among this outspoken artistic community. Mail art is often topically inflammatory and highly political. The transmission system exposes the artists to censorship, sometimes by governments and at other times by overreaching postal authorities or protectors of public morality. Because many mail artists work spontaneously, perhaps hastily, one may be lumped among artistically and ideologically odd bedfellows—the absence of jurying exaggerates this possibility. Mail art's aggressive non-commerciality causes consternation to the capitalist mentality that dominates the bourgeois art world. Because one makes not a cent producing and exhibiting one's work, some rationale other than profit must motivate the artist. Among some mail artists the motivations are low level—ego gratification and exhibitionism; but among the more mature, one routinely discovers the artist's desire to fuse idealism with a concrete and physical creative object, along with the need to transcend the rigidly imposed boundaries the conventional art world imposes upon statement, medium and technique.

There are luminaries within the mail art network, artists who through their efforts, timeliness, energy and volume of correspondence, technical magnificence, or eccentricities, have ascended to the peaks. Ray Johnson is one such artist, whose mail art activities were documented by the mid-1950s and who is acknowledged as a progenitor of the modern mail art movement, founder of the New York Correspondance School, and as an artist who has done much to give credibility and popularity to the genre. The artists associated with Fluxus were a prominent, esthetically significant group who measured the pulse of the 1960s with dedication not only to correspondence art, but also with efforts in the areas of collaboration, happenings, art kits, intermedial and conceptual work. Fluxus artists advocated a "meta-form" that joined life and art, was accessible and socially responsible. Not only mail art, but new music, performance art, and concrete poetry recognize the work of the late George Maciunas (1931-1978), Emmett Williams, Dick Higgins, Nam June Paik, Jackson Mac Low, Dieter Roth, as well as numerous others associated with this distinctive cultural nexus. But one individual deserves uncommon notice—**Guglielmo Achille Cavellini** (16, via Bonomelli, 25100 Brescia, Italy).

A wealthy man whose fortune comes from a chain of Italian mini-markets, Cavellini has devoted considerable time and money to self-historification, with mail art serving as the medium by which he has advanced the project of himself. His
name, logo (embodying the centennial of his birth, 2014), and glossy creations have been sent to thousands of curators, archivists and mail artists. Over the years I’ve received several bound books (he refers to them as "Living Room Shows") documenting his life and works, enormous colorful autographed posters, decals, embossed T-shirts, postcards, stickers, artistamps, and sturdy binders. All this is produced with flair, self-consciousness, wit, and irony. His work represents a decision "to concentrate all of my efforts and to dedicate all of my imagination to the furtherance of my own work as an artist, and above all to the process of 'Self Historification.'" Cavellini doesn’t want art historians to recognize him only after his death, nor does he plan to leave the researching and indexing of his life to others. The mails provide a medium to make such documentation instant and continuous, and his wealth provides him with the opportunity to personally record his artistic existence. While being, perhaps, mail art’s most widely recognized personality, Cavellini stands outside the movement’s mainstream. The self-serving thrust of his work is unique, as is the glamor and expense associated with his person and performances—he has had correspondents flown to his villa and sponsored parades and festivals in his own honor. But riches grant him privileges unavailable to others, and his commitment to a self-promoted place in art history manifests a passion for rank and stature with which most mail artists are unconcerned. How many artists have written their autobiography indelibly upon a tailored raincoat and conspicuously worn it around the world?

Mail art is full of paradox: crude and childish junk is given equal exhibition opportunity alongside sophisticated, thought-provoking work; the famous and powerful are leveled to a common plane with nonentities using silly pseudonyms; mailings may be as intimate as a love letter, yet arrive without anticipation and unannounced; mail artists consider their works to be temporary, ephemeral as mayflies, whereas the art establishment is obsessed with preservation, conservation, and collecting; time-consuming, occasionally costly-to-produce creations are relinquished to strangers without thought of cost or financial return; personal mail is the transmission system for public display; traditional artistic categories routinely are breached. Such discontinuities grant mail art vitality as a process and make critical generalizations about the genre specious. But by the reciprocal understanding "Send and you shall receive," and the time-honored exhibition principle of "No rejections, no returns," mail artists worldwide have codified a simple formula that assures the movement a distinctive, fascinating place in the larger cultural history of our epoch.

**Sources**

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- Maria Otilia Bocchini, CATÁLOGO DE ARTE POSTAL: XVI BIENAL DE SAO PAULO (Pavilhão Armando Arruda Perreira, Parque Ibirapuera, São Paulo Brazil); 136 pages.
- Guglielmo Achille Cavellini, AUTORITRATTI: MOSTRA A DOMICILIO: 1981 (Via Bonomelli, 16-25100 Brescia, Italy); unpaginated.
Bumper stickers are peculiarly American. We like to use any available surface for graffiti. You won't see them in Europe, where car decor is monitored by the authorities. Like a T-shirt that reads "Kiss me, I'm Irish," the bumper sticker is a clamor for attention. Properly speaking, it is not a communication but a form of self-expression. Someone who carts around an old McGovern or Nixon sticker on his bumper cannot be trying to persuade anyone to vote for them, but is probably asserting a political position or a sense of loyalty. (Of course, it's possible that the car owner is simply too lazy to remove the old paper and glue.)

We present here a few of the dozens of examples of this medium that Michael Chickey has recorded. Many seem to be concerned with religion; other popular categories are sex, ethnic origin, politics, and ecology ("I brake for small mammals," "Save the whales"). Whatever the deep significance, they are an entertaining distraction while waiting for the light to change.

The accompanying photo essay is part of a larger collection of bumper sticker photos (more than a hundred) that Michael Chickey has been compiling for a decade. A freelance artist and photographer working in Venice, California, he has been exhibiting his paintings, drawings, and photos since 1975, has had work published in Popular Photography, Artweek, and Photographers Forum Magazine among others, and is staff photographer for California Track and Running News. His bumper sticker collection, is, he feels, a light-hearted study of human behavior. "There are no people included in these photos, but I feel that each photo is a statement in itself about the owners of these cars."
To the editors:

I have a bone to pick with Keith Kendig ("Mathematics, Truth and Beauty," The Gamut #18). Kendig’s definition of beauty doesn’t do his subject justice: “Of course beauty of any kind is difficult to define; in our case one can try using words like ‘symmetry’ or ‘conciseness.’ A phrase like ‘revealing simplicity in what before seemed complex’ also touches on the idea.”

I wouldn’t disagree with Kendig’s definition (unless, of course, he intends for us to infer its universality), only with its modesty. Beauty has in almost all instances a degree of irrationalism about it; it is often perceived intuitively, produced with inspiration, and expressed through or in conjunction with vivid personality. Kendig’s lucid and highly instructive discussion illustrates as well as anything I’ve ever read that the beauty of mathematics isn’t just its symmetry and instances of revealed simplicity, but also the degree to which intuition, inspiration, and personality have played a part in its history. This is an important lesson, particularly for anyone who may have been influenced, as was I, by the popular prejudice that mathematics is the epitome of rational, even mechanistic thinking.

Keep up the good work one and all. With more articles like Kendig’s, I may eventually acquire the education I failed to get while I was in school.

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