## EXTRAPOLATION



# **EXTRAPOLATION**

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### THE LAUNCHING PAD

Recently the M.L.A. informed me that at its meeting this spring the Executive Committee rejected our petition to set up a continuing science fiction discussion session. I believe that the vote resulted from a misinterpretation in that they thought we wished to attain Group status: their rationale was based on the premise that science fiction should fall under the Popular Culture Group. I have written, asking for a reconsideration of that vote and for both an organizational meeting in New York City and a meeting in Los Angeles. I have reminded the Committee that the Seminar on Science Fiction was (I say "was" since the seminar system no longer exists) the second oldest continuing meeting in the M.L.A. structure. For the moment I think this correspondence will be sufficient, but if need be we can either deluge M.L.A. with direct letters or petition again next spring. This time we had more than fifty letters;

let's try for two hundred if we have to go through the red tape again. I'll let you know in the next issue, and we can talk about this in New York I think part of the problem arose from my being on the Executive Committee of the Popular Culture Group for the past five years and therefore sponsoring the science fiction meetings under that rubric. I have suggested in my recent letter that we cannot expect Popular Culture, with its many interests, to surrender consistently one-third of its program to sf, although the continued vitality of sf and fantasy might warrant it. I am also in correspondence with Chuck Elkins and others of the proposed executive committee. For the moment be patient.

For there will be a meeting in New York. I cannot give you time or place at the moment, but Donald A. Wollheim has agreed to a dialogue concerning his career as writer, editor, and publisher. I have asked for an afternoon or evening hour for that session, and I hope that you all will mark it on your schedule. If we appear in good number at Christmas, any attempt to establish the continuing session will be that much easier.

Incidentally, I am particularly indebted to Don for a suggestion he made while I was researching a bibliography of Robert Silverberg for G. K. Hall. The problem was to establish as exactly as possible the date of publication of the early paperbacks, especially the Ace Doubles. The present editors at Ace had no idea where such records might be; Don reminded me that the best (only) way of dating such books was by copyright registration. The Library of Congress Catalogue of Copyright Entries proved invaluable. I recommend that you consult it in any problem of dating you may work with. Any library which serves as a government depository will have it.

This past weekend, SFRA met at Regis College in Denver, with Professor Charlotte Donsky as chairman. Since I was not there—it is only the second SFRA meeting I have missed—I cannot tell you at this moment where next year's meeting will be or who won this year's Pilgrim Award. I shall have that information by the next issue at the latest, and of course it will be in the SFRA Newsletter.

The chief reasons that I did not attend result from the fact that next year I will be on leave of absence from the College in order to complete some writing. Between that and the beginning of summer school, I simply could not get to Denver at this time. However, both Alice and I will attend Denvention, this year's Worldcon, which will be held at Denver over the Labor Day weekend. That will be the first of a number of meetings which will take me at least to London and California next year.

In many respects, the most colorful meeting yet announced will be held in Paris in late April 1982. Professor John Dean has written. "This will be the first time that Continental scholars have gathered" together in a series of workshops. The overall title of the session is to be "American and European Science Fiction: Interface and Interchange," with emphasis upon the relationship since World War Two. It will be a part of the American Studies 1982 Biennial Conference in Paris. He asks for papers, in English, running about 20-25 minutes (2,600 words). For more detailed information, I suggest you write directly to Professor John Dean, Universite Paris XIII; 10, rue Broca, 75005; Paris, France. Although my schedule calls for an autumn trip to England, I hope to be in Paris in the spring.

Although it has not yet been released, I remind you that by September the new *Dictionary of American Science Fiction Writers*, edited by Thomas Wymer of Bowling Green State University, should be available. It sounds like a most

(continued on page 261)

## Bettelheim, Castaneda and Zen: The Powers Behind the Force in Star Wars

#### **LEONARD M. SCIGAJ**

■ The George Lucas Star Wars saga is certainly successful as cinematic spectacle. The Dykstraflex camera, the rousing John Williams musical score, and the painstakingly meticulous audio and video special effects, produced by the California-based Industrial Light and Magic, are often memorable. Kubrick's 2001: A Space Odyssey contained no footage of multiple space ships diving, veering and twisting in different directions in the same sequence, much less the same with the realistic illusion of the main camera moving. John Dykstra, former assistant of Douglas Trumbull, Kubrick's chief cameraman, developed an entirely new camera with an intricate computer memory that has revolutionized the art of science fiction animation. Ben Burtt, Lucas's principal sound magician, matched Dykstra's work with the eerie sound of lightsabers clashing, the banshee howl of tie fighters screeching over our heads, and the sharply individualized languages of secondary characters. Over 350 special effects per filmfrom complicated blue screen overlays of as many as thirty-eight elements, to stop-action photography and large-scale painted glass illusions-crowd the eyes of moviegoers with visual thrills per minute. All of this happens "a long time ago in a galaxy far, far away." Is then the power behind the appeal of Star Wars only one of spectacle? Does the saga perhaps offer more substantial rewards, for children and adults alike? And how are we to comprehend the mysterious "Force" in Star Wars?

In a lengthy interview during the run of the intitial *Star Wars* movie, George Lucas repeatedly stated that his primary purpose in creating the *Star Wars* saga was to resurrect interest in the fantasy adventure serial, a

Extrapolation, Vol. 22, No. 3 0014-5483/81/0223-0001 \$01.00/0 Copyright © 1981 by The Kent State University Press species of moviemaking that vanished with the hard realism of nuclear scares in the cold war fifties and the social protest of the stoned sixties. He recognized that Stanley Kubrick had already made the ultimate speculative science fiction movie based on current theory and hardware. Lucas primarily wanted to reach a younger audience, and from a psychological angle—from the position that aspirations nursed by a rich fantasy life are as important for future accomplishments as knowledge of the current limits of technological know-how. Lucas believes that the romantic side of space exploration is vital; he hopes that the leader of our first colony of Mars explorers will say, "I really did it because I was hoping there would be a Wookie up here."

Lucas's reasoning is hyperbolical but not entirely far-fetched; the relation of present dream to future reality is an absolutely important one. When, for instance, *Life* magazine sent Ray Bradbury to Houston to cover the first test of the Saturn Five rocket, the 360-foot dream giant that eventually did send man to the moon, Bradbury stood in a ready room and mused about "the science fiction people . . . the boys who used to read *Astounding Stories* beneath winter bedsheets in olden nights, or hid Jules Verne behind algebra texts and then grew up to cog fiction into science." They were the same ones, Bradbury reasoned, who built the Saturn Five and the Manned Spacecraft Center. In Bradbury's own words, "In a room crowded with three dozen astronauts, my name was mentioned. I saw a dozen heads jerk. And finding me they sent me fine, rare, wondrous smiles or recognition across 20 years of time. We were all from the same school. We had shared out the dream to the now incredibly shared reality."<sup>2</sup>

Colonizing Mars is quite another story, of course, but Lucas's point about the imaginative dream is well taken. Though fantasy/adventure science fiction, unlike social science fiction, has little direct applicability to problems in the real world of today and violates the laws of physics with impunity, it has the positive effect of liberating the mind and revealing psychological truth—the truth of the creative imagination. Intuition, wonder, belief, imagination, will and determination are powers which are necessary in maintaining psychic health and in pointing our way toward our future selves. Fantasy science fiction frees the imagination by providing metaphorical truths at a high level of generality, to which we attach meaning according to our own personal needs. Even as adults we periodically need to believe that we can, metaphorically speaking, rescue princesses, destroy Death Stars and raise space vehicles from bogs.

The generalized metaphorical truths of fantasy are especially important for children and adolescents. Irvin Kershner, the director of *The Empire Strikes Back*, considers his film a fairy-tale fantasy, and specifically directs us to consider Bruno Bettelheim's arguments about the relationship of fairy tales to children in his book *The Uses of Enchantment*.<sup>3</sup> Here Bettelheim, a

much-published specialist in the rehabilitation of emotionally disturbed children, argues that it is absolutely necessary for the child to develop a rich fantasy life to compensate for his uncertainties, his physical inadequacies, his powerlessness in influencing events in the real world, and his lack of knowledge of that real world.<sup>4</sup> Through identifying with various character types in the fairy tale, the child also externalizes his emotions and gradually, over a period of years, comes to recognize those emotions as aspects of his own personality (UE, pp. 65-66). The freedom-filled, metaphorical (rather than realistic or literal) world of the fairy tale is conveyed to the child through the fantastic events, the degree of removal from the present ("a long time ago in a galaxy far, far away") and the obligatory happy ending, all of which invite him to participate in the world of the tale without creating stress over expectations of success in the real world or having to assimilate enforced moralistic interpretations which deaden his explorative interest (UE, p. 25). According to Bettelheim, the child's problem is "to bring some order to the inner chaos of his mind so that he can understand himself better-a necessary preliminary for achieving some congruence between his perceptions and the external world" (UE, p. 55). On a subliminal level, Luke Skywalker embodies the child's aspirations for future power and success, while Ben Kenobi and Yoda appease the child's sense of conscience and responsibility by imparting the truths of wise men. Leia Organa activates the child's vision of aesthetic beauty, and Darth Vader articulates his destructive wishes. Thus ego, superego and id are externalized in a manner that allows the child to acquaint himself with himself gradually.

Bettelheim also argues that the child has a natural proclivity for ordering his perceptions of external reality through the use of opposites (UE, p. 74). Thus the stereotypic good guys and bad guys, the Skywalkers and Vaders, of both fairy tale and space opera speak directly to the child's limited perceptual abilities. Very often the child will use such opposites to satisfy his anxieties over his own ambivalent feelings, or his negative responses toward parental strictures; by projecting his negative emotions onto a villain, the child displaces his negative feelings in a way that removes guilt (UE, pp. 68–70, 92). Thus an arrogant sibling, wicked stepmother or evil troll in a fairy tale often siphons off the child's sibling rivalry frustrations or his vindictiveness over the parent who scolds or spanks, while the hero figure remains unclouded.

The child, observes Bettelheim, first experiences his responses to the events of external reality as involuntary impulses to hit or hug; consciousness of personal volition is very weak (UE, p. 31). Only gradually does the child recognize that his impulses are caused by his own emotional life, for in childhood the ego is so fragile that any invasion from the id, unconscious, or affective life completely engulfs it (UE, p. 55). Because the metaphoric nature of fairy-tale motives allows unlimited, safe applicability, the child is not forced to absorb realistic explanations which threaten his security by creating new uncertainties. A frank discussion of the impossibility of hyperspace or of blaster noises in the vacuum of space might cause anxiety and at the same time deaden the child's imaginative responses. But the *Star Wars* saga as conceived by Lucas offers extra reassurances to the young: can any child really feel threatened with the security insurance provided by the cuddly Chewbacca, the indestructible Artoo Detoo or the fussy, foppish See Threepio? Also, if a friendly dwarf can raise space vehicles from bogs, is not the small child reassured, as in the story of the little mouse who removes the lion's sliver, that he too is important in the world?

For the above affective psychology to work, however, the child's curiosity and imagination *must* be aroused. Bettelheim and Kershner both agree on the importance of liberating the imagination of the child. For a story to enrich the life of the child, it "must stimulate his imagination," observes Bettelheim (UE, p. 5), for "when unconscious material is to some degree permitted to come to awareness and worked through in imaginaton, its potential for causing harm-to ourselves and others, is much reduced" (UE, p. 7). Similarly Kershner is emphatic in his disapproval of adult viewers who denigrate the fantastical events and special effects of The Empire Strikes Back. Like Bettelheim, Kershner believes that what does not work on the immediate level of story will hardly intrigue a child's limited rational capacities, nor retain the attention of the adolescent. To Kershner intergalactic raids, immense space slugs, wampa ice creatures, forty-foot-high snow walkers, dawn approaches to the cloud city of Bespin and mysterious jungle encounters are an absolutely necessary sugarcoating meant to arouse the imagination.

The adolescent is especially moved by Cinderella stories of the hero or heroine with the pure heart who is able to transcend the straitened circumstances and embarrassments of birth and family life to find a "happily ever after." The All-American hero Luke Skywalker is first seen as a farm boy in a remote corner of the galaxy who contents himself with shooting womp rats in lonely canyons from his skyhopper. But through a series of lucky coincidences he rescues a princess and beats the Academy graduates by almost singlehandedly destroying the Death Star through nervy flying and expert marksmanship. Native abilities, luck and an almost cocky self-confidence triumph once again over the accidents of lineage or economic status—just what every American adolescent wants to believe.

Yet it would seem that the novel or film which bases its entire rationale on the above affective arguments automatically limits its value as art, according to adult categories. An adult craves consideration of the more difficult problems of his personal world and his society, more salient treatment of the complexities of characterization, more philosophical probity concerning the ultimate questions of life, and perhaps a consolation won through significant suffering. Here the original *Star Wars* movie fails. Only the newness of the special effects and the humor of the dialogue mask a lack of what an adult would consider content, meaning, insightfulness. Recall when Luke appears at Leia's Death Star detention cell and, dazed by a woman "more beautiful than her [holographic] image," says, "I've come to rescue you. I'm Luke Skywalker." Leia's response, "I beg your pardon,"<sup>5</sup> is hilarious in the context, typical of the movie's camp dialogue, and indicative of the thinness of the plot. Information on the Force in this movie in not developed sufficiently to warrant more than a passing nod at the science fiction conventions of telepathy and telekinesis.

The Kershner *Empire Strikes Back*, however, presents some serious educational material on the subject of the arduous labor needed to *earn* the status of hero. The work and dedication needed to acquire patience and self-control, especially control over one's fear and anger, graphically shown in Luke's Jedi knight training scenes with Yoda, is forceful and convincing. These scenes provide substantive material for both parents and children. Kershner emphasizes this theme in the climactic gantry scene. Here Vader taunts Luke: "You have controlled your fear. Now release your anger" (ESB, p. 192). But Luke, remembering Yoda's counsel and his training, prefers the abyss *and is miraculously saved*.

The Star Wars novels, as adult literature, are deficient in depth of characterization and sophistication in style and craftsmanship. As with Kubrick's Space Odyssey, when novel, filmscript and movie are all produced as parts of one total project, in the same or contiguous time periods, the movie studio tends to pressure the writer to produce a novel which follows fairly exactly the plot, action, scenes and pace of the movie. The original text and screenplay are typically chopped to bits or completely revised by the additions and deletions of the director, and by what works and does not work in terms of production cost, time, space, and the limits of available materials and technology. Small wonder that, at the end of the Space Odyssey project, Arthur C. Clarke came close to disowning it entirely, stating that "2001 reflects about ninety per cent on the imagination of Kubrick, about five per cent on the genius of the special effects people, and perhaps five per cent on my contribution."6 Likewise the Star Wars novels are pale copies of the cinematic experience, with only an occasionally well-placed adjective or turn of phrase to vary the monotony of straightforward plot and dialogue.

Nevertheless, *The Empire Strikes Back* contains some thematic substance, especially vivid as cinema, on the topics of Yoda and the Force, and in the archetypal development of the father-son conflict. In the aforementioned interview with George Lucas, he briefly called the Force "a Castaneda *Tales of Power* thing." Lucas also mentioned in passing that in at least one of the four ur-scripts he wrote before the final (1975-1976) rough draft of the nine-part saga, a Castaneda-type Force functioned as a much more thoroughly developed thematic motif.<sup>7</sup> Both Lucas and Kershner minored in anthropology at the University of Southern California, with Lucas spending much time in social psychology, studying the function of myth and fairy tale in various cultures. Kershner corroborates this and mentions that both he and Lucas read all of the five Castaneda novels as they appeared.<sup>8</sup>

In 1960, Carlos Castaneda, then a graduate student in anthropology at UCLA, met don Juan Matus, a white-haired, 70ish Yaqui Indian originally from Sonora, Mexico. Castaneda met him while collecting information on hallucinogenic plants in Arizona for his master's thesis. Don Juan was a *brujo*, a Yaqui shaman—a sorcerer, healer or tribal medicine man who can transform himself into animals; conduct seances over peyote, jimson weed and hallucinogenic mushrooms; and summon unseen powers. Castaneda became so fascinated with the complex personality and arcane sorcerer's knowledge of don Juan that he began in June of 1961 an apprenticeship in the art of the Yaqui shaman that lasted over a decade and provided the material for five novels.

The main narrative interest in Castaneda's novels, and also a central concern in modified form in the Star Wars saga, centers around the clash of a modern, written culture with an older, oral shamanic culture that perceives reality in an entirely different way. Carlos, the Castaneda alter ego of the novels, derives from our rational, linear, printed-word, causeeffect culture, where ojective, empirical evidence rules unchallenged. Don Juan derives from a shamanistic culture which takes a more animistic approach to reality and stresses the intuitive, feeling-oriented development of subtle affective states achieved through the cultivation of volition or will. Endless jokes are made about Carlitos's penchant for taking notes and seeking rational explanations of phenomena generated by the volitional centers within the self, while don Juan alternately amazes and exasperates him with a mercurial personality that oscillates from razor-sharp wit to outlandish parody to coarse, earthy humor and absolutely deadpan seriousness. Lucas's use of the Force in the Star Wars saga derives mainly from a free but careful adaptation of many elements of the Yaqui shaman's culture to Jedi culture. A more comprehensive exposition of the cultural tenets of the Yaqui shaman is therefore necessary before discussing their application to the Star Wars novels.

Initially, Carlos undergoes a severe shock as he begins to orient himself in a culture based upon nonrational tenets. In the course of his apprenticeship Carlos is treated to elaborate rituals surrounding the cultivation, preparation and ingestion of psychotropic power plants; to talks with the sage Mescalito (a peyote-induced vision); to omens on mesa and mountain;

to disappearing automobiles; to talks with bilingual covotes and visionary lizards: to encounters in the dark with menacing apparitions; and to rapturous aesthetic visions and nightmarish horrors induced by peyote, jimson weed and psychotropic mushrooms. From don Genaro, don Juan's acrobatic sorcerer companion. Carlos witnesses an array of paranormal phenomena that range from 150-foot jumps up and down cliffs, to handstands over waterfalls, to teleportation across great distances and perpendicular climbs up eucalyptus trees. Carlos tries to remain as sceptical as possible throughout, even after the occasional embarrassment of being so completely dislodged from normal reality that his bowels rise up in protest; but as he becomes more and more exposed to the philosophical side of the shamanistic art of sorcery he is less and less convinced that don Juan's teachings are only metaphorically true, or merely the effects of hallucinating through drugs, hypnotic suggestion or sheer fright. Don Juan finally reveals that the drugs, visions and encounters were only preliminary work directed at dislodging the apprentice's perceptive powers from routine and ordinary circumstances.9 Don Juan emphasizes that the two main goals of sorcery are to liberate the perceptual faculty by shutting off the "internal dialogue," the tendency of the mind to think in linear, rational or tonal logic, in order to recognize the nagual, the unknown or nonordinary reality (TP, pp. 13, 92, 119). Nagual states can only be glimpsed at privileged moments by developing the volitional powers through feeling, through aid from an ally (a power-laden familiar spirit [TDJ, pp. 53, 200]), and by practice in techniques such as "seeing" (using the intuition and aesthetic powers for holistic visions or essences [SR, pp. 37, 90; TP, pp. 21, 153, 238]) and "dreaming" (the art of making your dream activities so available and real to consciousness that the dreamer and the dreamed are interchangeable [JI, pp. 112-13; TP, pp. 44, 76-77]). What Carlos must learn is that perception is relative to whatever system the mind constructs to filter and interpret reality. Don Juan argues that "things don't change. You change your way of looking, that's all" (SR, p. 37). Once this is learned, the sorcerer can recognize that "the world was whatever we perceive, in any manner we may choose to perceive" (SR, p. 147).

The *nagual* in used in three senses in Castaneda. Occasionally, especially in *The Second Ring of Power*, it refers to the benefactor of the apprentice, the one whose responsibility it is to introduce the apprentice to states of nonordinary reality. In Castaneda's novels don Genaro is the benefactor who introduces Carlos to nonordinary states of perception, wherein don Genaro is pulled, as if by pulleys (TP, p. 182) or a rubber band (TP, pp. 99, 113), by luminous fibers or force vectors connecting him to various objects in the environment. At other times the *nagual* refers to the brain's capacity for holistic perception, using volitional powers. This corresponds roughly to the popular bicameral, split-brain theory, wherein the right lobe, which controls the left side of the body, views reality holistically, intuitively, spatially, in terms of static images, and the left lobe, which controls the right side of the body, analyzes reality through rational, sequential thought. At one point in *Tales of Power*, don Juan, whose task it is to reshape Carlos's *tonal* or rational faculty by forcing him to undermine his rational perceptual biases, whispers into Carlos's right ear, activating the left, *tonal* lobe, while don Genaro, the benefactor or emissary of the *nagual*, whispers into Carlos's left ear (TP, p. 258) in order to "split" him (TP, pp. 184, 193, 202) and so liberate his right lobe volitional powers by dissociating him from ordinary reality.

After the apprentice has glimpsed the nagual many times and has developed his personal power through contact with his ally, "seeing" and "dreaming," he is ready for the leap into the abyss (TP, pp. 159, 259), the leap into the mystical knowledge of the sorcerer's essential loneliness in an ephemeral world of phantom people. By this time the apprentice will have recognized, as Korzybskian semanticists do, that the island of the tonal or man's reasoning faculty can only provide a convenient linguistic, analytic, ex post facto description of what remains an ineffable, "unspeakable" reality (TP, pp. 97-98, 236, 272). Here the nagual becomes the Nagual, the Unknown as a metaphysical postulate, somewhat akin to the Vedic Void or Buddhist *sūnyatā*: "reason is merely reflecting an outside order, and that reason knows nothing about that order; it cannot explain it, in the same way it cannot explain the *nagual*. . . . The *tonal* of every one of us is but a reflection of that indescribable unknown filled with order; the *nagual* of every one of us is but a reflection of that indescribable void that contains everything" (TP, pp. 277-78). Don Juan articulates a consciousness of this ontological Nagual, the fathomless Absolute beyond the phenomenal world, by speaking of the wind: "Beyond the gate of the tonal's eyes the wind rages. I mean a real wind. No metaphor. A wind that can blow one's life away. In fact, that is the wind that blows all living things on this earth" (TP, p. 177).

With this knowledge, the adept or warrior, having long ago lost his ego or sense of self-importance (JI, p. 23) and vanquished the four natural enemies of the sorcerer—fear, clarity, power and old age (TDJ, p. 84ff.) lives with a detached solitude, keenly aware of death the hunter stalking his every step, acting with impeccable humility, making his decisions and accepting responsibility for them (SR, p. 150). He reveres nature as a giver of sustenance, and remains, like the medieval mystic, aware of the ineffable Other that occasionally breaks in upon his humble life.<sup>10</sup> Amid the sadness of this bittersweet resignation, the warrior's chief joy lies in his belief in the often repeated doctrine that man is a "luminous being" (SR, pp. 23, 40, 106, 147; TP, pp. 9, 46, 57, 97–98, 158; SRP, p. 134), acting in consort with the fibers of energy of the natural world, able to change with the changing configurations of reality through the exercise of his volitional powers. The key concept here is fluidity, the ability to revise periodically one's perceptual coordinates, to recognize the truth of don Juan's doctrine that "we are all born . . . light and bouncy, but we become earthbound and fixed" (TP, p. 35). To become as fluid as the acrobatic don Genaro one must notice everything, remain elastic enough to "revamp [one's] understanding of the world" (SRP, p. 149) periodically and develop the profound volitional powers of the will. Such a person maintains a luminous aura of self-possession that fellow sorcerers can perceive.

There are many surface resemblances to Castaneda's sorcerer's art in the Star Wars novels and some deeper thematic similarities. When Luke first meets Yoda, he affirms that he is looking for "a great warrior" (ESB, p. 100), recollecting the Castaneda term for the Yaqui warrior-adept (TDJ, p. 197). Both Ben Kenobi and Darth Vader are specifically called "sorcerers" early in the first novel (SW, pp. 37, 51), and with condescension. Though don Juan does not drink, his sorcerer's conduct is strange enough that the townsfolk believe that he is "plastered out of his mind most of the time" (JI. p. 7); similarly, Ben Kenobi is called a "crazy wizard" and a "desert bum" (SW, p. 76). Han Solo voices the practical man-of-action's scepticism of "half-mystical energy fields," "hocus-pocus religions and archaic weapons" (SW, p. 121). Even Darth Vader is taxed by General Tagge about his "sad devotion to that ancient mythology" (SW, p. 37). Like don Juan's ability to detect presences in the mesa through noting subtle sensory changes, Kenobi sniffs the air to detect the approach of the Tusken Raiders (SW, p. 73), and Vader detects Kenobi's presence on the Death Star before actually seeing him, because of a "stirring in the force" (SW, p. 145). The Force itself is described as a "powerful ally" by both Ben and Yoda (SW, p. 93; ESB, p. 123), rehearsing don Juan's specific term about the familiar spirit that can bring power, guidance and knowledge (TDJ, p. 51).

Like the *nagual*, the Force is an irrational, volitional power within the mind. After he hypnotizes the checkpoint guards at the Mos Eisley Spaceport, just before meeting Han at the Cantina, Ben Kenobi notes that "the force is in the mind, Luke, and can sometimes be used to influence others" (SW, p. 93). The Force in *Star Wars* is activated in a manner cognate with don Juan's doctrine of turning off the internal dialogue to free the will. When Luke practices with seeker globes Ben instructs him to "divorce your actions from conscious control" and to "stop predicting and use the rest of your mind" (SW, p. 121, 123). In *A Separate Reality*, don Juan teaches that the luminous fibers which connect man to every living thing in the Yaqui sorcerer's animistic universe can appear only after the will opens the gap in the abdomen (SR, p. 147). "What a sorcerer calls will,"

says don Juan, "is a force that comes from within and attaches itself to the world out there. It comes out through the belly, right here, where the luminous fibers are" (SR, p. 148).

Yoda elaborates on Ben Kenobi's doctrine of the Force as "an energy field generated by living things" (SW, p. 81) in *The Empire Strikes Back*, with animistic theorizing and a direct reference to don Juan's doctrine of "luminous beings." The passage is pure Castaneda:

"For my ally is the Force. And a powerful ally it is. Life creates it and makes it grow. Its energy surrounds us and binds us. Luminous beings we are, not this crude matter," he said as he pinched Luke's skin.

Yoda made a grand sweeping gesture to indicate the vastness of the universe about him. "Feel it you must. Feel the flow. Feel the Force around you. Here," he said, as he pointed, "between you and me and that tree and that rock." (ESB, p. 123)

Compare this with the following discourses of don Juan in early passages from Castaneda's second novel, *A Separate Reality*:

"I mean do you ever feel the world around you?"

"I feel as much of the world around me as I can."

"That's not enough. You must feel everything, otherwise the world loses its sense." (SR, p. 4)

"Every man is in touch with everything else, not through his hands, though, but through a bunch of long fibers that shoot out from the center of the abdomen. Those fibers join man to his surroundings; they keep his balance; they give him stability. So, as you may *see* some day, man is a luminous egg." (SR, p. 23)

Don Juan's will has little to do with what we would call egocentric willfulness. For the warrior the will must be cultivated and carefully controlled through various exercises in physical and perceptual discipline, such as sitting still for long periods on one's "spot" (TDJ, p. 29) and "notdoing," a technique of focusing on unusual or overlooked aspects of the environment (JI, pp. 181ff.), plus the aforementioned perceptual disciplines of "seeing" and "dreaming." And the warrior's ability to perform any of these disciplines only comes after he has abandoned his egocentric selfimportance and personal history (JI, pp. 11, 14, 23) and cultivates detachment and patience (SR, pp. 150-51). It functions within a coherent cultural system of thought as a liberating power of concentration and determination that can occasionally lead to extraordinary physical and mental feats. Similarly, Luke disciplines himself through exercises in patience, concentration and physical agility with Yoda (ESB, pp. 119-24, 132-36, 140-44, 152-55). Luke's Genaro-like acrobatics come to his aid as he jumps five meters to escape Vader's designs after falling into the carbonite freezing chamber (ESB, p. 191).

The will as a force in Castaneda can only be properly understood in the

context of the elaborate animistic beliefs of the Yaqui Indian shaman, where reverence for nature is extremely strong. The idea of nature as a single organism or an animistic energy field is a pervasive belief in most primitive cultures. The work of contemporary environmentalists such as Paul Shepard and Max Nicholson attests to the fact that from a participatory conception of man and nature it is much easier to develop an ethics and an ecology than from our legacy of the divorce of man and nature through dualistic empiricism. In Castaneda's novels one never leaves the mountains without saying thank you for benefits bestowed; one never cooks five quail when one will do; one breaks only enough branches to build a decent fire. The system has adequate ecological and ethical dimensions to prevent the expression of what we would call willful conduct. Castaneda's will is also capable of breathtaking aesthetic visions based upon the natural wonders and minutiae of nature; this is often presented in striking sequences of nonlinear images and states of feeling.

We have just a hint of such an elaborate ecological and ethical system in the *Star Wars* novels to date. In the long ago and far away time, the Jedi knights were protectors of an intergalactic imperium with an emperor, governors for outlying territories, and even women senators. With a Gibbons-like natural cyclicity, the Empire falls through ambition, greed, treachery and deception. Then the Jedi are almost completely exterminated. Moviegoers will not know exactly how close Jedi life is to that of the Yaqui shaman until episode one reaches the theaters. It is scheduled for production after the next (sixth) episode, *The Revenge of the Jedi*, due in May 1983. Nevertheless, one can note some of the attributes of Jedi life from incidents in *Star Wars* and *The Empire Strikes Back*.

Lucas's Jedi operate with a moral seriousness similar to that of the Yaqui shaman. The Jedi are chivalrous, using the Force only for knowledge or defense, never for attack or aggressive designs. For the Jedi, the bright side of the Force appears when the mind is calm and controlled, in a peaceful, passive state (ESB, p. 134), as is the case with the Yaqui sorcerer when he shuts off the internal dialogue and follows any of his meditative exercises. Through the instruction of Ben and Yoda to Luke, one notes that the Jedi maintain a great reverence for nature and have an aesthetic bent. Even when they must kill, they do so cleanly and artistically. In the Cantina sequence, Ben holds his lightsaber above his head in a peculiar stylized posture, and uses a reflex saluting motion after a single, lethal cutting stroke. The beauty of Ben's fighting posture and clean, deft execution is reinforced through an immediate contrast, the mess Han makes of Greedo's body with his blaster, for which he must apologize to the bartender (SW, pp. 99, 105).

Without the self-control and the deep reverence for nature, the Jedi knight might succumb to the degenerate "easier, quicker, more seductive

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side of the Force" (ESB, p. 134), the Darth Vader indulgence in anger, coercion and, especially, lust for power, the true sorcerer's third enemy (TDJ, pp. 86–87). Vader controls the Death Star Admirals by using the politics of fear. His ends are the selfish accumulation of power: he desires to pervert Luke's training and join forces to depose the emperor (ESB, p. 199). Ben Kenobi underscores Vader's utilitarianism with an insightful simile: "You sense only a part of the force, Darth. . . . As always, you perceive its reality as little as a utensil perceives the taste of food" (SW, p. 166). We first see Darth Vader torturing a Rebel officer for information (SW, p. 10); shortly after he even agrees to torture Leia. In *The Empire Strikes Back*, he changes admirals no less than three times, strangling the first two telekinetically when they fail to produce the desired results.

As with Hitler and G. Gordon Liddy, will in Vader and the officers of the Imperial Fleet has atrophied to the point of ambitious, egocentric monomania, a fair portrait of some of the unsavory aspects of our contemporary Western materialism. Vader and the Imperial officers relate only to the cool, analytic efficiency of technology; they use only the *tonal* aspect of the Yaqui shaman as an extension of their own personal lust for power. At one point in the original *Star Wars* novel, Luke muses that the supposedly impenetrable Rebel headquarters would be "simply another abstract problem in mass-energy conversion" to the Imperial command (SW, p. 178). Such logic would be impossible in the world of the Yaqui shaman. Governor Tarkin, chief Death Star officer, sadistically forces Leia to watch the destruction of her home planet Alderaan (SW, pp. 117–18); Vader has no difficulty acquiescing to this destruction once he labels the inhabitants as traitors (SW, p. 129). Like Shakespeare's lago and Edmund, Lucas's villains are consummate egotists and rationalizers.

Unlike the equipage and methods of the Yaqui shaman and the Jedi knight, the Imperial Fleet is cumbersome, wasteful and entirely unaesthetic. Their troops are typically seen blasting huge holes in the corridors of Rebel ships and bases. Their own ships need gigantic trash compactors, and the Imperial ships litter the galaxy with garbage. Their irreverence for nature is complete while their worship of technology is awesome, a telling projection of a blind Western will, a Faustian egotism that is bent on converting all of nature to selfish designs. Tarkin's delirious devotion to the Death Star, a ponderous technological dinosaur, is merely a projection of his own ego. When an Imperial officer counsels evacuation after deducing the exhaust port weakness, the objective of the Rebel fighter attack, Tarkin roars, "Evacuate. . . . At our moment of triumph?" (SW, p. 211).

Ben Kenobi is both dexterous and humane in applying his knowledge of technology. He does not divorce art from utility. He is able to read the blur of data printouts on the Death Star tractor beam effortlessly and dismantles the apparatus quietly and efficiently, without bloodshed, as a necessary, life-preserving task (SW, pp. 136, 154). Interestingly enough, Luke is able to destroy the Death Star only after turning off his targeting computer and trusting in his intuitive, *nagual* training in the Force. His first batch of proton torpedoes, fired with computer aid, explodes harmlessly on the side of the trench. When he fires the successful second batch, he does so without computer aid, in a dream state, and with the same tickling sensation in his head that Carlos experiences when he is about to enter the nonrational world of the *nagual* (TP, pp. 88, 148; SW, pp. 215, also 91).

The climactic point of the entire five-novel Castaneda sequence occurs at the end of *Tales of Power*, the fourth volume, where Carlos must assume the burden of his own adulthood as a sorcerer by tossing himself into an abyss, into a posture of resignation to the utter loneliness of the adult self afloat in the sea of the Unknown. Now he must experience the truth of the last part of his training, the sorcerer's explanation:

This is the sorcerer's explanation. The *nagual* is the unspeakable. All the possible feelings and beings and selves float in it like barges, peaceful, unaltered, forever. Then the glue of life binds some of them together. . . . When the glue of life binds those feelings together a being is created. . . . The *tonal* is where all the unified organization exists. A being pops into the *tonal* once the force of life has bound all the needed feelings together. . . As soon as the force of life leaves the body all those single awarenesses disintegrate and go back again to where they came from, the *nagual*. (TP, p. 272)

Here don Juan becomes the priest who initiates the son into the "invisible unknown," in the words of Joseph Campbell. Don Juan becomes the father leading the son Carlos away from the domestic idyll of familial dependency and security and into the hard adult world, for "the father is the initiating priest through whom the young being passes on into the larger world."<sup>11</sup> In the twilight, on a windy cliff edge, the time and environment most suited to visitations from the *nagual* (JI, pp. 62ff.), Carlos hurls himself over the abyss, to be resurrected in *The Second Ring of Power* as a fledgling adult trying to manage himself with other apprentices as a potential leader replacement for don Juan and don Genaro. In this new adult world the father is the self; don Juan and don Genaro are absent throughout the novel, and Carlos experiences the frustration, agony and uncertainty of making his own judgments and decisions.

In the climactic ending of *The Empire Strikes Back*, Luke must also make his decision to plunge into a windy abyss at twilight, to enter the world of the adult self, a place where Ben can no longer help him. The Bespin reactor shaft may not carry the ontological freight of Castaneda's abyss of the Unknown, but it at least signifies a rite of passage into the self-sufficient adult world. Luke's initiation into the unknown is fraught with tension, for the father, only at this moment revealed to him, is a demonic antithesis of a true initiating priest. Luke must categorically deny both

Vader's authority and his counsel at once, but to do so means to abandon all traditional adolescent support and launch into a void where he must create his own values. He is able to muster the courage to do so only because he has been preparing himself for this break, throughout *The Empire Strikes Back*, by enriching and controlling his inner powers through work and self-sacrifice. The symbolic signpost for this process of developing inner strength is the motif of Luke hanging upside down, which occurs at the opening, the middle and the climactic end of the movie. The archetypal motif of hanging is precisely one of self-sacrifice to gain illumination: it is found in *Le Pendu*, the twelfth trump of the Tarot pack, in Frazer's discussion of the Hanged God Marsyas in *The Golden Bough*, and in Wotan's self-sacrifice in *The Poetic Edda*, where he hangs for nine nights on a windy tree in an offering of "myself to myself."<sup>12</sup>

Luke's chief experience when suspended upside down in the cave of the wampa ice creature at the outset of *The Empire Strikes Back* is one of physical pain. He has progressed in his understanding of the Force only to the point of the telekinetic reach for his lightsaber and the intuitional advice to find Yoda. The second upside-down suspension, during Yoda's commando training in body control and concentration, is much more expressive of progress in the inner discipline and courage that Luke will soon need. He is even able to suspend a befuddled Artoo Detoo in the air. Artoo's sensors fail to register any empirical data whatsoever (ESB, pp. 123-24) precisely because the increase in power exists only within Luke—in the development of his volitional powers of concentration and self-control.

The third upside-down tableau occurs at the end of the climactic gantry scene, where Luke decides to descend into the abyss of the Bespin reactor shaft rather than accept the evil logic of Vader. After having fallen head first (that is, upside down) for miles down the central shaft of the funnelshaped city, Luke's legs latch onto the last possible concrete object between Bespin and the void of space—an electronic weather vane. Here he hangs, suspended upside down, transfixed in complete pain, until he is able to gain an armhold with his remaining hand. As Ben, Luke's father-initiator, is forever gone, Luke for the first time takes on the adult burden of initiating his own telepathic communication. This initiative saves his life; Leia answers his call. The weather vane functions as a cross, a symbol of the hero's acceptance of the agony of a self-sufficient life in the phenomenal world.

Though Luke is right in his decision to break with the demonic father, the lack of a normal atonement with the father as coequals in the adult world of loneliness and pain, which usually happens at this point, is enough to cause a feeling of guilt at the breaking of a taboo—the hallowed authority of the father figure. This is articulated symbolically in the use of the Oriental and Celtic motif of the severed right hand as the punishment for a transgression against the sacred. The fact that Luke survives the breaking of this taboo and gains a bionic arm, complete with feeling, may be interpreted in context as a partial victory in his struggle for self-mastery. Nevertheless, Luke realizes that he must return to Yoda to complete his training, for he did give in to hate against Vader and his spirit was utterly exhausted, ready to submit to him, save for the fortunate rescue (ESB, pp. 185, 209).

Throughout this climax, Vader is portrayed in terms of the mythological tyrant father motif, the prototypes of which are the Greek Kronos, who eats his own children rather than have his power and authority supplanted, or the Holdfast of Cretan myth, who arrogates all power to himself and turns the Cretan moon bull, symbol of fertile cyclic change, into the demonized Minotaur. Vader only wants Luke as an adjunct to his own designs for power, for he knows that the emperor has foreseen that Luke has the potential to overthrow them (ESB, p. 199). When Luke balks, Vader attempts to take away the life he created. This attempted castration is underscored, Kershner is quick to remind us, by the fact that the object in Luke's right hand when it is severed is the very lightsaber his father gave him as a gift, through the agency of Ben Kenobi (SW, pp. 78-79). But little does Vader know that Luke has been growing his own manhood throughout the novel, by learning to develop and discipline his own inner volitional powers. For this reason alone the attempted castration fails.

In this father-son confrontation of perverted Jedi master and innocent Jedi apprentice, Vader unleashes all his accumulated sorcerer's power in the form of an ally that has the ability to dismantle metal objects and propel them at Luke. This is reminiscent of Carlos's battles with one of don Juan's allies, a massive rectangular or boulder-shaped black object that lurched out at him in the night, often breathing as heavily as does Vader (JI, p. 175; TP, p. 221; SRP, p. 139). The sheer force of Vader's ally hurtles Luke out the reactor controlroom window and onto the gantry outside, at the edge of an abyss and in the midst of a screaming wind which Vader controls, for it abates only when he speaks (ESB, p. 198). The question of whether this abyss and wind carry any of the freight of the ontological Unknown of the Yaqui shaman, as at the conclusion of *Tales of Power*, can only be answered by assessing the continuation of Luke's training with Yoda in the next movie, *The Revenge of the Jedi*.

Along with the Castaneda influence, a number of Zen concepts apply to the *Star Wars* saga. Though no scenes are modeled on any specific textual sources, both Kershner and Lucas have been avid readers of Zen for decades, and many Zen concepts surprisingly dovetail into the Yaqui shamanism. Before one can experience the state of *satori*, of absolute identification with the is-ness of all created being, the neophyte must experience the  $s\bar{u}nyat\bar{a}$  state of the fullness of nothingness and the dissolution of the ego and dualistic, rational thinking. This is roughly cognate with don Juan's activities of wiping clear the island of the *tonal* in order to experience the *nagual*, and of shutting off the internal dialogue. Like a true Zen master, Yoda counsels Luke to "forget your old measures. Unlearn, unlearn!" (ESB, p. 120). A further concept necessary for *satori* is the realization of the self as the generative center of all that is perceived— "the 'that art thou' doctrine of the *Chāndogya Upanishads*."<sup>13</sup> This is similar to the perceptive act of realizing the self as a luminous being, capable of initiating and modifying one's own perceptual relationship with the environment.

One scene in *The Empire Strikes Back* that is particularly influenced by Zen is the confrontation with the apparitional Darth Vader under the tree in Degobah. The whole point of the scene is to make Luke realize that, as he is the generator of his own experience and its interpretive contexts, the fears he sees outside himself are really self-created. The logic of this reverts back to the Tibetan Book of the Dead, one of the primary sources for Buddhist concepts. To achieve Buddhahood the initiate must recognize that all thought-forms are "the radiances of thine own intellectual faculties come to shine."<sup>14</sup> The confrontation under the tree is a test initiated by Yoda for Luke to learn to control his fear, the first enemy of the Yaqui sorcerer (TDJ, p. 84). Luke fails this test miserably. He insists on taking his lightsaber with him, even though Yoda counsels that the only things Luke will find in the cave are those he takes with him-that is, his own thoughts, his own fears. When Luke cuts off what he thinks is Vader's head, the severed head shockingly transforms itself into his own image. The motif of the severed head of the self as a lack of understanding of the self as the generator of all experience can be found in Oriental literature as early as the Chandogya Upanishad. When one reveres the Atman or self-soul as only the heavens, rather than all of reality, one's understanding is incomplete, and "one's head falls off."15 Here the failure exists in not recognizing that the Atman is the totality of experience-for-the-self. Luke leaves the treecave wondering "if he were really fighting himself" (ESB, p. 144). This is exactly the case. The slow motion of this scene, the only scene in the movie done in slow motion, reinforces the dreamlike status of this confrontation with the inner self.

Kershner personally believes that both the Castaneda and the Zen in *The Empire Strikes Back* funnel into Werner Erhard's *est*, a contemporary therapy directed toward learning self-responsibility for one's actions through realizing the self as the generator of the contexts of one's experience and recognizing that this self can change or reperceive the contexts.<sup>16</sup> The "that art thou" doctrine of the *Upanishads* and the Yaqui doctrine of the self as a luminous being fuse with the *est* notion of the self as the generator of one's perceptions and values. When Luke drops into the abyss, he is taking his first step toward realizing these doctrines.

The powers behind the appeal of the Star Wars saga for children lie not only in its virtuosity in the realm of animation spectacle and adventure yarn, but also in its therapeutic ability to externalize the emotions of the child so that he may become acquainted with himself, and in its ability to liberate the child's imagination by providing a safe, freedom-filled alternative world of the fairy tale in which to explore the present and future self. For the adult the saga sustains interest because it questions the unfettered pursuit of material gain and technological progress of our Western culture by juxtaposing it against a culture that disciplines and channels man's volitional powers into a morally coherent system. The Force is an inner volitional power of concentration and determination in one's strivings that can be of value when cultivated and disciplined within a culture that provides ethical, ecological and philosophic dimensions. Jedi culture in the Star Wars saga also functions as an ideal against which to measure the defects of our own contemporary culture, some of which are articulated in the materialism, egocentric willfulness and obsession with power of Vader and the Imperial Command. Thus the content of this fantasy/adventure saga does include a level of social applicability.

The Star Wars saga also offers the adult the possibility of self-renewal, of becoming reacquainted with himself, through reordering and expanding perceptual faculties habituated in rational analysis. Though the literary craftsmanship of the Star Wars novels leaves much to be desired, the saga has some of the components of good literature: the stereotypic conflicts are articulated with attention to archetypal resonances, and the themes often challenge our perceptions and refresh our lives by offering possibilities for change in the one area we do have power to change—the potentially luminous fifteen hundred cubic centimeters of gray matter inside the skull. Yoda speaks this truth metaphorically when he states that the difference between raising rocks and raising space vehicles exists in the mind (ESB, p. 122). Here you fail only if you fail to believe in your potential to change—to reperceive, acquire self-discipline, and achieve anew.

#### Notes

- See the Paul Scanlon interview with George Lucas, "The Force Behind George Lucas," *Rolling Stone*, 25 Aug. 1977, pp. 40-48, 50-51.
- 2. Ray Bradbury, "An Impatient Gulliver Above Our Roofs," Life, 24 Nov. 1967, p. 36.
- 3. Telephone conversations with Irvin Kershner, 5 and 6 Aug. 1980.
- 4. Bruno Bettelheim, *The Uses of Enchantment* (New York: Alfred Knopf, 1976), pp. 57, 61. Hereafter cited as UE. Kershner had many of Bettelheim's arguments specifically in mind in creating the fairy-tale atmosphere of *The Empire Strikes Back*.

- 5. George Lucas, *Star Wars* (New York: Ballantine, 1976), p.144. Hereafter cited as SW. The Donald F. Glut, *The Empire Strikes Back* (New York: Ballantine, 1980), is cited as ESB.
- 6. Quoted in Jerome Agel, ed., *The Making of Kubrick's 2001* (New York: New American Library, 1970), p. 136.
- 7. For specific mention of Castaneda see the Scanlon interview, p. 50; on the dating of the four ur-scripts see "Behind the Scenes of Star Wars," American Cinematographer, 58 (July 1977), 700. As conceived by Lucas, the Star Wars saga comprises nine episodes structured into three trilogies. We have seen episodes four and five. Episode six, The Revenge of the Jedi, is scheduled for release in May 1983. Lucas develops each new episode from his central, nine-episode rough draft and delivers it to an accomplished screenplay writer. After episode six, Lucas will shift to episodes one, two and three, which occur about twenty years before Luke Skywalker's birth. With the exception of Artoo Detoo and See Threepio, the cast will change with each trilogy.
- 8. Lucas holds a degree in film from USC. Kershner, born in Philadelphia in 1923, holds Fine Arts degrees from Temple and USC. He taught on the cinema faculty at USC before becoming a highly respected documentary filmmaker in the sixties. He has since branched out into more mainstream productions; his credits include Stakeout on Dope Street, Hoodlum Priest, The Luck of Ginger Coffey, A Fine Madness, The Flim Flam Man, Loving, The Return of the Man Called Horse, The Eyes of Laura Mars, and the television movie: The Raid on Entebbe.
- 9. Carlos Castaneda, Tales of Power (New York: Pocket Books, 1976), p. 240. References to the first four Castaneda novels follow the Pocket Books editions: The Teachings of Don Juan: A Yaqui Way of Knowledge (1974), A Separate Reality: Further Conversations with Don Juan (1972), Journey to Ixtlan: The Lessons of Don Juan (1974), Tales of Power (1976); hereafter cited as TDJ, SR, JI and TP respectively. References to The Second Ring of Power, cited as SRP, refer to the hardbound edition (New York: Simon and Schuster, 1977).
- 10. For an interpretive comparison of the first four Castaneda novels to the *via quattour*, the fourfold way of the medieval mystic, see Alan M. Olson, "From Shaman to Mystic: An Interpretation of the Castaneda Quartet," *Soundings*, 61 (Spring-Winter 1978), 47–66.
- 11. Joseph Campbell, *The Hero with a Thousand Faces*, 2nd edn. (1968; rpt. Princeton: Princeton Univ. Press, 1973), pp. 136, 345.
- See, respectively, Gareth Knight, A Practical Guide to Qabalistic Symbolism (1965; rpt. New York: Samuel Weiser, 1978), II, 141-44, for Le Pendu; Sir James Frazer, The New Golden Bough, abridged, ed. Theodor H. Gaster (New York: New American Library, 1964), pp. 377ff.; The Poetic Edda, "Hovamol" 139, trans. Henry Adams Bellows (New York: American-Scandinavian Foundation, 1923), p. 60.
- Chāndogya Upanishad (6. 8-16), in Robert Ernest Hume, trans. and ed., The Thirteen Principal Upanishads, 2nd edn., rev. (1931; rpt. New York: Oxford Univ. Press, 1977), pp. 246-50.
- 14. W. Y. Evans-Wentz, ed., *The Tibetan Book of the Dead*, trans. Lama Kazi Dawa-Samdup, 3rd edn. (1957; rpt. New York: Oxford Univ. Press, 1960), p. 123.
- 15. Chandogya Upanishad (5. 12), in Hume, p. 235.
- 16. Werner Erhard and Victor Gioscia, "The est Standard Training," Biosciences Communications, 3 (1977), 104-22.

## The Contrapuntal Design of Artificial Evolution in Asimov's "The Bicentennial Man"

#### **PATRICIA S. WARRICK**

■ What is a man? What is a robot? Andrew Martin, the protagonist in "The Bicentennial Man" is a robot, but a discontented one. He puzzles, "Would it be better to be a man?" His exploration of and his final answer to the fundamental question of what it means to be a man give a terse dramatic structure to Isaac Asimov's finest story about machine intelligence. The 1977 Nebula Award recognizes its merit. "The Bicentennial Man" is the latest in a series of thirty-six tales about robots and computers that Asimov has written between 1940 and 1976. He is the most productive, knowledgeable, and profound of any science fiction writer on this theme, and he well deserves the title he has earned as the father of the robot.

The occasion for writing "The Bicentennial Man," Asimov explains in his story note, was a request he received in 1975 to contribute a story to an anthology to be titled *The Bicentennial Man*. His story is the history of a robot named Andrew. It traces Andrew's evolution from the time he was manufactured as a household robot through the next two hundred years of his mental and physical transformation until he finally becomes the Bicentennial Man.

Asimov notes that this is the longest story (15,000 words) he has produced below novel length in the last fifteen years. Even given the substantial length of the story, it is still very terse—filled with ideas—and might well benefit from expansion to novel length. The story is told in twenty-three numbered episodes, and opens with an episode set just short of the story's climax at the end of the two hundred years. Episodes 2

Extrapolation, Vol. 22, No. 3 0014-5483/81/0223-0002 \$01.00/0 Copyright © 1981 by The Kent State University Press through 20 recapitulate Andrew's long history; episodes 21 through 23 bring the story to a rapid, powerful, and very poignant conclusion.

In an earlier novel, *The Naked Sun* (1957), Asimov used a biologist, working in a laboratory where human fetuses were grown in artificial wombs, to explain the human developmental process: "Every individual repeats his own evolutionary history as he develops. Those fetuses back there have gills and a tail for a time. Can't skip those steps. The youngster has to go through the social-animal state in the same way. But just as a fetus can get through in one month a stage that evolution took a hundred million years to get through, so our children can hurry through the social-animal stage."<sup>1</sup> Asimov takes this idea that ontogeny repeats phylogeny and applies it to robot evolution in "The Bicentennial Man." Andrew the robot, as he develops, repeats the robot development dramatized in all Asimov's previous stories. Then, having recapitulated all the stages of development to that point in time, Andrew pushes the evolutionary process forward into the future.

The power of the story results from an interweaving of two tales, one told and one untold. Andrew's story traces the evolution of robots toward the organic, first set in motion when man learned to create artificial intelligence housed in a machine. But equally moving is the tale not told, the story of man's evolution toward the mechanical as his new cybernetic technology gives him the means to replace organic with machine parts. This design of told and untold tales woven into a future of human metamorphosis is the music of ambiguity, suggesting man's glory and his tragedy when his technological creativity changes his essential nature. The echoing notes, after the story transforming robot into man and man into robot ends, suggest what it means to be the human that Nature created. Andrew ascends, or perhaps descends, into manhood; the direction is not clear, but the price of his journey is his immortality. The contrapuntal design of the story suggesting man's journey toward machinehood silently whispers that the price of man's immortality may be his humanity.

Asimov began writing stories about robots when he was only nineteen years old. His first one, "Robbie" (1940), describes a robot who is a playmate for a little girl, and it is among the earliest science fiction picturing robots with electronically operated brains.<sup>2</sup> Asimov's robots have "positronic" brains. Positrons are minute subatomic particles of matter discovered by physicists at the time Asimov was creating his robots; he borrowed the term and gave it to his robots to suggest the way information is processed and stored in their platinum-iridium brains.

The stories can be divided into three phases. During the first, from 1940 through 1950, Asimov wrote a dozen stories and they were primarily about robots, with only two computer stories. Nine of these stories were collected and published as *I*, *Robot* in 1950. In his second period, from 1951 to 1961,

Asimov wrote another dozen or so stories and two robot detective novels, *The Caves of Steel* and *The Naked Sun*. Many of these stories and the two novels were collected and published under the title *The Rest of the Robots*. In 1958 he turned from writing science fiction to writing about science, and not until the mid-1970s did he write more fiction about computers and robots. The anthology, *The Bicentennial Man*, contains a half-dozen stories marking his third period and demonstrates the further evolution of his ideas about the key role computers will play in man's future.<sup>3</sup> While almost every science fiction author has written at least one robot story, and today robots have become as much a symbol of the future as spaceships, no one has written as many stories about artificial intelligence nor demonstrated as wide a knowledge of the subject as Isaac Asimov.

Artificial intelligence in science fiction appears in so many forms that a clarification of terms is helpful. A computer is defined as an automatic electronic machine for performing calculations and for storing and processing information. A robot is a mobile machine system with information processing ability, made of nonbiological materials like metal, plastic, and electronic devices. The robot may be self-controlled (have its computer within), remotely controlled (have its computer elsewhere), or an intermediate machine, with the robot being partly self-activated and partly remotely controlled. Robots are distinguished from androids, the latter being man-designed, humanlike entities made of biological materials. Cyborgs are entities built by joining together mechanisms and biological organisms. While Asimov is always knowledgeable and accurate in his portrayals of machine intelligence, his descriptions of computers tend to be more realistic than his portrayal of robots. The most meaningful reading of his fiction is gained by regarding his robots as a metaphor for all the automated electronic technology-in a variety of forms-that will probably replace most of man's physical and routine mental work in the future.

The "Three Laws of Robotics" play a key role in "The Bicentennial Man,"<sup>4</sup> and Asimov assumes his reader is familiar with their function in his earlier fiction. The Laws are as follows:

- 1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- 2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
- 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

The germinal idea for the First Law appeared in Asimov's original robot story "Robbie" (1940). Irritated with the plethora of robot stories in the 1920s and 1930s where the robot routinely became a destructive monster, Asimov vowed that "never, never was one of my robots to turn stupidly on his creator for no purpose but to demonstrate, for one more weary time, the crime and punishment of Faust."<sup>5</sup> His First Law made certain a robot would never injure a human. The Three Laws first appeared as a key element in the plot of "Runabout," Asimov's fifth robot story. He relates that the laws were worked out with editor John Campbell during a conversation in Campbell's office on December 16, 1940.<sup>6</sup> In subsequent stories the scope, applications, and implications of the Laws developed until they have become a serious ethical system for guiding the use of computers and, even more broadly, technology in general. The Three Laws have become well known both in and out of science fiction. Two recent texts on artificial intelligence make references to the Three Laws, and one of the authors says he sees no reason why the Laws cannot be programmed.<sup>7</sup>

In "Robbie" the First Law apparently served no more purpose than assuring man that a robot was harmless. But six years later, in "Evidence" (1946), Asimov was fully aware of the ethical implications of the Laws. Robopsychologist Dr. Susan Calvin explains: "If you stop to think of it, the three rules of robotics are the essential guiding principles of a good many of the world's ethical systems."<sup>8</sup>

"The Bicentennial Man" subsumes all the earlier robot and computer fiction, incorporating the settings, themes, many of the characters, and the Asimovian view of artificial intelligence. This view is a positive one, eschewing the "Frankenstein complex"9 afflicting those who are fearful of and hostile to technological advance. Asimov holds that man will continue to develop more sophisticated technology; he will gradually become more skillful at problem-solving in societal and environmental areas; he will expand outward and colonize space. In Asimov's imaginary future world, the first robots were built by U.S. Robots and Mechanical Men, Inc. in 1976 and used as household servants. Soon a reaction against them developed on Earth, and they were then used primarily in space. The progress of the corporation was guided for many years by Dr. Susan Calvin, "the brilliant roboticist who had, virtually singlehanded, built up the positronic robot from a massive toy to man's most delicate and versatile instrument. . . . "10 After her death, Mervin Mansky becomes the roboticist.11 As "The Bicentennial Man" ends, the production plant has been shifted to a large space station, along with many robots, and the Earth is becoming parklike. Asimov uses the same themes and ideas from story to story, but he never repeats them precisely. They keep changing and evolving, and the movement is always from the simple to the complex; the sophistication of mechanical intelligence increases-from Robbie, no more than a massive toy, to Multivac,<sup>12</sup> able to maintain a stable world system. The complexity of the Three Laws also increases as Asimov

explores their ambiguities. Perhaps the most interesting evolutionary process of all, however, is reflected in Asimov's changing attitude toward the meaning, possibility, and value of high level artificial intelligence.

During the 1940s, in Asimov's first period, his robots and computers are reliable servants of man. They aid man in a variety of ways-space exploration and development, economic control and governance, mathematical calculations-but they are always subservient to man. In his second period, Asimov sees robots as helpful partners to man. His two detective novels, The Caves of Steel and The Naked Sun, illustrate this man-machine symbiosis. Robots are reliable logic machines, able to store and process data, inexhaustable and incorruptible because they are without emotions and consequently have no ambitions, loves, or other distractions to subvert the functioning of logic. Man, in contrast, is capable of creative problemsolving, and can exercise judgment in choosing between alternatives. His intuition can be of value if his insights are supported and developed through the mathematical logic the computer can provide. Asimov calls this supportive relationship a C/Fe culture. These are the chemical symbols for carbon and iron; carbon is the basis of human life and iron of robot life. A C/Fe culture results from a combination of the best of the two forms. In the third period, the most recent, when "The Bicentennial Man" was written, artificial intelligence is pictured as having evolved substantiallv bevond its level in the earlier works. Creativity, intuition, the emotions of joy and delight, judgment, free will-characteristics Asimov once defined as unique to man-are now given to robots. "That Thou Art Mindful of Him" (1974) introduces for the first time in Asimov's fiction the possibility of machine intelligence being both superior to and likely to dominate human intelligence in the future.<sup>13</sup> The view held long ago by Susan Calvin, in a story written in 1946, that robots deserve to control and direct men because they are superior<sup>14</sup> is now enunciated at Asimov's own position.

"The Bicentennial Man" incorporates all Asimov's previous ideas about machine intelligence as the story moves on to explore new territory: the ethical and philosophical implications for man in creating high level intelligence. (Interestingly enough, Stanislaw Lem in an essay titled "Robots in Science Fiction" [1969], argued that artificial beings with a high level of intelligence must be considered ethically as human beings. He complained that American science fiction about robots had not dealt with significant issues like this.<sup>15</sup>)

Asimov does something in "The Bicentennial Man" which he had never done in his previous thirty-five stories about robots and computers. He tells the story from the point of view of the robot.<sup>16</sup> He assumes a robot with consciousness and free will, plants the reader squarely in that consciousness by his selection of the robot's point of view, and opens the story with a scene where the robot exercises his free will as he deliberates a choice: to be or not to be a man, even if the price of manhood may be death. Andrew is not plagued with Hamlet-like indecision, although the reader will not know the consequences of his choice until the final scene.

Recollecting the evolutionary steps in the design of intelligence that led him to this moment of decision, Andrew recapitulates the two hundred years of his history (and also recapitulates the evolutionary process of Asimov's discussion of artificial intelligence over the previous thirty-five years). Then, having traced the stages of his development, Andrew pushes the evolutionary process into the future. Here the Asimovian imagination is at its best, taking dazzling leaps forward in time, but always pushing off from the current stage of knowledge in the field. He starts with questions currently being asked by researchers in artificial intelligence. What is human intelligence? The answer seems to be that it is information stored, processed, and used by the human organism to accomplish purposeful acts. A corollary question immediately arises. What is machine intelligence? The answer to this is similar to the first, except that now the process takes place in an inorganic mechanism. Asimov probed but did not define the likenesses and differences between organic and inorganic intelligence in "Stranger in Paradise" (1974). Now he pushes the question to the utmostand finds an answer both definitive and ambiguous. He reflects the growing awareness in the fields of computer science, psychology, biology and philosophy that the differences between human and artificial intelligence are not nearly so clear as they once appeared to be.

The approach Asimov chooses to the puzzle of intelligence, human or machine, leads to the power of the story. Inverting the obvious approachman examining artificial intelligence-he elects to have Andrew explore the nature and implications of human intelligence for a robot. As he learns about his master and creator, Andrew longs to become like him. Andrew's struggle to evolve beyond his programmed obedience is dramatized with great economy, and almost entirely through dialogue. The Martin family, in its four generations, represents the small group of men who realize the potential of artificial intelligence and take actions to foster and expand it. The U.S. Robots Corporation stands for the economic system supported by the mass of men who wish only to exploit robot technology for profit and who feel no ethical responsibility to this new form of emerging intelligence. The law is represented in various ways over the 200-year period of the story-lawyers, regional legislators, and finally the World Court. Each time Andrew brings to the courts a request for protection of his rights, they are confounded, replying that there is no precedent to follow.

The reader, following the untold story of the mechanical transformation of man's body, asks: What is the nature of artificial intelligence and its implications for man? He realizes that in this area, too, there are no precedents. We have always assumed that a high level of intelligence was unique to highly evolved living forms. But when inanimate or mechanical forms, albeit created by man, display a comparable level of intelligence, the assumption of man's uniqueness is brought into question; perhaps the living and the nonliving are not discontinuous. Beyond creating artificial intelligence, man begins to implant mechanical devices in organic bodies; and when the mechanical and the biological merge, they become strangers in a strange land where meanings, values, and relationships have not yet been defined. Asimov is in the avant-garde in attempting these definitions.

Andrew's journey from security as a servant in a sheltered household to lonely manhood, uncertainty, and finally death echoes the archetypal expulsion of man from Eden and his fall into knowledge, freedom, and death. Man in the Edenic myth was once in his childhood innocence locked into behavior patterns allowing him no significant choices. This part of the myth seems to symbolize the genetic programming that determines the behavior of lower life forms. Eating from the Tree of Knowledge, man achieves freedom at the cost of being driven from his secure paradise in Nature. The robot's parallel journey carries him beyond the programming created by his designers as he increasingly becomes self-programming. Andrew, as did Adam, moves from security to uncertainty. His journey is a spiral one, repeatedly touching three points of change as it revolves on its course: the physical, the mental, and the legal. Changes in one incite changes in the others.

Andrew's journey is originally precipitated by an element of unpredictability in his brain. "The mathematics governing the plotting of the positronic pathways was far too complicated to permit of any but approximate solutions and . . . therefore Andrew's capacities were not fully predictable" (p. 155). In biological evolution, the genetic mutation is due to a quantum jump in the gene molecule.<sup>17</sup> Analogously, Andrew seems to experience on occasion a shifting of an electron from one orbit to another in his brain. This unpredictability expresses itself in creativity. Andrew turns out to be a mutant robot with an unusual talent: he produces exquisite wood carvings. Further, he experiences enjoyment in his artistic activities; as he explains, "It makes the circuits of my brain somehow flow more easily" (p. 139). His woodcarvings are sold by the Martins and the money is deposited in an account in Andrew's name.

The ability to dream accompanies Andrew's creativity. He begins to dream of transcending his present condition and becoming what he is not free. Only later, when he is finally granted freedom by the Martins, does he learn its complexity. The individual is not really free unless the law declares him free and protects him from encroachments upon that freedom. Andrew's problem: how to get the courts to declare him legally free. The last two-thirds of the story traces Andrew's struggle to solve the problem of getting the courts to recognize his rights, as an entity with high intelligence, to the protection of the law. This mode of plot development by problemsolving is typical of Asimov. Puzzling out solutions with logic, not resolving conflicts through violence, is the methodology of all Asimov's computer and robot stories. No violence between robot and man is possible since the First Law prevents it. Step by step, as one solves a mathematical problem, Andrew patiently works out the answers to how one becomes legally free. To be so is a privilege only men have, he soon discovers. So the problem becomes one of definition: what is a man and how would a robot with high level intelligence have to change to become a man?

First, one must look like a man, so Andrew begins wearing clothing to hide his robot nudity. He learns about but does not emotionally understand the fact of human death when his first owner, Gerald Martin, dies. Andrew realizes that he needs more knowledge, and so he sets out for the library to begin his task of self-education. Threatened by humans on this trip, he realizes that he must have a law assuring his right to survive. George Martin, his protector, appears before the court and puts forth the argument for the rights of non-humankind to survive: "If a man has the right to give a robot any order that does not involve harm to a human being, he should have the decency never to give a robot any order that involves harm to a robot, unless human safety absolutely requires it. With great power goes great responsibility, and if the robots have Three Laws to protect men, is it too much to ask that men have a law or two to protect robots?" (p. 152). Winning his court battle after the fervent pleading of George Martin, Andrew is finally assured the legal right to survive. This is a significant breakthrough, declaring as it does that inanimate matter should also be protected by the law.

Next, Andrew begins his second career, one of learning and study, a career that is not completed until he has written a history of robots and so come to understand his past. In this cycle of his self-education, he develops an awareness of time; his discovery of his past, different from the present, implies a process of change continuing into the future. Andrew is not alone in his learning activities. The research of man into artificial intelligence and sophisticated mechanical devices continues as the years march past. Man and machine are united in a complementary bond; change in one creates change in the other. Only the briefest hints of man's evolution toward a machine form are given, but they serve to remind us that the transformation is occurring parallel with Andrew's changes. The science of prosthetology develops and is able to replace some human parts—kidneys, heart, hands—with mechanical parts. Andrew draws on this new technological expertise to have his positronic brain transplanted into an android body.

Increasingly intelligent, Andrew becomes increasingly aware of the price he pays for his approaching humanity. Complexity yields ambiguity. Even programmed by the Three Laws, the moral simplicity of his early life when he was an obedient servant is now gone. To achieve his goals, he had to ask others to lie for him (p. 154). He resorted to pressure and blackmail (p. 158). But given his aspiration to become a man, he is willing to pay this price.

The cyclical pattern of physical change, mental change, and legal change continues. Andrew begins a third career as a robo-biologist, and after mastering the field through long years of study, he takes the lead in prosthetology and makes substantial contributions to the science of lengthening human life by replacing organs with mechanical devices. At the same time he works to design a system allowing him to gain energy from organic sources rather than atomic cells. He starts to explain his evolutionary plan: "My body is a canvas on which I intend to draw—" (p. 163). He does not complete the sentence; what he intends is left as a question. The perceptive reader, comprehending the silent human story weaving through the robot tale, realizes the reversal that is taking place. Andrew, experimenting on himself, acts to "humanify robots" at the same time as men are in the process of "roboticizing humans" (p. 176). As Andrew, redesigning himself physically, must continually adjust his self-image, so man, transforming his body with machines, must accept a new vision of humanity.

Through all the years, Andrew never loses his dream. "The truth is," he says as he finally asks the chairperson of the World Science and Technology Committee to legally declare him human, "I want to be a man. I have wanted it through six generations of human beings" (p. 166). The chairperson disparages the likelihood of such a precedent-shattering event happening. But Andrew is persistent, fighting by indirection and legal maneuvers because the Three Laws prevent his taking any direct action against humans. Because his intelligence is never muddied by emotions, he can reason clearly and with utmost logic. He sees, finally, that he cannot be declared a man as he had hoped, despite freedom, intelligence, and an organic body, because his brain is different. The World Court has declared a criterion for determining what is human. "Human beings have an organic cellular brain and robots have a platinum-iridium positronic brain. . ." (p. 168). Andrew is at an impasse. His brain is developed (p. 169).

Finally, Andrew pushes the implication of this statement to its ultimate meaning. The greatest difference between robot and man is the matter of immortality. He reasons: "Who really cares what a brain looks like or is built of or how it was formed? What matters is that brain cells die; *must* die. Even if every other organ in the body is maintained or replaced, the brain cells, which cannot be replaced without changing and therefore killing the personality, must eventually die" (pp. 170-71). He realizes that the price of being human is to sacrifice his immortality. In the final moving episode of

the story, he submits to surgery rearranging the connection between organic nerves and positronic brain in such a way that he will soon die. When he performs this ultimate act of sacrifice, the Court at last declares him a man.

"The Bicentennial Man" is a powerful, profound story for several reasons. Foremost, Asimov leaves much unsaid, the story at which he only hints. Andrew's process toward manhood and death is unfolded against a background where man is developing technology moving him toward artificial intelligence and immortality. As machine intelligence evolves to human form, human intelligence is evolving toward machine form. The implication of this transformation is that a clear line between the animate and the inanimate, the organic and the inorganic, cannot be drawn (p. 152). If we see the fundamental materials of the universe as matter, energy, and information patterns (or intelligence), then man is not unique. He exists on a continuum with all intelligence. He is no more than the most highly evolved form on the Earth. This view implies that ethical behavior should extend beyond human systems to include all systems because any organizational pattern, human or nonhuman, organic or inorganic, represents intelligence. A kind of sacred view of Nature and of all the universe, arrived at not by religious mysticism but by pure logic, emerges from this reading of "The Bicentennial Man."18

A further suggestion in "The Bicentennial Man" is that because knowledge or information eventually dies in the organic brain but can survive indefinitely in a mechanical brain, the inorganic form may be the most likely one for intelligence to survive in the universe beyond the Earth's environment. "Stranger in Paradise" (1974) describes in detail the possibility that the machine form may well be the ideal one to house intelligence as it journeys out among the stars.

Finally, the story succeeds because it creates a sense of questing motion. The power of this motion accelerates as Andrew's intelligence searches through a series of lesser problems and finally discovers the most fundamental question for man: what is the complementary relationship of life and death? The untold tale that weaves through the story questions man's dream of achieving immortality. Andrew's patient and costly journey to reach humanity; his joy in freedom, creativity, and learning; his willingness to die to give life to his dreams—all these ask the reader to see with a fresh vision and delight the meaning of human life. Is it just possible, as Andrew suggests, that life is precious for man because he is a mortal who dreams and who knows he must die? Will man's quest for immortality be as costly as Andrew's journey to humanity?

#### Notes

- 1. The Naked Sun (New York: Lancer Books, 1956), p. 122.
- 2. The first story picturing an electronically operated robot was Harl Vincent's "Rex," written in 1934. Lester del Rey followed with "Helen O'Loy" in 1938, and Eando Binder published "I, Robot" in 1939.
- The six stories and their original dates of publication are "Feminine Intuition" (1969); "That Thou Art Mindful of Him" (1974); "The Life and Times of Multivac" (1975); "Stranger in Paradise" (1976); "The Tercentenary Incident" (1976); and "The Bicentennial Man" (1976).
- 4. The Three Laws play a key role in the plot of two other stories reprinted in *The Bicentennial Man*. The stories are "Feminine Intuition" and "That Thou Art Mindful of Him."
- 5. I, Robot (New York: Panther, 1950), p. 11.
- 6. Joseph F. Patrouch, Jr., *The Science Fiction of Isaac Asimov* (Garden City: Doubleday, 1974), p. 37.
- See Philip C. Jackson, Jr., Introduction to Artificial Intelligence (London: Mason and Lipscomb Publishers, 1974), p. 396; also Bertram Raphael, The Thinking Computer (San Francisco: W. H. Freeman and Co., 1976), p. 249.
- 8. Asimov, I, Robot, p. 169.
- 9. Asimov, The Naked Sun, p. 138.
- 10. Asimov, "That Thou Art Mindful of Him," in *The Bicentennial Man* (Garden City: Doubleday, 1976), p. 67. Subsequent page references are to this edition.
- 11. The name is clearly derived from Marvin Minsky of MIT, who is more enthusiastic about the possibility of duplicating human intelligence than almost any other researcher in the field of artificial intelligence.
- 12. Asimov, "The Life and Times of Multivac," in The Bicentennial Man.
- 13. See Asimov's essay "The Myth of the Machine" in *Science Fiction: Contemporary Mythmakers*, ed. Patricia Warrick et al. (New York: Harper & Row, In Press). In this essay he expresses the view that machine intelligence may well be the next form in the evolution of intelligence.
- 14. Asimov, I, Robot, p. 181.
- 15. In SF: The Other Side of Realism, ed. Thomas D. Clareson (Bowling Green: Bowling Green Univ. Popular Press, 1971).
- 16. Eando Binder with his Adam Link was the first writer to use the point of view of the robot in a series of stories.
- 17. Erwin Schroedinger, What is Life? (Cambridge: Cambridge Univ. Press, 1944), p. 36.
- 18. In The Tao of Physics (Berkeley: Shambhala Publications, 1975), Fritjof Capra develops extensively the similarities in the views of reality shared by Western modern physics and Eastern mysticism, although the former has proceeded in its study with the methodology of logic and the latter with intuition. In a like manner, Asimov arrives at a sacred view of Nature through the use of reason.

## Teaching the Course in Fantasy: An Elvish Counsel

#### **ROBERT CROSSLEY**

■ On the evening of the second day of his quest, Frodo Baggins encounters a group of elves in the forest and seeks direction from their lord, Gildor. The dilemma is whether he should proceed unguided on his journey or wait for Gandalf to show up as promised. Gildor assesses the situation coolly, considers the alternatives, produces a noncommittal old proverb, and ends up throwing the problem back to Frodo: "Elves seldom give unguarded advice, for advice is a dangerous gift, even from the wise to the wise, and all courses may run ill." Enough of my own courses in fantasy have run ill that I distrust my own counsel, and what I write here—even when it sounds most dogmatic—is meant to be suitably guarded and tentative. It should, at any rate, be *read* with elvish skepticism even if it seems composed out of the assured egotism which is the privilege of wizards but the occupational hazard of merely human teachers.<sup>1</sup>

I first taught a fantasy course in 1970. Others who began teaching such courses around that time will recall the suspicion that often greeted the effort to bring nonrealistic fiction into the collegiate curriculum. Apprehensive faculty committees were likely to think "fantasy" less a literary classification than a medical condition. My own first course in fantasy must have seemed a mischievous and uncouth stepchild of the sixties. And, in truth, those who saw it that way were probably partly right. A decade later the situation is altered. In many institutions the course in fantasy holds a secure, if not always respectable, place in the curriculum. The teacher of fantasy may still find his subject treated with amused tolerance by colleagues, but declining enrollments and shrinking literature majors

Extrapolation, Vol. 22, No. 3 0014-5483/81/0223-0003 \$01.00/0 Copyright © 1981 by The Kent State University Press have made English faculty grateful for any course that attracts students to its program.

But there is no point in continuing to do battle with the academic dragons who disapprove of the fantasy course being conducted next door to the Milton course. We have passed the stage where we need to be preoccupied with defending the intellectual integrity of our courses. For those who teach fantasy the interesting questions now are: Having gotten the subject into the curriculum, what are we doing with it? Are the pedagogies that were appropriate to an experimental course ten years ago serviceable for a course capable of becoming a central, rather than a peripheral, component of a humanities curriculum? As teachers, do we continue to set off the fantasy course from other literature courses proudly clinging to our reputation of "unclean"—or do we make of it a showcase and a model for the teaching of literature?

To such large questions my answers must necessarily be personal and partial. Because I believe advice *is* a dangerous gift, I do not wish to advise, still less to prescribe. I can only investigate some of my own evolving attitudes toward the course in "Fantasy and Utopia" which I teach at the University of Massachusetts. My interest here is not in recommending my own syllabus or in passing on "teaching techniques," since I do not believe teaching practices and styles are transferable like hand-me-down clothes. My autobiographical reflections have no value other than as one contribution toward a debate that needs to take place if we are to generate a general pedagogy of fantasy.

All pedagogy is divided into three parts: the audience, the books, the teacher.

I

If my own experience is typical, the commonest misconceptions about the teaching of fantasy have to do with the audience. Who are the students enrolled in fantasy courses? What are their expectations? What do they need from the courses? The misconceptions stem from an assumption that, somehow, the course in fantasy is different from other literature courses, that the students, like the texts themselves, are peculiarly imaginative. Or just peculiar.

I have taught fantasy courses under many circumstances: in a tenmember, student-led seminar for seniors, in a freshman literature discussion course for twenty, in a mixed lecture and discussion class of thirty-five, in a large lecture hall to nearly a hundred, and, recently, to a group of master's candidates who were themselves secondary school teachers. I find I can construct no profile of the student likely to take or profit from a course in fantasy. Just the reverse: the students I have taught have been defiantly heterogeneous in talent, interest, taste, motivation, and age. That
may seem obvious—except that both teachers of fantasy and their skeptical colleagues have often harbored (openly or secretly) the belief that the subject of fantasy tends to attract a natural community of students.

In fact, students seem to enroll in the fantasy course with a fascinating mix of expectations: some have read a few popular works of fantasy and are eager to extend the range of their acquaintance with a whole type of fiction; others urgently hope the reading list will include only books they have already read. Some take the course because of a single prized work or author-Alice in Wonderland or The Lord of the Rings, Ursula Le Guin or C. S. Lewis; of these, some will be pleased to make new connections with their favorite author and others will use their favorite as a measure against which they will find all other texts and authors lacking. Some come captive to the visual fantasy of films and are irritated by literary fantasy. Some study fantasy because they have already developed a passion for it, some because they are curious to learn what all the fuss is about, some because they think they ought to like it, some because they enjoy condescending to and debunking it. (Some few never know why they are in the course at all, and the teacher will often bless those blank souls who enter with neither the superior dogmatism of the enthusiast nor the stiff upper lip of the cynic.)

Some students enroll in "Fantasy and Utopia" expecting a longer, denser reading list than they will find in other literature courses; others are in quest of the fabled easy "A." Some find the material rich and demanding and a stimulus to debate; others believe the texts are light and uncomplicated, exempt from analysis. Some come hoping the class will sit in a circle on the floor and share their intimate fantasies; some come worried that the course will turn out to be yet another dreary and unstructured happening in which there is much talk and little education. Some think fantasy is directly pertinent to issues in their own lives-spiritual, moral, intellectual, imaginative, aesthetic issues; others are convinced that the great virtue of fantasy is its irrelevance to serious issues, its emphatically apolitical, amoral, anti-intellectual, antiacademic character-and God help the teacher if he starts unearthing "hidden meanings." Some see the course as an occasion for rediscovering or reinventing the (real or imagined) freedom of their childhood; some can respond to the quests and trials, the humiliations and triumphs of heroic fantasy as vivid analogues to their own adolescent rites of passage; some are eager to discover in the texts models of social stability and individual integrity that may be usable lights to clarify adult life. Still others are looking for a time outside of time and a space beyond the here-and-now which will distract their attention from present troubles. At the University of Massachusetts, I have found parents and grandparents taking the fantasy course largely in order to find out what their children and grandchildren were reading.

What does the teacher do in such a chaos? First, he reminds himself that

the chaos is not special but typical; the diversity of motives and predilections in the audience for the fantasy course is no wider than in any literature course. Indeed, to raise our sights beyond the academy, it is no different from the situation of the reading public at large. In other words, the chaos derives from the fact that many people act from unarticulated, unexamined or not fully formed biases and habits of reading and evaluating books of all kinds, let alone fantasy books. The teacher cannot—and probably should not attempt to—abolish that chaos; but he can exploit it by bringing the issue of literary assessment out into the open.

What I am suggesting is that the course in fantasy beome a course in the act of reading—a course in what is at once the most basic and the most sophisticated of literary issues. When Tolkien, in a famous passage in "On Fairy Stories," distinguishes the escape of the prisoner from the flight of the deserter as a way of settling the question of "escapism" in fantasy, he raises important questions about the attitudes, the responsibilities, the pleasures of the reader: when we read a work of fantasy (or, again, any text) are we deserting obligation or fleeing a jail? In the act of reading, what are we escaping from? More importantly, what are we escaping to? What do we hope to put behind us, and what do we expect to find on the other side? Bilbo Baggins put the questions more crassly in *The Hobbit* as he was about to be tricked out of his comfortable house and into a dreaded adventure: "What am I going to get out of it? and am I going to come back alive?"

My assumptions about literature are a moralist's assumptions-I believe it is important that the act of reading cause some change in the reader-and therefore Bilbo's questions, far from being naive or self-serving, are for me the only really important questions a reader asks of a book. What am I getting out of this? Am I coming back more fully alive? The goal of literature courses, including fantasy courses, is not interpretation but evaluation. Interpretation is merely an instrumental skill; we interpret so that we may see and enjoy and judge. Literary history, textual explication, generic and stylistic analysis are merely the ritual exercises of an academic liturgy unless they affect students' capacities to judge what they read in the fullest and most humane way. The one common denominator in my list of the varieties of students taking fantasy courses is that nearly all enter with likes and dislikes, preferences and biases. The one thing it is most important for them to emerge with is a richer, more resourceful, more conscious and articulate and knowledgeable way of determining their literary valuations.

Bilbo Baggins' questions necessarily bring me to the issue of what to read

in a course in literary fantasy. If the student needs to make the effort to allow herself to be changed by what she reads, the teacher is obliged to choose texts that will make that effort worthwhile. I have not always seen this issue as clearly as I think I do now. In my earlier fantasy courses I included materials that now strike me as ephemeral, soft, not challenging or interesting enough-Flash Gordon films, the books of Carlos Castaneda, Stranger in a Strange Land, Jerry Rubin's Do It!, stories by Bradbury and Lovecraft. The particular titles on my list do not matter, except to me, and others will judge these works very differently. But it is important for the teacher of fantasy to have a hit list as well as a hit parade. Such discriminations are simply the outward signs of the teacher's conviction that the course in fantasy need not be a poor relation to other literature courses. If one were teaching an introduction to Shakespeare, one would want to bypass Titus Andronicus and The Merry Wives of Windsor for Othello and Twelfth Night. So, in introducing fantasy I prefer to pass over Lovecraft to make room for Poe, to eliminate Castaneda on sorcery in favor of Le Guin's Earthsea wizards, to nod respectfully in Heinlein's direction but give careful attention to H. G. Wells, to allude to contemporary political fantasies but study Zamyatin's We and Morris' News from Nowhere, to discard the overrated Bradbury and save time for the neglected David Lindsay.

Let me reiterate: my titles do not matter. I am not interested in prescribing a syllabus. A fantasy course drawn only from nineteenth and twentieth-century texts has an abundance of classics in the fantastic mode from which to draw. If we teach our students how to read Mary Shelley and George Macdonald and Carroll and Lewis and Tolkien and Kafka and Le Guin and Wells and Stapledon and Borges, they can read (and judge) for themselves the books of lesser figures. As with any literature course, our aims in teaching fantasy should be to equip students to become independent readers able to read beyond the boundaries of a course syllabus, liberated from the guidance—and opinions—of the teacher. For that purpose a course built on the great books in fantasy—works with intrinsic literary merit or those that have had an impact on the development of the tradition and forms of fantasy—has a special claim on the attention of students.

My argument may seem cranky. I admit it is old-fashioned. I would deny, though, that it is elitist or the product of academic knee-jerking. I am certainly very much against operating a course in fantasy as a smokescreen or subterfuge for teaching the same old texts that are always taught in introductory literature classes. In fact, I am anxious that no one construe my principles as an excuse for designing a fantasy course exclusively from texts like *Beowulf*, *Gulliver's Travels*, *The Tempest*, *Don Quixote*, *The Divine Comedy*, *The Odyssey*, *The Turn of the Screw*, *The Great Gatsby*, and The Faerie Queene. Very sound arguments can be made for seeing such books as wholly or partly or substantially fantastic. And it may be valuable to allude to them as such in a fantasy course; however, those books are taught elsewhere in the curriculum. One justification for inventing a separate course in fantasy is to broaden the literary canon, to bring into the university excellent writers and works that have been excluded because of academic provincialism, because of a straitened definition of what makes "literature" or "a classic," because of snobbish cultural distinctions between literary and "popular" fiction. The course in literary fantasy should widen the artistic horizons of our students (and our colleagues) rather than rearrange the same old materials, studied from a supposedly fresh perspective. The fresh perspective may come when the student carries what she has learned about Tolkien or Wells in her fantasy course to her study of The Faerie Queene or Gulliver in some other course. When that starts happening, the fantasy course may start to be perceived as a real part of the curriculum and not simply a concession to vulgar tastes.

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The most perilous part of my counsel is to suggest something of the role, the stance, the behavior of the teacher. Here autobiography risks becoming indecent exposure, so let me turn momentarily from the doubtful truth of personal history to the higher truth of fiction. The protagonist of Ursula Le Guin's *The Dispossessed*, the brilliant, self-exiled physicist Shevek, journeys from the utopian colony Anarres to the mother planet Urras where he becomes a visiting professor at a major urban university. Students flock to his physics lectures; the students are bright, responsive to the magnetism of Shevek's personality and to his gifted teaching. They come from a privileged and pampered background. They are all male, all upwardly mobile, job-oriented, and grade-conscious. For Shevek the anarchist, the democrat, the believer in noncompetitive learning, the experience of trying to teach such students in such circumstances is challenging and somewhat demoralizing:

They were superbly trained, these students. Their minds were fine, keen, ready. When they weren't working, they rested. They were not blunted and distracted by a dozen other obligations. They never fell asleep in class because they were tired from having worked on rotational duty the day before. Their society maintained them in complete freedom from want, distractions, and cares.

What they were free to do, however, was another question. It appeared to Shevek that their freedom from obligation was in exact proportion to their lack of freedom of initiative.

He was appalled by the examination system, when it was explained to him; he could not imagine a greater deterrent to the natural wish to learn than this

pattern of cramming in information and disgorging it at demand. At first he refused to give any tests or grades, but this upset the University administrators so badly that, not wishing to be discourteous to his hosts, he gave in. He asked his students to write a paper on any problem in physics that interested them, and told them that he would give them all the highest mark, so that the bureaucrats would have something to write on their forms and lists. To his surprise a good many students came to him to complain. They wanted him to set the problems, to ask the right questions; they did not want to think about questions, but to write down the answers they had learned. And some of them objected strongly to his giving everyone the same mark. How could the diligent students be distinguished from the dull ones? What was the good in working hard? If no competitive distinctions were to be made, one might as well do nothing.

"Well, of course," Shevek said, troubled. "If you do not want to do the work, you should not do it."

At my urban university, students do sometimes fall asleep in class because most have jobs of thirty or more hours a week. But despite the absence of privilege and insistent reminders of the necessity of rotational duty, the classroom at the University of Massachusetts resonates with the classroom at leu Eun on Urras. Shevek's dilemma points suggestively to issues of course organization and management and evaluation for the teacher of fantasy.

We might notice, first, that Shevek, that principled disbeliever in systems and bureaucracies and rote learning, teaches by lecturing. When I first began teaching fantasy, I disdained the lecture—though I cheated sometimes by employing what I clumsily called "formal presentations." Over the past ten years, class size has grown and the number of formal presentations has crept upward. Lately I have dropped the pretense of informality altogether and have begun to lecture consistently to groups of sixty or more. Though I may now be involved in ex post facto rationalization, I think I was moving on my own—gradually and reluctantly—to a revaluation of the pedagogy of lecturing. In spite of the price that one pays in the foreclosure of intimacy and give-and-take in the classroom, the lecture may be an especially appropriate pedagogy for courses in fantasy and Shevek an appropriate model for the teacher.

The fantasy course is often populated with students who think they already know the subject before the semester begins. Many, both those who like and those who dislike fantasy, believe (somewhat inconsistently) that it is uncomplicated and infinitely subjective. They think that because a book is a fantasy any interpretation is legitimate, all value judgments about it are personal and therefore not debatable, and anyone who challenges their response as too simplistic (or simply incorrect) is just a spoilsport. I do not want to seem to parody or patronize the students. There is no reason why they should not feel this way at the beginning of a course. There is nothing ominous or sinful about their inability to respond fully to a literary work. Ignorance may not be bliss, but it is surely the proper starting point for any course of study. Teachers are sometimes so busy lamenting and ridiculing their students' ignorance that they forget that ignorance is the normal condition of a student beginnning a course; education assumes ignorance.

If we wish to assist in enhancing students' pleasure in reading fantasy and in discovering richer literary experiences, the most promising strategy may not be to initiate the course with discussion or to make "a good discussion" the highest pedagogical goal. Too exclusive a reliance on discussion formats may do students of fantasy a disservice by perpetuating the ignorance with which they naturally start the course. Shevek as teacher is an impressive reminder of what teaching authority means; he rejects the authoritarian role-the teacher as bureaucrat, as disciplinarian, as the answer-man-but affirms through his behavior in the lecture hall a powerful image of the intellectual authority of the teacher. He lectures. And in so doing he uses a pedagogical instrument suited to demonstrating an inquiring mind actively at work on a subject. If we want to educate students not only about fantasy but about the significance of the act of reading, we might do well to emulate Shevek and leaven discussion with lecture. If we want the course to change the students-the moralist is speaking again—we need to do more than provide them a forum for the recycling of their ignorance. The danger of the lecture, particularly if we fall short of Shevek's enviable combination of brilliance and charm, is apparent: one mind at work may cease to be exemplary and become simply dogmatic. Lecturers can too easily get the habit and start teaching on automatic pilot. Like all pedagogies, the lecture requires tact and selfconsciousness lest it become simply ritualistic.

Of all the rituals of the academy, the ritual of grading has most bedeviled me since I began teaching. In *The Dispossessed*, Shevek proposes to finesse the problem in characteristically anarchistic fashion: give them all A's and the computers that print report cards will be satisfied, but he and his students will share the secret knowledge that the whole evaluative enterprise is absurd. The strategy is tempting. So much fantastic literature is overtly utopian and so often depicts ideal societies operating without debilitating competition or heroic characters who are self-motivating rather than responsive to bureaucracies and systems that the teacher may feel hard put to justify participating in the conventions of academic evaluation so often ridiculed and despised in the very books he is teaching. Let me return to autobiography again, though I will not presume to generalize all my sins.

Eleven years ago, as a graduate student on a teaching fellowship, I gave all my students A's. The computer did not notice. My chairman did, and I came close to being prohibited from teaching again. I have never tried the experiment again—whether from cowardice or conviction I am not prepared to say. Later, in my first fantasy course, I avoided assigning papers or giving exams but required of students something called, fuzzily, "projects": I received an astonishing variety of productions, everything from stained glass art to a board game to a staged fantasy "happening" that disrupted not only my classroom but the whole floor of the building (nearly costing me my teaching license again). Students submitted dream journals, illustrated children's books, music, and an animated film. If variety and inventiveness count for much, the projects were a success. And all but one person made A's and B's. Of course. What did I know about stained glass or animation or game theory? How dare I judge inadequate what I knew next to nothing about? In such a situation the teacher can only appreciate, not evaluate. But I enjoyed the projects hugely, the students were handsomely rewarded with the tokens of academic achievement, and everyone's conscience was clean. More or less.

In a later year I added to the projects the requirement that each student lead one class discussion. The grades for these sessions tended to be quite high. How could one give a nervous, inexperienced student who had never taught a day of her or his life a low grade for teaching a class I was being paid for? Besides, I knew how hard it was to teach fantasy, having led some discussions myself that were stinkers. Conscience conspired with selfinterest to maintain a high proportion of A's and B's. I kept reminding myself, though, that the proportion was not surprising in a course the students really wanted to take.

In later versions of the course I have asked for papers and have begun giving exams; some odd things have happened to the grades. More students began receiving C's and even D's as I discovered that some very enthusiastic students had shockingly little to say about the texts—and their essays seemed sometimes to have been written while the authors were attending to television rather than Tolkien. Were these students so much dumber than those of 1970? Or was I the dummy? Maybe my earlier students had just as shallow and sloppy a grasp of the subject but simply enjoyed their ignorance more.

Enough. I am not as reactionary as my diatribe makes me sound. I remain convinced that the grading code is a deterrent to education, but it is clearer to me now than it was ten years ago that reformation cannot be accomplished in isolation. Not only is it mistaken to pretend that a miniutopia can be founded for a few months in one room for an hour every other day while students and teachers continue to lead their usual lives elsewhere, it is also quite self-indulgent. As long as the fantasy course remains part of the curriculum of education as we now know it, and not of education in Utopia, we must use the same evaluative principles and standards common to other college courses. There is nothing to stop us from trying to use those evaluative instruments humanely, scrupulously, and intelligently, but we have to use them or watch the long effort to bring fantasy into the curriculum become nothing more than a sideshow for the amusement or indignation of our crustier colleagues and a source of frustration rather than renovation for most of our students.

When Shevek proposed abolishing grades and examinations in his physics course, his students objected. (So, by the way, did mine—and on exactly the same grounds.) They wanted to be ranked. There is a crucial, if unattractive, lesson here: utopia is not a product that can be imported. For Shevek's course to matter in the curriculum and in his students' lives, it had to have the outward trappings of academic respectability; its content, its substance could be profoundly subversive as long as it made the usual ritual demands on students. Indeed, the rituals were a prerequisite to its being taken seriously by both administrators and students.

I think the same is probably true of a course in fantasy. Fantastic literature is often, in its substance, subversive of widely held ethical, economic, political, psychological and educational values, but the books can take care of themselves, can have their designed effect on readers. without our orchestrating the undermining of the grading system in our classrooms. In fact, such efforts are likely to be counterproductive. Once evaluation is removed from the fantasy course, many students will discover, to their chagrin as well as ours, that cultural values and stresses to which they remain beholden take over. They will give more time to those courses that make the conventional demands and less than they need to get something substantial from the fantasy course. Works of fantasy are, after all, artful fictions, not elixirs that will cure all the ills in our society or in our classrooms. And we, alas, are only teachers, not wizards. We need to remember, in this age when critics and teachers have an increasingly immodest sense of their own importance and power, that the authors of fantastic fiction are the wizards. And if we teach well, the books will work their own magic without us.

## Notes

1. I am grateful to Prof. Donald Morse and the members of the Fantasy Institute he conducted at Oakland University in the summer of 1978 where I presented an earlier, somewhat different version of this essay. Among other things, the essay is a reflection on, and substantial rejoinder to, ideas about the teaching of fantasy I presented in "Education and Fantasy," *College English*, 37 (1975), 281–93.

# That Web of Symbols in Zamyatin's We

#### EDWARD W. R. PITCHER

■ To complement the several general commentaries on the quality and kind of novel which Yevgeny Zamyatin's We has been declared to be, I will analyze closely the novel's symbols in this essay and argue for the importance of paying close attention to the text before arriving at judgments of Zamyatin's intent or accomplishments. If this approach leads to a seemingly tedious attention to detail, the reader should remember that the complexity of the text and the obscurity of the symbol relationships are characteristic of Zamyatin's artful narrative strategy and only partly a reflection of the limited appeal of analytical criticism. The justification for such an approach is, of course, only apparent when the task is accomplished and one's conclusions reported; the approach may also be seen to have been essential when it is realized that those conclusions are opposed to the views of many readers and critics and might not seem viable without strong support through textual analysis.<sup>1</sup>

Zamyatin's novel explores the interplay between the individual and the state as utopian and dystopian fiction inevitably must. The central protagonist is D-503, numbers having replaced names in the closed society conceived by Zamyatin, and the reader follows his progress from unquestioning citizen of the One State to unwilling violator of its laws (seduced to disobedience by I-330, the Mata Hari of the novel and member of the subversive group Mephi), from uncomfortable participant to questioning, passion-inspired collaborator in acts of rebellion (including the conspiracy to seize control of the state's ultimate instrument for domination, an airship called the *Integral*), until finally D-503, fearful of capture, death, and loss of sanity, betrays those who have recruited him, is brainwashed

Extrapolation, Vol. 22, No. 3 0014-5483/81/0223-0004 \$01.00/0 Copyright © 1981 by The Kent State University Press into a new and absolute conformity, and dispassionately witnesses the failure of the Mephi rebellion. However, Zamyatin is as much concerned with the psychological as with the social or political implications of D-503's rebellion, and the symbolism more than the plot directs us to this complex level of the novel's meaningfulness.

Admittedly, one approaches any explication of symbolism with caution when treating a translation of the novel; one cannot assume that even a translator as experienced and careful at Mirra Ginsburg<sup>2</sup> has wholly captured the denotations and connotations, or the metaphoric and symbolic nuances in the original. Nonetheless, where there is a repetitive and emphatic use of specific images and words, we may be justified in undertaking a closer investigation into their function. A casual reader of *We* would surely take some note of its highly "literary" style and the frequent uses of colors, wind and storm, glass and mirrors, fires, electricity, fogs, clouds, waves, eyes, lips, abstract shapes, geometric and algebraic symbols, numerals and letters. The problem for the critic is to discover the key to this profusion of images and symbols, and to judge the appropriateness and effectiveness of the manner of writing to the themes, ideas or dramatized impressions of the novel.

Following one circle of Zamyatin's web of symbols, we find that skycloud images reflect the changes in the character and life of D-503. As he moves from complacent acceptance of the One State, through stages of passionate interest in I-330, to conscious individualism precipitated by sexual jealousy and possessiveness, to subversive action, doubt and hesitation, and then back to conformity and un-imagination, we find an analogous movement from calm, blue skies, to lightly clouded skies, to iron-grey clouds, to ever increasing wind and storm, then subsiding of storm and restoration of calm (order) following personal defeat. One finds no difficulty constructing Fretag's pyramid of rising and falling action to represent the stages in this novelesque tragedy.

Similarly, Zamyatin has encircled the "meaning" of the novel by a series of images that can be related to the seasonal shifts from spring to autumn, and therefore to fertility and fruition. Early in the novel (Second Entry), the air is filled with spring pollen that films the lips, leaving a sweet taste. The mouth and lips become a symbol of the female sexual orifice, and by extension the face is an index to sexual passion in D–503's impressionistic descriptions. In the First Entry he feels his "cheeks burning" with the desire "to unbend the wild, primitive curve": "This must be similar to what a woman feels when she first senses within herself the pulse of a new, still tiny, still blind little human being. It is I, and at the same time, not I" (p. 2). The dawning of passion in him, the compulsive attraction to the "sweet" lips of I–330, to consummation of desire, leads to an apparent birth of self, of soul, an "I" beneath the "We." It is a birth reflected both in the rebellion against the state and in the psychological torment within D-503. And like any birth, there is pain and the fear of pain, symbolized by D-503's focus on the teeth behind I-330's inviting lips, the fire within the depth of her eyes, and the fascinating X of her features (an impressionistic intersecting of lines in her face).

The sexual imagery penetrates, radially, to the center of the novel. The fertile vegetative world behind the Green Wall is reached by entering an Ancient House with its dark-red walls, past the old woman with the "ingrown" mouth and wrinkled lips from which all the lines of her face radiate outward in a "beaming" smile (p. 25), inward to a chaos of objects and colors, a huge fireplace and large mahogany bed, and a "closet" that leads secretly downward and up to the other side of the wall. In the Seventeenth Entry, D–503 seeks I–330 at the Ancient House, kisses the "ingrown, soft, mossy mouth" of the old woman who tells him I–330 is there, runs "directly to the bedroom," enters, seeing "the wide bed—smooth, untouched," finds the key in the keyhold of the closet, hears only "drops falling hurriedly into the washstand from the faucet," thinks himself pursued by S (the *betrayer within* the One State), enters the closet and falls: "Slowly, softly, I floated down somewhere, my eyes turned dark, I died" (pp. 94–96).

Of course, "it was a state of temporary death, familiar to the ancients" (orgasm), and he revives, noting "blood on [his] finger" and his "broken, quivering breath." He has arrived on the inside, in tunnels where lights "tremble" as he also soundlessly trembles, and he finds I-330: "Her eyes opened to me—all the way; I entered" (p. 97). She laughed and "sprayed [D-503] with laughter, and the delirium was over, and drops of laughter rang, sparkled all around and everything, everything was beautiful." They return with I-330 "pressed . . . all of her" against D-503, silently, blindly: "she walked just as I did, with closed eyes, blind, her head thrown back, her teeth biting her lips . . ." (p. 98). He "comes to" as from a dream, returning from a symbolic journey of sexual adventure, having discovered, he believes, the kinship between passion and "soul."

The centrality of his discovery is asserted in a passage that associates the Ancient House with the face of the old woman and with both I-330 and sexual passion: "The starting point of all the coordinates in this entire story is, of course, the Ancient House. It is the centre of all the axial lines of all the X's, Y's and Z's on which my whole world has been built of late" (p. 92). However, Zamyatin clearly intimates that D-503 is experiencing the wild fervor, the fire, of spring passion without regard to true fruitfulness and growth. It is 0-90 who becomes pregnant with real life, not I-330. Her teeth, the presence of the "blade-sharp" doctor who "speaks with scissors" (pp. 97-98), and the threat felt by D-503 sensing I-330's fiery nature, are

qualifications and contradictions for one seeking to make too much of the "soul" that D-503 is said to have discovered.

The water dropping in the washstand slips wastefully into the drains. The old woman at the Ancient House is infertile and withered as surely as I-330 is promiscuous and a Mata Hari seductress. I-330, like U (who is also infertile), would use D-503 like a child or dupe, because "love must be ruthless" (p. 183) and revolution must be bloody. The wind of change brings sweet honey pollen to the lips but also dries the mouth; it brings innocent white clouds and "cast-iron slabs," the promise of life-giving rain, and destruction, storm, and sterilty. In this world, D-503 is buffetted and drowned and burnt—a pawn and victim of a Nature turned against him, a Nature where L=f (d) and Nature demands "dissolution" of self in the universe (p. 135) as much as Reason demanded a dissolution of self in the One State.

Looking outward from the center of the web, the labyrinth, D-503 confronts the unknown and the irrational. For dramatic reasons, Zamyatin focuses mystery in I-330 (the X dissects her face), and she is the vehicle of the unknown "truths" that are progressively disclosed to D-503—"truths" of passion, jealousy, possessiveness, irrationality, and individuality. The X of I-330 is supplanted, however, by another web centered in the Ancient House, seen as a symbol of the historical past, of paganism and passion, false gods and beliefs, and a life in tune with Nature. It is not the Nature of Thompson or Wordsworth or Goethe, but the Nature of Melville, Hardy and Lawrence—it is the wild energy of the treacherous ocean, the untamed garden, the passion of instinct and desire. It is lawless, permissive, aggressive, and irresistible.

The city-state within the glass wall is shut off from this Nature, but it functions within individuals, suppressed, caged, like the energy latent in a body of water. In the One State, the "energy residing in the waves" has been turned from beast to "domestic animal" (p. 68). Indeed this is exactly what happens to the numbers (citizens), each of whom represents "one of the innumberable waves in this mighty stream" (p. 5). The "blue waves of unifs" in the auditoriums and during the exercise marches are imaged time and again as Zamyatin establishes not only the "quality" of life in the One State, but also focuses upon the dominant symbol of the novel. As we shall see, D-503 conceived of himself fundamentally as at one with the state, as a single wave in the sea, and as this sense of identity is challenged by the discovery of passion, the result is figured forth as an explosive intermixing of fire and water.

Zamyatin emphasizes moments when D-503 feels himself behaving in a manner contrary to state ethics by introducing water symbolism. In the auditorium lecture of the Forth Entry, the anecdote of the Savage and the

barometer clearly links "rain" ("algebraic rain") with order and mathematics; D-503 is distracted and shuts out "the vitalizing stream that flowed from the loud-speakers" until "sobered" as the person next to him emits "a tiny bubble of saliva" that "burst" on his lips. Being a drop of water in the sea of numbers, D-503 is unconsciously responsive ("sobered") to the symbolic destruction of that drop of saliva. Liquidation (literally being turned to water) is always a threat for those who stray from state regulation.

When he follows I-330 to the Ancient House (Sixth Entry), he is introduced to the fire burning within her. When she suggests that they fraudulently solicit a sickness excuse slip, D-503 feels obliged by state law to report her, but he is reluctant to destroy the budding relationship. Consequently, his dream at the outset of the Seventh Entry of "sap" flowing over the objects of the Ancient House, leaves him with "some strange, sweet, mortal terror" (p. 32). In the Seventh Entry he is resigned to his "treachery" and I-330 has established a hold over him that becomes a death-grip in later chapters.

In the Eighth Entry, D-503 explains his abhorrence for the irrational through recollections of early mathematical training and his introduction to the square root of minus one. What often is wholly overlooked, however, is that this early period in his mental training was also a period when he developed a subliminal association between water and rational order. The teaching machine was nicknamed Plapa because when "he" was plugged in "the loudspeakers would always start with 'Pla-pla-pla-tsh-sh' and only then go on to the day's lesson" (p. 39). This watery "plash" of sound might easily be passed over were not the passage immediately followed by D-503's conversation with R-13, the poet, whose "rush of words  $\ldots$ spurt out in a torrent and spray comes flying from his thick lips. Every 'p' is a fountain; 'poets'-a fountain" (p. 40). We are advised, moreover, that D-503 had been instructed in law by a man whose voice came through the loudspeaker like "blasts of violent wind." R-13 had failed in mathematics and subverted the law program by stuffing his speaker with spitballs, but D-503 stored his lessons in mathematical orderliness (water) and state law (wind) in the deeper recesses of his mind.

In the Ninth Entry we are given D-503's account of an execution in the Cube Plaza. An atomizing ray reduces a "number" to a small puddle of "chemically pure water" and the Benefactor is "wet with spray" from the liquidated "enemy" (p. 48). D-503 accepts the stern order of the state, impressionistically seeing the Benefactor as a man with huge hands that move in "cast-iron" gestures, but the associations between water and death reinforce his earlier learning. The following day he feels "freshly distilled" (an echo of the "chemically pure water" remaining after the purge of the "superfluous" number). He meets with I-330 and is seduced into drinking

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prohibited alcohol, feeling as a result as one poised over "a seething, scarlet sea of flame" that is also deep "within" himself (p. 56).

At night his "bed rose and sank and rose again under me, floating along a sinusoid" (p. 58). He fears that he will perish; the sea has turned to flame, "liqueur" is found to be "fiery poison"; fire and water intermingle, struggle to dominate each other, and begin the slow process of self-dissolution as vapors (mist, fog, cloud) inevitably result. The exercise of the Cube Plaza is repeated hereafter on the psychological level and with painful slowness.

From the Eleventh Entry to the Thirteenth Entry, we are moved from "a light mist" to a pervading "fog." The fog seems (to D-503) to dissolve the "glass walls" and even the "gray unifs." It is an acidic fog, sprung from the fire/water elemental confusion in D-503, a fog like "swirling smoke, as in a silent, raging fire" (p. 70). He at once hates and loves it, according to I-330 (p. 71), because it permits him to dissolve (be free of state law). He drank the fire of I-330's lips, "poured" himself into her and "drank her in" in return (p. 74), and felt "full . . . to the very brim!" (p. 75). In such moments, there is "no State" (p. 74) in his conscious thoughts, but there is always the emblem of the State, the mist and fog, that the fiery sun cannot wholly evaporate. On the day 0-90 visits (Fourteenth Entry), the orderliness of State life is resumed, but mist outside implies his thoughts are elsewhere, and he knows that "by nightfall the fog would probably be dense again" (p. 78).

Returning to work on the *Integral*, D-503 rediscovers the secure comfort of collective work, like floating "on the mirrorlike untroubled sea," but when questioned about his previous absence and illness he feels that he is "drowning" or "doomed to burn forever" (p. 83). The sea becomes deadly, fiery, vengeful. In the newly discovered world of passion and betrayal of the One State, D-503 finds himself without "rudder" or "controls," directionless, but sure to crash into the ground "or up—into the sun, into the flames" (p. 84). He is alienated, "cast out by a storm upon a desert island" (p. 87), and he senses, unconsciously, that his identity is being eroded away as if by "drops falling slowing from the washstand faucet" (p. 89) or an "impermeable substance softened by some fire" (p. 89)—images repeated in the Seventeenth Entry (p. 92) when he discovers the tunnels below the Ancient House.

The water symbolism flowing from the reflecting and subconscious mind of D-503 becomes increasingly threatening and desperate as his anxiety is heightened. In the Eighteenth Entry, he dreams "like an over turned, overloaded ship. A heavy, dense mass of swaying green water" (p. 100). He dreams of I-330 undressing behind the closet door and himself making love to her. In that moment he sees (in the dream) "a sharp ray of sunlight breaking like a flash of lightning on the floor . . . and now the cruel, gleaming blade fell on the bare outstretched neck of I-330" (pp. 100-101).

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The crisis has come. D-503 has imaged the destruction (appropriately by fire) of I-330; his subconscious mind seeks its own survival, its liberation from the fear of death by water (the One State), or madness induced by the irrational.

In the following entries, D-503 makes deliberate but ill-sustained efforts to return to normality, but even 0-90 subverts his intention as she begs him, with words flowing "like a stream over the dam" (p. 112), to give her a child. After obliging her, he cannot resist following I-330's invitation to the Ancient house (Twenty-first Entry), although he rationalizes his reasons for going. He goes "against a strong wind" (recall the law instructor's windy voice), in a state of suspension and frozen will, and as he approaches the Ancient House, the city is seen initially as "blue blocks of ice," then under the shadow of a cloud, as ice heaving, breaking up to "burst, spill over, whirl, and rush downstream" (p. 119). He fails to find I-330 but views the house "as through water, at the bottom of a deep lake," and searches until "sharp, salty drops of sweat crept down my forehead into my eyes" (p. 120). Then, behind him, he hears the "splashing steps" of S, and feels threatened, alien, under the eyes of this Guardian of the One State. S "plashed away" but leaves a warning that heightens D-503's anxiety and dread. D-503 returns to his rooms and listens "constantly to the wind as it flapped its dark wings against the window" (p. 122).

Despite D-503's subsequent, impassioned encounters with I-330 and his recurrent feeling of dissolving in her like a crystal in water (forgetting all threats from the State), we are repeatedly reminded by Zamyatin's symbols that there is still "the wind flapping huge wings" (p. 133) and always, increasingly, cloudiness, storm, imminent disaster. D-503's "true" self is restored, from time to time, as he cools his passions; "Quick—cold water, logic. I pour it by the pailful, but logic hisses on the red-hot bearings and dissipates into the air in whiffs of white elusive steam" (p. 135).

When the state is openly threatened (as in the "election" of the twentyfifth entry), he anticipates instantaneous recriminations because his guilt makes him feel complicity in any "crime." The very air appears to him as "transparent cast iron" (p. 143)—an association with the benefactor, lawmaker and executioner (p. 46). Later D-503 remarks that where "mephi" had been put on the wall people shied away "as if a pipe had burst there and cold water were gushing out . . . and I was also showered with cold water, shaken, thrown off the sidewalk" (p. 149). From his guilt-ridden perspective, the "water" of the state threatens him most, hits him directly. Most significantly, he is not heated by the "fever" of revolution; like the *Integral* he can be fired up, but he carries a ballast of water.

The abortive attempt to take over the *Integral*, and the effort of the State to put down revolution through the Great Operation, leave D-503 with a compulsive desire to be finally cured. Initially he wants to kill U, the

informer, but he realizes (through her misinterpretation of his intentions) that the urge to kill is linked to the sexual passions that have been part of his "sickness." He pursues her with "dry" mouth, down "stairs disgustingly slippery, liquid," while the wind howls outside, but he realizes the absurdity of U's sexual submission to him, knows he has been "locked within the same circle" (symbolized by the glass steel hoop of a bandage about his head), and finally is purged of passion.

He goes to the Benefactor (Thirty-sixth Entry) and learns that perhaps I-330 had merely used him. He struggles not to accept this hint of ultimate betrayal, but the wedge is in and the "edges of the crack spread wider" (p. 217). In the moment of his struggle, the Mephi break down the Glass Wall and open rebellion in the State provides an analogy for the psychological turmoil in D-503. In one last meeting with I-330, he tremblingly pours a glass of water (p. 223), tremblingly resists her, tries to drink the water and is nauseated, but manages to break the hold she has over him (her lips now are cold). The next day, his reconstruction is complete (p. 225), and he is able to seize and gulp "greedily" the glass of water left from the previous day. He goes to the Guardians to betray I-330 and cleanse his conscience, but in a final twist, Zamyatin has him interviewed by S, and D-503 realizes that S is an agent of the Mephi—that treachery is housed in the very heart of the One State, that the corruption is *within*. The only means of rooting it out is to submit to the surgical solution provided by the Great Operation.

Throughout the course of his narration, D-503 has repeatedly represented his struggle and the struggle between the Mephi and the One State as an opposition between contradictory, wholly incompatible philosophies and perspectives on life. The opposition between the rational and irrational, between mathematical orderliness in the harmoniously functioning collective and passion-based individualism in the anarchic world of "Nature" is symbolized as an opposition between water and fire, between the present and past, stability and flux. In the words of I-330, the opposition is between energy and entropy (pp. 174-75): the party of "energy" is dedicated to the maintenance of dissimilar forces or the collision of like forces "to get fire, explosion"; the party of "entropy" is dedicated to the dissipation of energy by the orderly spreading of uniformity, sameness. The one sacrifices ease and contentment for struggle and ecstasy; the other sacrifices struggle and ecstasy for ease and contentment. The polarized viewpoints are, in Zamyatin's representation of them, mirror images of each other, or even constituent parts of the same reflecting mirror.

In a pluralistic world, opposites truly exist; they are realities to contend with. In Zamyatin's We, D-503 thought he underwent a personal experience of these opposites colliding, internally and externally in self and state. It is an experience figured forth as a perilous, exciting intermixing of fire and water, individualism versus collectivism, passion versus reason, the

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"natural" versus the artificial, fertility versus infertility. For D-503 it is also an experience that necessitates a choice between order and disorder, between a sureness of identity and a confusion and madness. He is psychologically incapable of conceiving of identity based upon an embracing or straddling of the opposites within himself or within the State. The "wall" is utterly essential and "white cannot at the same time be black" (p. 190). For D-503 it is a sickness of "soul" or excess of treacherous "imagination" that allows one to conceive of the universe as inherently uncontainable, undefinable, infinite and ineffable. For citizens of the One State, such thinking constitutes a form of psychological suicide.

D-503 did indeed have the necessary "sickness of soul," but it was more than he could withstand. When he is fired by passion, he *walls* out thought of the One State (water) from his consciousness. The exercise is futile, of course, as the unconscious mind spills over with images of threatening water, sap, fog, wind. He struggles to balance and synthesize the warring elements, seeing "a sea of flame" or "molten drops" of self, but he cannot achieve a new monism, a "single firewater,"<sup>3</sup> and opts for the surgical removal of imagination in order to rediscover the old monism. He could not play the double role of I-330 or S-4711, and he could not resist contemplating the other side of each "wall"—that which lies beyond the fixed and finite.

In We, the choice is not between the Natural World and the One State, the Garden and the City, because D-503 is not free to choose, and representatives of both worlds are shown to be vicious, ruthless, and selfseeking pseudophilosophers. D-503's dilemma is the human dilemma; we cannot opt for one or other side of the polarized positions in the novel. We cannot wall in an idea and think that truth has been circumscribed; we cannot conceive of a finite universe without immediately asking what lies beyond the area circumscribed by logic or mathematical calculation. However, we must retain the wisdom and the psychological capacity to live with the ineffable, the irresolvable, the ambiguous and the irrational. We must forego the belief in utopia (Eden or the New Jerusalem) without relinquishing the dream.

### Notes

- 1. My conclusions are similar but more negative than those of Alex Shane, who suggested that Zamyatin was advocating a view of life as process (*The Life and Works of Evgenij Zamjatin* [Berkeley: Univ. of California Press, 1968]), but I disagree with most interpreters, and with Alexandra Aldridge in particular, who thinks that Zamyatin "prefers the easeful dream world of Arcadia to the efficient city" or believes that he saw "the only option" to be "starting over in a state of benign anarchy, in the unfettered greenery of the Garden." See Alexandra Aldridge, "Myths of Origin and Destiny in Utopian Literature: Zamiatin's *We*," *Extrapolation*, 19 (December 1977), 71 and 74.
- 2. Mirra Ginsburg's translation of We was published by the Viking Press in 1972 but is more

available in the Bantam edition of the same year. Ginsburg also translated Zamyatin's essays in A Soviet Heretic: Essays by Yevgeny Zamyatin (Chicago: Univ. of Chicago Press, 1970), and quotes freely from this collection in her introduction to We. My references to the Bantam text have been noted in parentheses in the body of the essay.

3. The phrase is from the translation of Zamyatin's essay "Paradise" quoted by Mirra Ginsburg in her introduction to We (p. x). While she explores the idea of monism versus dualism in the novel, Ginsburg fails to see the relevance of the phrases to the symbolism of the novel.

## The Launching Pad

## (continued from page 212)

valuable contribution because of the detail of its entries. Tom will also co-edit the third volume of Voices for the Future, which is now at Bowling Green Popular Press and will be available sometime in 1982. We are beginning plans now for a fourth volume whose emphasis will be on those writers, like Murray Leinster and John Wyndham, for example, who are of historical importance. If you have someone vou would like to write about, please inform me or Tom. Incidentally, the number of volunteers for book reviewing has been most gratifying. I have been in correspondence with all of them.

Although it may seem a bit premature, we have begun thinking of a special twenty-fifth anniversary issue of *Extrapolation*. A number of its articles will be by invitation, but please inform us if you would like to contribute. Incidentally, the special issue on women in science fiction, to be edited by Professor Mary Brizzi, is now scheduled for spring 1982. I believe that we now have scheduled most articles on hand; any unsolicited contributions will receive the immediate attention of our Board of Editors and will be scheduled as soon as possible upon acceptance.

On May 16, Lou Tabakow of Cincinnati died from Amytropic Lateral Sclerosis, the degenerative neuro-muscular disorder known as the Lou Gehrig syndrome. For more than twenty years he ran Midwescon, held the last weekend in June in the Cincinnati area. Last September at the Worldcon in Boston, he received the First Fandom Big Heart Award. Several years ago at the P.C.A. meeting in Cincinnati, Lou, Doc Barrett, and I held a dialogue about sf fandom; I hope a transcript of that seminar will soon be published in Extrapolation. Few men are as thoughtful, kind, and vital as was Lou; he was one of those individuals who make science fiction and sf fandom unique, giving it a closeness and sincerity which no other group I know can equal. In a letter to Robert Silverberg, written shortly before his death, Lou said, in part: "I believe we are immortal, in the sense that each of us lives in the thoughts and feelings and perceptions of those with whom we have contact."

T.D.C.

# H. P. Lovecraft: The Hawthorne Influence

## **DONALD R. BURLESON**

■ Howard Phillips Lovecraft (1890–1937), the Rhode Island fantaisiste whose cosmic mythos of primordial gods has moved some critics to proclaim him a unique figure among creators of supernatural horror, came to admire Nathaniel Hawthorne greatly but did not seem to consider him a major influence on his own work. Lovecraft perceived his primary sources as residing in Poe and Lord Dunsany, and indeed the influence of these writers is readily recognized, especially in Lovecraft's early tales-for instance, the Poesque tales "The Outsider" (1921) and "The Hound" (1922), and the Dunsanian tales "Celephaïs" (1920) and "The Quest of Iranon" (1921). But a Hawthorne influence can also be clearly discernedan influence more thematic than stylistic, to be sure, but a lasting influence and one ranging over so many common themes and images that its affect on the Lovecraftian oeuvre is striking. The dark dreamer from Providence had, certainly, his own ways of working out his chosen themes, including a "personal myth" that differed radically from that of Hawthorne. While Hawthorne's inner life of allegory gave utterance to brooding concerns with good and evil in the world, Lovecraft had a weltanshauung by which his writings were expressive symbolically, though not didactically, of an indifferent and purposeless cosmos in which such Hawthornian matters as the Unpardonable Sin would be well-nigh meaningless. Nevertheless, Hawthorne in some respects assumes a central importance in the fabric of Lovecraft's creations.

By the time he wrote his book-length critical survey, Supernatural Horror in Literature (1925–27), Lovecraft had reread Hawthorne intensively and devoted considerable space to him in the survey, describing

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him—albeit with a tone of distaste for Hawthorne's allegorical didacticism—in terms of genius. This survey, far from being "a piece of frivolous self-indulgence" as remarked by L. Sprague de Camp in his Lovecraft: A Biography (1975), is an indispensably useful source for the student of Lovecraft's critical views, and it sheds light upon an important aspect of Lovecraft's interest in Hawthorne: the regional aspect. With his own love for the dark side of New England history and folklore, Lovecraft found endless fascination with Hawthorne's shadowy interest in and ancestral connection with New England Puritanism and witchcraft persecution. The inclination of Hawthorne to be led by this state of mind to plant his creations in his own native Novanglian soil is reflected in Lovecraft's developing preference for such settings. Prior to his serious study of Hawthorne, Lovecraft's tales show no paticular tendency to concentrate upon New England; but as his style ascends to its maturity in the late 1920s and early 1930s, he weaves the byways and accumulated lore of his native region into the heart even of his most sweepingly cosmic conceptions. And so many are the thematic and imagistic echoes of Hawthorne in Lovecraft's work that the two writers, for all their differences in outlook and purpose. are remarkably similar in their use of New England terrain and culture as a canvas on which to try to suggest the hues of their respective personal visions.

Sometimes similarities are evident even with respect to Lovecraft's early writing. Hawthorne, with ever an eye on the past, was fond of darkly personifying old New England houses in his fiction, saying, for example, of the House of the Seven Gables: "The aspect of the venerable mansion has always affected me like a human countenance, bearing the traces not merely of outward storm and sunshine, but expressive, also, of the long lapse of mortal life, and accompanying vicissitudes that have passed within. . . . The deep projection of the second story gave the house such a meditative look that you could not pass it without the idea that it had secrets to keep, and an eventful history to meditate upon."<sup>1</sup>

It would be difficult, for one familiar with Lovecraft's work, to read these passages without thinking of his story "The Picture in the House" (1920), in which the narrator says of certain old New England farmhouses remote from travelled roads: "Two hundred years and more they have leaned or squatted there, while the vines have crawled and the trees have swelled and spread. They are almost hidden now in lawless luxuriances of green and guardian shrouds of shadow; but the small-paned windows still stare shockingly, as if blinking through a lethal stupor which wards off madness by dulling the memory of unutterable things." This passage has an alliterative style not unlike Hawthorne, and a feeling for the sentient nature of *place*, a characteristic tendency in Lovecraft and one also shown by Hawthorne in such tales as "The Hollow of the Three Hills" and in such scenes as the forest meeting in *The Scarlet Letter* (1850). Referring to the Puritan gloominess and furtive isolation in which the history of many such houses is steeped, Lovecraft's narrator further observes: "Only the silent, sleepy, staring houses in the backwoods can tell all that has lain hidden since the early days, and they are not communicative, being loath to shake off the drowsiness which helps them forget. Sometimes one feels that it would be merciful to tear down these houses, for they must often dream."<sup>2</sup>

Both writers make repeated use of the "window-eye" metaphor in the personification of houses-as, of course, does Poe also, for example, when he speaks of the House of Usher as having "vacant and eye-like windows." In The Blithedale Romance (1852), Hawthorne's narrator Coverdale sees that "some of the windows of the house were open, but with no more signs of life than a dead man's unshut eyes" (HSG, p. 562). Lovecraft, in "The Shadow over Innsmouth," a tale of a decayed Massachusetts town concealing monstrous human matings with ichthyic creatures, invests the houses, by metaphorical transferral, with a life worse than death when he describes their "fishy-eyed vacancy." This tale, with its treatment of the "Innsmouth look"—an unblinking, fishlike appearance gradually assumed by Innsmouth denizens because of their partly nonhuman ancestry-also seems thematically to echo a Hawthorne notebook entry of January 4, 1839: "A mortal symptom for a person being to lose his own aspect and to take the family lineaments, which were hidden deep in the healthful visage. Perhaps a seeker might thus recognize the man he had sought, after long intercourse with him unknowingly."3 Indeed, in Lovecraft's tale, the narrator experiences just such a delayed recognition-of himself, when he discovers that his own genealogy contains the tainted Innsmouth blood.

There is another Lovecraft story in which the author's tendency to deal with gloomy or sinister interiors reminds one of that tendency in Hawthorne, especially in view of parallel imagery. When Lovecraft wrote "The Shunned House" (1924)—based on a real house in Providence just as The House of the Seven Gables (1851) is based on a real house in Salem-he was still very Poe-conscious, even mentioning him in the story (in the connection that Poe in real life had walked by the Shunned House's prototype on Benefit Street); but the presence of Hawthornian elements is clear. Hawthorne says that Colonel Pyncheon "was about to build his house over an unquiet grave" (HSG, p. 247), and Lovecraft extends this notion into the literal. His Shunned House is built, as was the real house, over the graves of an earlier family of French settlers (of whom, like Chillingworth in *The Scarlet Letter*, there are evil rumors from abroad), and their grave site is "unquiet" indeed in its vampiristic effects on subsequent dwellers there, who waste away and die, sometimes beset with mad visions of a presence in the house gnawing at them. Other imagery relates the two works as well. At Hawthorne's Seven Gables, "the street

having been widened about forty years ago, the front gable was now precisely on a line with it" (HSG, p. 259); at the Shunned House, "a widening of the street at about the time of the Revolution sheared off most of the intervening space" between the house and the road so that by the time a sidewalk was laid by the cellar wall exposed at street level "Poe in his walks must have seen only a sheer ascent of dull grey brick flush with the sidewalk and surmounted at a height of ten feet by the antique shingled bulk of the house proper."4 The image in each case is that of an ancient edifice nuzzled by the encroachments of a growing, changing community knowing little of the depths of horror still lingering there. Further, when Hawthorne describes the Pyncheon looking-glass said to be connected with the Maules in such a way that "they could make its inner region all alive with the departed Pyncheons" (HSG, p. 254), the reader of Lovecraft is reminded of the scene near the end of "The Shunned House" where, as old Elihu Whipple is attacked in the moldy cellar by the house's vampirelike presence, the narrator sees in the vortex of dissolution a shifting display of the house's ill-fated occupants over the centuries. It is not surprising that a Lovecraft work would contain imagistic echoes of Hawthorne's Salem novel, for Lovecraft expressly admired the work; in his critical survey he refers to the novel as "New England's greatest contribution to weird literature" and to the fictional house as a place of "overshadowing malevolence . . . almost as alive as Poe's House of Usher, though in a subtler way. . . ."

Lovecraft, in the survey, expressed fascination with the psychopomp motif in Hawthorne's novel, remarking that "the dead nocturnal vigil of old Judge Pyncheon in the ancient parlour, with his frightfully ticking watch, is stark horror of the most poignant and genuine sort. The way in which the judge's death is first adumbrated by the motions and sniffing of a strange cat outside the window . . . is a stroke of genius which Poe could not have surpassed. Later the strange cat watches intently outside that same window in the night and on the next day, for—something. It is clearly the psychopomp of primeval myth. . . ."<sup>5</sup> Lovecraft himself uses this motif, the notion of the psychopomp or ghastly catcher of departing souls. In a form transmuted by local folklore which Lovecraft absorbed during a 1928 visit to North Wilbraham, Massachusetts, he presents (in "The Dunwich Horror," 1928) the psychopomp in the guise of whippoorwills, who gather outside the death-chamber window and time their cries in unison with the dying person's breath, waiting to capture the fleeing soul.

Another notable motif in *The House of the Seven Gables* is that of the long-lost family papers concealed in a recess, constructed for the purpose, in the wall behind the portrait of old Colonel Pyncheon. A similar use of this motif occurs in Lovecraft's 1927 novel *The Case of Charles Dexter Ward*, in which young Ward finds the papers and notes of his unwholesome

ancestor Joseph Curwen in a recess behind the panelling on which the ancestor's portrait has been painted. The two situations differ in that, in Hawthorne's novel, the discovered papers, though having caused much misery during their concealment, are finally without real worth or effect, while in Lovecraft's novel the discovered papers are of momentous import, leading to Charles Ward's ruin. But in each novel there is the theme of the modern character whose family past reaches forward, through centuries in time, to engulf him. The modern scion is culpable in Hawthorne, innocent in Lovecraft; but each one physically resembles his evil ancestor to an uncanny degree, suggesting atavistical exhumation of family woes long buried. And it is interesting to note that Lovecraft's Curwen is a name-echo of the Salem witchcraft judge Corwin, a colleague of Hawthorne's witchcraft-judge ancestor Hathorne.

Another Hawthorne novel much admired by Lovecraft is The Marble Faun. Lovecraft makes a revealing remark, in his Supernatural Horror in Literature, about what it is in this novel that catches his fancy: the hint of "fabulous blood in mortal veins"-Donatello's resemblance to the Faun of Praxiteles. Lovecraft employs this motif in his 1926-27 novel The Dream-Ouest of Unknown Kadath, where, in a passage recalling also Hawthorne's "The Great Stone Face," he says (of an ancient dream-priest advising the narrator on his dream-quest of the gods called the Great Ones): "Atal babbled freely of forbidden things; telling of a great image reported by travellers as carved on the solid rock of the mountain Ngranek . . . and hinting that it may be a likeness which earth's gods once wrought of their own features. . . . It is known that in disguise the younger among the Great Ones often espouse the daughters of men, so that around the borders of the cold waste wherein stands Kadath the peasants must all bear their blood" (AMM, p. 296). Lovecraft also flirts with this theme in his early tale "Hypnos" (1922), in which the narrator's Hellenically statuesque companion may have been either a living human or the godlike statue finally perceived-or may have been a god among humans. He is even described as "a faun's statue out of antique Hellas."6 This story, like Lovecraft's other Hellenic piece "The Tree" (1920), is thematically and tonally very Hawthornian in flavor, though both tales were written during the period of Lovecraft's strongest infatuation with Poe.

Lovecraft, in his 1922 essay "A Confession of Unfaith," acknowledges a significant early debt to Hawthorne. He relates that at the age of six his philosophical development took an important turn when he read A Wonder Book and Tanglewood Tales, which gave him an early awareness of Graeco-Roman thought and charmed him with the beauty, even in retold form, of Hellenic myth. This germinal glance led to more extensive reading and a lifelong love of classical antiquity. It is significant that Lovecraft so early thus imbibed a sense of myth, for he was later to develop

his own mythos: a symbolic pantheon of primordial gods and, surrounding them, a cycle of myth that runs as a sable thread through virtually all of his later work. Frank Belknap Long, in his memoir *Howard Phillips Lovecraft: Dreamer on the Nightside* (1975), has remarked that this mythos "is simply without parallel in the whole of literature" (p. 21). And it seems probable that its development—while more directly showing the influence of Lord Dunsany—owes much, in its incipient stirrings, to the view of Argos and Sicily seen by a six-year-old through the storyteller's eye of Hawthorne.

But there is a much more direct and striking way in which Hawthorne seems to have left his mark upon the Lovecraft mythos. Lovecraft is known to have read Hawthorne's notebooks as early as 1919, for in that year he writes in his own commonplace book-a compendium of impressions and story ideas very similar in overall tone and flavor to many of the most somber Hawthorne notes-this entry: "Hawthorne-unwritten plot. Visitor from tomb. Stranger at some public concourse followed at midnight to graveyard where he descends into the earth."7 This note, besides showing (if there were any doubt) that Lovecraft early in his writing career had read Hawthorne thoroughly enough to know the plot to be unwritten, establishes that Lovecraft by 1919 could hardly have missed the following Hawthorne note dated October 17, 1835: "An old volume in a large library,-every one to be afraid to unclasp and open it, because it was said to be a book of magic" (AN, p. 26). This entry is remarkable for its similarity to the description of Lovecraft's mythical book, the abhorrent Necronomicon which plays so central a role in his major works. Lovecraft's reading of Hawthorne's notebooks in 1919 would have been early enough for the Necronomicon to be suggested, at least in part, by Hawthorne's note, for Lovecraft first quotes from his imagined tome in a story in 1921 ("The Nameless City") and first refers to it by name in a story in 1922 ("The Hound"). The Necronomicon, in the Lovecraft mythos, is seen as an ancient and forbidden volume containing the means of invoking, by sorcery, certain Old Ones or gods-chief among them being Yog-Sothoth, whose name is shrieked atop a mountain in "The Dunwich Horror" by a wizard holding the dreadful volume open before him. Lovecraft invented a whole history of printings, translations, and suppressions of his rare and forbidden book, from its composition circa A.D. 700 by Abdul Alhazred, to its modern-day presence, under lock and key, in a certain few university libraries-including the Widener Library at Harvard and the library of Lovecraft's imaginary Miskatonic University. The fabulous tome lurks tenebrously in the mythos stories and is a key to their understanding, as in "The Whisperer in Darkness," for example, when Lovecraft's narrator says, "I started with loathing when told of the monstrous nuclear chaos beyond angled space which the Necronomicon had mercifully cloaked

under the name of Azathoth" (DH, p. 262). Lovecraft thus reveals the symbolic nature of his god. A Hawthorne notebook entry, then, may well have played a part in generating a pivotally important aspect of the Lovecraft mythos. Lovecraft makes it clear in a late-February 1937 letter, written only a few days before his death, that the direct source of his *Necronomicon*, or at least of its title, was a dream encompassing even the Greek etymology: "Image of the Law of the Dead." But it seems highly probable that the Hawthorne note, with its similarity to the notion of Lovecraft's shunned and guarded volume, was a part of the assimilated lore out of which the oneiric image was born.

Many other comparisons can be drawn, even with respect to Hawthorne's short works, many of which Lovecraft admired. The patterns of similarity and possible or probable influence become complex. For example, in "Roger Malvin's Burial," Hawthorne describes a gravestonelike granite slab "upon which the veins seemed to form an inscription in forgotten characters" (HSG, p. 1125). Lovecraft, always taken with the notion of haunting, elusive pseudomemory-of hidden meanings lying just beneath the surface of things-similarly writes of the Vermont landscape in "The Whisperer in Darkness": "I felt that the very outlines of the hills themselves held some strange and aeon-forgotten meaning, as if they were vast hieroglyphs left by a rumoured titan race whose glories live only in rare, deep dreams" (DH, p. 253). These hill outlines, like Hawthorne's rock veins or the tattoos of Melville's Queequeg in Moby Dick, are hauntingly inscrutable, almost-readable characters. This notion can be extended to that of ciphers, a common motif with Lovecraft ("The Dunwich Horror," "The Haunter of the Dark," "The Whisperer in Darkness," The Case of Charles Dexter Ward) and one which plays a part in Hawthorne's Septimius Felton. The latter, unfinished work has a character named Aunt Keziah, who boasts that she has resisted the temptations of the Black Man; Lovecraft's story "The Dreams in the Witch House" (set in Hawthorne's own Salem, called Arkham) deals with a witch named Keziah Mason consorting with the Black Man of witchcraft lore. The Hawthorne influence here is clear, though Lovecraft goes far in his use of the Black Man motif, boldly absorbing the whole of Salem witchlore into his own mythos. Septimius Felton also deals with the motif of a silver key which leads to ancestral papers in a chest; Lovecraft's story "The Silver Key" treats of these things also, but (especially when considered together with the sequel "Through the Gates of the Silver Key") with a cosmic scope far beyond anything suggested by Hawthorne. This latter work is thematically related to another unfinished Hawthorne novel. Dr. Grimshawe's Secret, whose motif of the bloody footprint brings to mind the cloven hoofprint of Lovecraft's tale "The Unnamable," a story whose setting is the very Charter Street Burial Ground (in Salem) employed in the Hawthorne work. The

configuration of comparisons and apparent influences comes to be, after a while, labyrinthine.

Many other examples could be cited. But it is clear that although Lovecraft did not greatly care for Hawthorne's style (at least as a style generally to emulate) or his allegorical moralizing, he was thematically influenced by Hawthorne to a considerable extent. Lovecraft, of course, worked out his chosen ideas in a way uniquely Lovecraftian; he was, for all his delvings into Poe, Lord Dunsany, and Hawthorne, a highly original thinker and writer, one who developed his *oeuvre* with a sense of cosmic horror more profound than that of Hawthorne (whose work pointed in rather different directions) but with a relation to Hawthorne very much in evidence. If the Custom House dreamer could read the tales of the dreamer from Providence, he would find old familiar images and themes, but would find them cosmically transmuted—not "shrouded in a blackness, ten times black," but shrouded in the blackness of the abyss.

#### Notes

- Nathaniel Hawthorne, The House of the Seven Gables, in The Complete Novels and Selected Tales of Nathaniel Hawthorne, ed. Norman Holmes Pearson (New York: The Modern Library, 1937), pp. 245, 258. Subsequent Hawthorne fiction references in the text, denoted HSG, are to works in this edition.
- 2. H. P. Lovecraft, *The Dunwich Horror and Others* (Sauk City: Arkham House, 1963), pp. 121-24. Subsequent references in the text, denoted DH, are to this edition.
- 3. Nathaniel Hawthorne, *Passages from the American Notebooks* (Boston: Houghton Mifflin and Company, 1887), pp. 209–10. Subsequent reference in the text, denoted AN, is to this edition.
- 4. H. P. Lovecraft, At the Mountains of Madness and Other Novels (Sauk City: Arkham House, 1964), p. 223. Subsequent reference in the text, denoted AMM, is to this edition.
- 5. H. P. Lovecraft, *Supernatural Horror in Literature* (1945; rpt. New York: Dover Publications, 1973), pp. 64-65.
- H. P. Lovecraft, Dagon and Other Macabre Tales (Sauk City: Arkham House, 1965), p. 160.
- 7. H. P. Lovecraft, *The Notes and Commonplace Book* (1938; rpt. West Warwick: Necronomicon Press, 1978), p. 21.

# The Strategies of Survival: Cybernetic Difference in *The Einstein Intersection*

### **DONALD R. EASTMAN**

Language and mind, poetry and biology meet and bear on one another in the figure of Orpheus.

-Elizabeth Sewell, The Orphic Voice

A picture held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably.

-Wittgenstein, Philosophical Investigations

■ In the first section or chapter of Samuel R. Delany's *The Einstein Intersection* (1967), Lobey describes "the debate" between Lo Hawk and La Dire over Friza's status. The problem of whether or not to confer the title of La or Lo on Friza is essentially a debate about what is or should be required to be a full-fledged member of the species. Lo Hawk's is a reactionary position: "In my day, La and Lo were reserved for total norms. We've been very lax, giving this title of purity to any functional who happens to have the misfortune to be born in these confusing times." La Dire's position is liberal and progressive: "Times change, and it has been an unspoken precedent for thirty years that La and Lo be bestowed on any functional creature born in this our new home. The question is merely how far to extend the definition of functionality. Is the ability to communicate verbally its *sine qua non*? She is intelligent and she learns quickly and thoroughly. I move for *La Friza*" (p. 10). For Lo Hawk, verbal communicate of the ultimate criterion:

Extrapolation, Vol. 22, No. 3 0014-5483/81/0223-0006 \$01.00/0 Copyright © 1981 by The Kent State University Press Communication is vital, if we are ever to become human beings. I would sooner allow some short-faced dog who comes from the hills and can approximate forty or fifty of our words to make known his wishes, than a mute child. Oh, the battles my youth has seen! When we fought off the giant spiders, or when the wave of fungus swept from the jungle, or when we destroyed with lime and salt the twenty-foot slugs that pushed up from the ground, we won these battles because we could speak to one another, shout instructions, bellow a warning, whisper plans in the twilight darkness of the source-caves. Yes, I would sooner give La or Lo to a talking dog!

La Dire's criterion is, she says, "change," and this word can be used almost synonomously with "difference." The word *difference* is, certainly, the key word of the novel. After the story gets rolling, it appears on almost every page and is a quality of almost every interesting character. We are never really told what *difference* is, and we are only briefly told, near the end of the book, what it is not. In the antepenultimate chapter, we have this exchange between Lobey and Spider:

Spider nodded and rapped his rough knuckles on the desk. "Do you understand difference, Lobey?"

"I live in a different world, where many have it and many do not. I just discovered it in myself weeks ago. I know that the world moves toward it with every pulse of the great rock and the great roll. But I don't understand it."

Through the eagerness on his drawn face Spider smiled. "In that you're not like the rest of us. All any of us knows is what it is not."

"What isn't it?" I asked.

"It isn't telepathy; it's not telekinesis—though both are chance phenomena that increase as difference increases. Lobey, Earth, the world, fifth planet from the sun—the species that stands on two legs and roams this thin wet crust: it's changing, Lobey. It's not the same. Some people walk under the sun and accept that change, others close their eyes, clap their hands to their ears and deny the world with their tongues. Most snicker, giggle, jeer and point when they think no one else is looking—that is how the humans acted throughout their history. We have taken over their abandoned world, and something new is happening to the fragments, something we can't even define with mankind's leftover vocabulary. You must take its importance exactly as that: it is indefinable; you are involved in it; it is wonderful, fearful, deep, ineffable to your explanations, opaque to your efforts to see through it; yet it demands you take journeys, defines your stopping and starting points, can propel you with love and hate, even to seek death for Kid Death—" (p. 127)

It is clear by this point that *difference* is not simply a freak of nature or biology, an odd chance occurrence, but is a fundamental element of existence. As the hunchback named Pistol tells Lobey, "Difference is the foundation of those buildings, the pilings beneath the docks, tangled in the roots of trees. Half the place was built on it. The other half couldn't live without it" (p. 113). *Difference*, then, is something necessary to and

## Donald R. Eastman

inextricable from life itself. A useful though apparently unrelated elaboration of the concept appears in an essay by Gregory Bateson entitled "Form, Substance, and Difference."<sup>2</sup> The similarity of Bateson's and Delany's use of the word *difference* is extraordinary.

Bateson begins an epistemological discussion by quoting the well-known semanticist Alfred Korzybski's famous dictum: "the map is not the territory." Essentially, this statement means that what we know, or can know, is not the thing itself, but is necessarily a representation of the thing: a picture, an image, a map. The philosophical precedent for this epistemological position is, of course, Kant's *Ding an sich* (thing-in-itself), which is part of the noumenal world and unknowable to the mind. The mind creates phenomena, which are only maps or human versions of the noumenal world. Bateson then asks what "the unit of mind" is; that is, on what aspects or particulars of the thing-in-itself does mind focus in order to make its map?

Let us go back to the map and the territory and ask: "What is it in the territory that gets onto the map?" We know the territory does not get onto the map. That is the central point about which we here are all agreed. Now, if the territory were uniform, nothing would get onto the map except its boundaries, which are the points at which it ceases to be uniform against some larger matrix. What gets onto the map, in fact, is *difference*, be it a difference in altitude, a difference in vegetation, a difference in population structure, difference in surface, or whatever. Differences are the things that get onto a map. [Italics in original]

Bateson then proceeds to attempt to describe what *difference* is, beginning, like Spider, by saying what it is not:

It is certainly not a thing or an event. This piece of paper is different from the wood of this lectern. There are many differences between them—of color, texture, shape, etc. But if we start to ask about the localization of those differences, we get into trouble. Obviously the difference between the paper and the wood is not in the paper; it is obviously not in the wood; it is obviously not in the space between them, and it is obviously not in the time between them. (Difference which occurs across time is what we call "change"). (p. 452)

The parenthetical remark reminds us of La Dire's position in the debate over Friza's status. It is La Dire who notices difference in Lobey, Friza, and Dorik (p. 42), and perhaps in Nativia (p. 48); who argues that change (difference across time) is the basis of life; and who sets Lobey on his journey to kill Kid Death. Nativia tells Lobey why the journey is necessary: "It's just that a lot of different people have died recently, like Friza died" (p. 48). Kid Death's aim, then, is to destroy difference, which is the essential quality of life. Kid Death, however, is only a microcosmic analog to that which destroys life or, as Lobey puts it, leads to a "return to the great rock and the great roll" (p. 93). The macrocosmic, societal, or systemic correspondence to Kid Death is that which is the opposite of difference: sameness or identity. The great social evil of Lobey's world is identical genetic structure, and special measures are taken to ensure a random mixing of genes.<sup>3</sup> Here, too, life depends upon difference; the proper formulations of genetics are, as Lobey says, "survival knowledge."

Again, Bateson's analysis is useful to our understanding of the novel's values. The map is not the territory. Genetics, like epistemology, is a matter of information; and information depends upon difference.<sup>4</sup> But, as we have seen, difference "is an abstract matter"; being outside both the wood and paper, it must be in the mind. It is, says Bateson, synonymous with the word "idea." Furthermore, every object or "thing" is surrounded by a vast number of facts and differences-of substance, location, color, texture, shape, etc.-of which a verv few are selected by the mind in the act of knowing. From this infinitude of facts about an object, says Bateson, "we select a very limited number, which become information. In fact, what we mean by information-the elementary unit of information-is a difference which makes a difference, and it is able to make a difference because the neural pathways along which it travels and is continually transformed are themselves provided with energy. The pathways are ready to be triggered. We may even say that the question is already implicit in them" (p. 453). The territory is transformed by the mind into a map, point by point, through "news of a difference." The act of knowing is the act of selecting from an infinitude of differences those which make a difference, and those vital differences are what we call information. The fact that we have transformed the territory, and even the differences, by the questions implicit in our neurological pathways, matters not at all. That is the way the mind works-when it works. All systems which process information-vegetable, animal, mental, societal, or mechanical-work this way. In all of these systems, what is essential to being "functional," to use La Dire's word, is difference. Not verbal language, not norms of status or physiology, not economics, not technology, but difference.

While the possibilities of this difference are infinite, the neurological pathways and the questions implicit in those pathways appear to be greatly restricted. There is an "ecology of ideas" just as there is an ecology of matter and energy.<sup>5</sup> Ideas, obviously, have a longer half-life than most biological entities, and man has, like the computer PHAEDRA, spent considerable time pondering the simplest of questions. "We sit," says PHAEDRA to Lobey, "waiting out centuries for what would seem like the most obvious and basic bits of information about you, like who you are, where you're from and what you're doing here" (p. 39). Perhaps the most striking feature of *The Einstein Intersection* is that in that world which is so astoundingly different from ours, myth survives much as we know it. It survives, however, because it is still functional—because it asks questions which still

need to be asked and which must be answered before they are replaced. As PHAEDRA says, "I suppose you have to exhaust the old mazes before you can move into the new ones. It's hard" (p. 39). It is interesting that the computer, whose function is memory, is unable to provide Lobey with answers or directions. One implication of this is, I think, that even when the territory is the same the map must be different. Like its genetic structure, the myths of Lobey's world—in which, for example, Spider is Judas Iscariot, Pat Garrett and Minos at once, and the Dove is Helen of Troy, Star Anthim, Maria Montez and Jean Harlow—are increasingly complex and require an ever-increasing variety of responses. This is why Spider tells Lobey that "the Labyrinth today does not follow the same path it did at Knossos fifty thousand years ago" (p. 131). Myths, too, however slowly, survive by difference: the map of Theseus is not the map of Lobey.<sup>6</sup>

Lobey's music is the response of the artist to myth and difference; it is a creative transform of the complexity of existence, a paradoxical, nonverbal participation in the vital process of change. As Spider says, "You must take its importance exactly as that: it is indefinable; you are involved in it; it is wonderful, fearful, deep, ineffable to your explanations, opaque to your efforts to see through it; yet it demands you take journeys, defines your stopping and starting points, can propel you with love and hate, even to seek death for Kid Death-" (p. 127). So long as Lobey continues to play his music, he will keep away the darkness and the terrors of Kid Death. His active, creative participation in his fate is a recognition of the epistemological responsibilities inherent in Spider's summary of Einsteinian theory, which "defined the limits of man's perception by expressing mathematically just how far the condition of the observer influences the thing he perceives" (p. 128). At the end of the novel, Lobey has learned to embrace the vital necessity of difference, and thus has learned, as Hamlet learned, a more-than-human respect for the varied and mysterious complexity of life: "Goedel . . . was the first to bring back a mathematically precise statement about the vaster realm beyond the limits Einstein had defined: In any closed mathematical system . . . there are an infinite number of true theorems . . . which, though contained in the original system, can not be deduced from it. . . . Which is to say, there are more things in heaven and Earth than are dreamed of in your philosophy, Horatio. There are an infinite number of true things in the world with no way of ascertaining their truth" (p. 128). Lobey has learned to live at the intersection of imagination and reality.

It is beyond our power to confirm the "truth" of the visions of Einstein and Goedel, or of Bateson's version of cybernetics and information theory; but the convergence of their thought in Delany's novel has the ring, as Pope put it, of "Something, whose truth convinc'd at sight we find,/ That gives us back the image of our mind." Wallace Stevens provides a final gloss which links this novel, epistemologically and aesthetically, with the fundamental concerns of twentieth-century art: "The mind has added nothing to human nature. It is a violence from within that protects us from a violence without. It is the imagination pressing back against the pressure of reality. It seems, in the last analysis, to have something to do with our self-preservation; and that, no doubt, is why the expression of it, the sound of its words [and its music], helps us to live our lives."<sup>7</sup>

By creating a fictional world of images, characters and events so extrinsically foreign to our common human experience, Delany has been able to throw into high relief the most fundamental qualities of human and nonhuman existence. All life depends for its survival upon variations in the genetic code by which it propagates itself; and human existence depends also on variation in the codes of communication—the maps, myths, words, or music—by which man both defines and preserves his species. *The Einstein Intersection* achieves a synthesis of the ideas at the heart of the debate between Lo Hawk and La Dire, with which the novel begins. This synthesis not only makes an eloquent case for the value of science fiction,<sup>8</sup> but also provides a compelling demonstration of the clear and fundamental dependency of the human species on the vitality of language and art.

## Notes

- 1. Samuel R. Delany, *The Einstein Intersection* (New York: Ace Books, 1967), p. 9. All references in the text are to this edition.
- New York: Ballantine Books, 1972. References in the text are to this edition. The essay was originally the Nineteenth Annual Korzybski Memorial Lecture, delivered on January 9, 1970. It was first printed in *General Semantics Bulletin*, No. 37 (1970), and it appears in the collection of essays entitled *Steps Toward an Ecology of Mind*.
- 3. See p. 93: "'They frown on that even where I come from,' I told Spider. 'It means his genetic structure is identical with his mother's. That will never do. If that happens enough, we shall all return to the great rock and the great roll in no time.' "See also p. 92: "Until there's a general balancing out of the genetic reservoir, the only thing to do is keep the genes mixing, mixing, mixing,"; and p. 129: "... the villages, when their populations become too stagnant, can set up a controlled random jumbling of genes and chromosomes...."
- 4. Claude Levi-Strauss's explanation of the almost universal taboo against incest in primitive societies focuses on the fear of what he calls "an absence of difference." Levi-Strauss also argues that the prohibition against incest is "the primary step thanks to which, by way of which, and especially in which, the transition from nature to culture is made" (Les Structures Elementaires de Parente [Paris: Presses Universitaires de France, 1949], p. 30). Lobey's society is in the middle of just this transition.
- 5. See Sir Geoffrey Vickers, "The Ecology of Ideas," in *Value Systems and Social Process* (New York: Basic Books, 1968).
- 6. As Bateson puts it: "... the very meaning of 'survival' becomes different when we stop talking about the survival of something bounded by the skin and start to think of the survival of the system of ideas in circuit. The contents of the skin are randomized at death

and the pathways within the skin are randomized. But the ideas, under further transformation, may go on out in the world in books or works of art. Socrates as a bioenergetic individual is dead. But much of him still lives as a component in the contemporary ecology of ideas.

"It is also clear that theology becomes changed and perhaps renewed. The Mediterranean religions for 5000 years have swung to and fro between immanence and transcendence. In Babylon the gods were transcendent on the top of hills; in Egypt, there was god immanent in Pharoah; and Christianity is a complex combination of these two beliefs" (p. 461).

- 7. "The Noble Rider and the Sound of Words," in *The Necessary Angel* (New York: Random House, 1951), p. 36.
- 8. Alvin Toffler has a similar, though much more pragmatic view of the value of science fiction when he says in *Future Shock* that "if we view it as a kind of sociology of the futu.e, rather than as literature, science fiction has immense value as a mind-stretching force for the creation of the habit of anticipation. Our children should be studying Arthur C. Clarke, William Tenn, Robert Heinlein, Ray Bradbury and Robert Sheckley, not because these writers can tell them about rocket ships and time machines but, more important, because they can lead young minds through an imaginative exploration of the jungle of political, social, psychological, and ethical issues that will confront these children as adults. Science fiction should be required reading for Future I." (New York: Random House, 1970), p. 425.

# A Bibliography of Fantasy and Fantasy-Criticism in Four Leading Nineteenth-Century Periodicals

#### **RUTH BERMAN**

■ With the increasing interest in fantasy as a literary mode among scholars, there is an increasing need for bibliographies (and, eventually, a comprehensive bibliography) of the field. "Fantasy" is here used in the broad sense of stories of what is not, including science fiction, as well as the stories of original imaginary beings and worlds found in what is sometimes called "high" or "pure" fantasy. (Surrealistic stories are sometimes also considered fantasy, but the surreal is chiefly a form of the twentieth century.) Borderline fantasies are included, so far as possible; however, the type of borderline fantasy in which an otherwise realistic story includes a brief supernatural incident, as with Thomas De Quincey's "The Household Wreck," are not always easy to identify. Translations are also included.

Except as noted, the stories were not signed. Attributions of authorship are taken from *The Wellesley Index* and Strout's bibliography of *Blackwood's*.<sup>1</sup> The listing of criticism includes some articles which discuss fantasy only briefly (usually as part of an article on superstitions or a review of a nonfantasy work by an author noted for fantasy). Many of the articles discuss fantasy as an aspect of poetry. No attempt has been made here to include a listing of fantasy poetry (although one poem is included in the list of criticism of fantasy); few fantasy poems appeared in the magazines, and *The Wellesley Index* does not list poems or give their authors. The nineteenth-century periodicals printed few poems of any sort, and few of them good.

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## **Fantasy Fiction**

Blackwood's Edinburgh Magazine

- Anonymous. "The Tunis Bark and the Dervis of Smyrna; Being a New Tale for a Melo-Drama," 7 (1820), 347-55.
- Anonymous. "A Visit to the Lunar Sphere," 8 (1820), 125–29. Signed "A Midshipman."

Anonymous. "The Last Man," 19 (1826), 284–86. Signed " $\chi\beta$ ."

Anonymous. "The Dance of Death/From the German," 31 (1832), 328-52. Probably translated by George Moir.

Bird, W. J. B. "A Dead Man's Vengeance," 143 (1888), 374-93.

Buchan, John. "The Far Islands," 166 (1899), 604-19. Signed. Reprinted in The Watcher by the Threshold and Other Tales (1902).

Bulwer Lytton, Edward G. "A Dream of the Dead," 86 (1859), 358-63. Signed "Hermides."

Campbell, John D. S. "Who Were They?/ A Maltese Apparition/ by the Marquess of Lorne," 142 (1887), 794–804.

Capes, Bernard. "The Sword of Corporal Lacoste," 165 (1899), 385-401. Signed. Reprinted in From Door to Door (1900).

Cecil, Gwendolyn. "The Closed Cabinet," 157 (1895), 1-39.

Chesney, George T. "The Battle of Dorking: Reminiscences of a Volunteer," 109 (1871), 539-72. Reprinted as *The Battle of Dorking* (1871).

Cobban, J. MacLaren. "Master of His Fate," 146 (1889), 439-66, 580-91, 770-89. Reprinted as *Master of His Fate* (1890).

Constable, F. C. "His Tomb," 159 (1896), 595-605.

Cowper, Frank. "Christmas Eve on a Haunted Hulk," 145 (1889), 23-37.

Croly, George. "A Letter from the Man in the Moon," 8 (1821), 667–71. Attribution uncertain.

Crosse, Cornelia A. H. "The Double Ghost We Saw in Galicia," 134 (1883), 640-59.

Curwen, Henry. "Zit and Xoe: Their Early Experiences," 139 (1886), 457-78, 612-34. Reprinted as Zit and Xoe (1887).

- De La Motte Fouqué, Baron. "The Field of Terror: a Tale," 8 (1820), 131-37. Translation signed "R. P. G." [R. P. Gillies].
- De Quincey, Thomas. "The Household Wreck," 43 (1838), 1-32, 25-32 (the issue was misnumbered and pp. 1-32, 25-32 appear consecutively). Reprinted in *Works*, Vol. XII.
- Doubleday, Thomas. "Shufflebotham's Dream," 8 (1820), 3-7.

Dunn, George. "My Pythagorean Friend," 150 (1891), 384–413. Signed "G. Dunn."

Dziewicki, M. H. "Airy Nothing," 145 (1889), 514-31.

- \_\_\_\_\_. "The Cemetery of the Lilies," 160 (1896), 165–83. Signed.
- Eliot, George. "The Lifted Veil," 86 (1859), 24–48. Reprinted in editions of Eliot's *Works* from 1877 onward.
- Fargus, F. J. "The Secret of the Stradivarius," 130 (1881), 77-84. Reprinted in *Called Back* (1884).

Ferguson, Samuel. "A Vision of Noses," 43 (1838), 648-60.

- Field, Julian. "Aut Diabolus Aut Nihil/The True Story of a Hallucination/by X. L.," 144 (1888), 475–99. Reprinted as *Aut Diabolus Aut Nihil* (1894).
- Fielding-Hall, Harold. "A Legend," 155 (1894), 567-72. Signed "H. Fielding."
- Fineglare, Francis. "The Story of Shakrak and the Magician of Constantinople," 3 (1818), 258-65. Signed.
- Fraser, J. B. "A Tale of Ararat," 28 (1830), 24-39.
- Fraser-Tytler, Patrick. "A Fragment of a Literary Romance," 1 (1817), 382-87, 465-71.
- Froude, J. A. "A Sibylline Leaf," 133 (1883), 572-92.
- Fuller, J. F. "Dream-Tracked in the Transvaal," 159 (1896), 730-48.
- Galt, John. "The Fate of the Caliph Motasser/Astrolab, or the Soothsayer of Bagdad," 27 (1830), 363-71.
- Gogol, Nikolai. "The Portrait / A Tale: abridged from the Russian of Gógól. By Thomas B. Shaw," 62 (1847), 457-84.
- Grant, Susan Ferrier. "Doves and Ravens:/a Christmas-tide Fantasy, by O. J.," 149 (1891), 137-41.
- Hamley, W. G. "Glimpses of the Future," 112 (1872), 282-305.

- . "A Magnetic Mystery," 141 (1887), 648-71.

Hardman, Frederick. "The Thirteenth," 54 (1843), 465-75.

- Hardman, John. "The Sphinx. An Extravaganza, Etched in the Manner of Callot," 24 (1828), 441–52.
- Hardy, Thomas. "The Withered Arm," 143 (1888), 30-48. Reprinted in Wessex Tales (1888).
- Häring, G. W. H. "Hans Preller: A Legend of the Rhine Falls./ From the German of Willibald Alexis [pseudonym of Häring]," 128 (1880), 176-86. Translated by Charles Lewes.
- Harris, Walter B. "The Man at Amnat," 160 (1896), 764-74. Signed.
- Higginson, Nesta. "Born on Hallow E'en," 148 (1890), 798-815. Signed "Moira O'Neill."
- Hogg, James. "The Marvellous Doctor./By the Ettrick Shepherd," 22 (1827), 349-61. Reprinted in *Tales and Sketches* (1837).

\_\_\_\_. "The Shepherd's Calendar. By the Ettrick Shepherd./Dreams and Apparitions.—Part IV," 22 (1827), 173-85. Reprinted as "The Laird of Cassway" in *Tales and Sketches* (1837).

. "The Brownie of the Black Haggs. By the Ettrick Shepherd," 24 (1828), 489–96. Reprinted in *Tales and Sketches* (1837).

Horsley, R. E. "The Restless Dead," 152 (1892), 789-803.

Howison, John. "Vanderdecken's Message Home; Or, the Tenacity of Natural Affection," 9 (1821), 127-31.

Jebb, J. B. Gladwyn. "The Haunted Enghenio," 111 (1872), 86-92.

Kent, Charles M. "The Vision of Caliogstro," 62 (1847), 408-22.

Körner, Christian Gottfried. "Hans Heiling's Rocks. A Bohemian Legend. Translated from the German of Körner," 8 (1821), 625–32. Translator unknown.

Kruse, Laurids. "The Magic Key," 37 (1835), 391–410. Translated by George Moir. Leng, Mrs. McAlpine. "The Ghost of Morcar's Tower," 126 (1879), 60–69.

McLeod, Agnes. "The Skeleton Hand," 156 (1894), 527-31. Signed.

Macnish, Robert. "The Barber of Gottingen," 20 (1826), 604-10. Signed "A Modern Pythagorean." Reprinted in *The Modern Pythagorean*, Vol. 11, *Tales* (1838).

Majendie, Margaret E. "Godfrey's White Queen," 126 (1879), 129-49, 313-36.

Marsh, Richard. "The Strange Occurrences in Canterstone Jail," 147 (1890), 791-814. Signed.

Marshall, Frederick. "The Bacillus of Love," 152 (1892), 668-87.

Maxwell, Herbert. "Ancient Lights in the Guelph Exhibition," 149 (1891), 406–20. Signed. Reprinted in *Meridiana* (1892).

Moir, D. M. "The Vision by Moonlight," 9 (1821), 437-48.

Moir, George. "The Lay-Figure/ A Painter's Story," 33 (1833), 583-92.

Oliphant, F. R. "The Grateful Ghosts," 139 (1886), 108-40.

Oliphant, Margaret. "A Christmas Tale," 81 (1857), 74-86.

. "The Open Door," 131 (1882), 1–30. Reprinted in *Two Stories of the Seen and Unseen* (1885).

. "The Land of Darkness," 141 (1887), 1–36. Reprinted in *The Little Pilgrim Goes Up Higher* (1896).

. "The Library Window/ A Story of the Seen and the Unseen," 159 (1896), 1-30.

. "The Land of Suspense/A Story of the Seen and Unseen," 161 (1897), 130-57.

Roscoe, James. "My After-Dinner Adventures with Peter Schlemihl," 45 (1839), 467-80. (A signature of pages was given the same page numbers as the preceding one. This story is in the second signature so numbered.)

Russell, John Cecil. "Coincidences??" 140 (1886), 364-83.

Skelton, John. "Summer and Winter at Balmawhapple/No. V—Lisette's Dream," 153 (1893), 670–87. Reprinted in A Second Series of the Table Talk of Shirley (1896).

Smith, William Henry. "Voltaire in the Crystal Palace," 70 (1851), 142-53.

Steevens, Christina. "Can a Mother Forget?" 148 (1890), 97-102. Signed "Garth Gibbon."

Sterling, John. "Legendary Lore/The Palace of Morgana and Benlowe's Books," 42 (1837), 480–87. "The Palace of Morgana" was reprinted in *Tales* (1848).

\_\_\_\_. "Legendary Lore/III. The Suit of Armour and the Skeleton," 43 (1838), 161-66. Reprinted in *Tales* (1848).

. "Legendary Lore./IV. Land and Sea," 44 (1838), 335–44. Signed "Archaeus." Reprinted in *Tales* (1848).

- Story, W. W. "A Modern Magician," 101 (1867), 552-76. Signed "W. W. S."
- Sturgis, Julian. "Under the Mask," 118 (1875), 32-43.
- Tieck, Ludwig. "Pietro D'Abano/A Tale of Enchantment/From the German of Tieck," 46 (1839), 228-55. Translated by James Ferrier.
- Tynan, Katherine. "Out of the Night," 160 (1896), 550-54.
- Warren, Samuel. "The Bracelets/A Sketch from the German," 31 (1832), 39-53. Signed "QQQ." Reprinted in Warren's *Miscellanies*, Vol. I (1855).
- Welthorpe, Henry. "Clifford the Astrologer—a Legend of Craven," 25 (1829), 1–19. Signed "Teutonicus."
- White, James. "The Hour of Fortune," 31 (1832), 944-51.
- White, T. P. "The Shrouded Watcher," 149 (1891), 38-44.

#### Fraser's Magazine for Town and Country

- Anonymous. "Remarkable Vision of Charles XI of Sweden," 1 (1830), 120-25.
- Anonymous. "The White Lady: a Tale of the Highlands," 4(1831), 293-301. Signed "I."
- Anonymous. "Dorf Juystein," 5 (1832), 489-92.
- Anonymous. "The Doctor Bewitched," 8 (1833), 530-35.
- Anonymous. "The Singular Trial of Francis Ormiston," 9 (1834), 196-203.
- Anonymous. "The New Fankenstein," 17 (1838), 21-30.
- Anonymous. "A Case of Clairvoyance," 20 (1839), 17-30.
- Anonymous. "The Devil's Diary; or, Temptations," 19 (1839), 653-67.
- Anonymous. "The Devil's Diary; or, Temptations," 20 (1839), 284–99. This was a sequel to the story in vol. 19.
- Anonymous. "Red Finlay of the Deer," 34 (1846), 166-71.
- Anonymous. "A Legend of Forfarshire," 35 (1847), 74-78, 228-43, 295-300.
- Anonymous. "Six and Four," 39 (1849), 465-70.
- Anonymous. "The Bright Room of Cranmore," 41 (1850), 41-49.
- Anonymous. "The Heirs of Gauntry," 42 (1850), 95-106, 175-87, 305-19.
- Anonymous. "A Tale of Mystery," 42 (1850), 601-14.
- Anonymous. "The Toad's Curse," 48 (1853), 286-99.
- Anonymous. "Sirius./ A Fairy Tale," 49 (1854), 591-96.
- Anonymous. "A Strange Story of Titahua," 63 (1861), 151-62.
- Anonymous. "The Wishes Shop," 72 (1865), 637-43.
- Anonymous. "Metaphysicus and Scientia./ A Parable for the Present Day," 78 (1868), 265-76.
- Anonymous. "Orthodoxus Tyrannus," 80 (1869), 788-97.
- Anonymous. "The Travels and Adventures of a Philosopher in the Famous Empire of Hulee," NS 3, 83 (1871), 703–17.
- Bell, Robert. "Phantoms and Realities/an Autobiograhy," 43 (1851), 16-29, 182-97, 326-38, 434-48, 574-85, 690-707. Enlarged and reprinted in *Hearts and Altars* (1852).
- Brown, Frances [probably]. "The Legends of Ulster./The Unlucky Birthright," 38 (1848), 344-51.

- Burton, Richard F. "Vikram and the Vampire; or, Tales of Indian Devilry," 77 (1868), 407-32, 560-76, 700-716; 78 (1868), 230-48, 480-97, 584-602, 748-61. Signed. Reprinted as *Vikram and the Vampire* (1870).
- Cunningham, Allan [probably]. "Rustic Controversies./ No. I/ The Fairy Folk," 22 (1840), 605–12.

. "Rustic Controversies./ No. IV/ The Spiritual Folk," 23 (1841), 351–59.

Garnett, Richard. "Hananda, The Miracle Worker," NS 6, 86 (1872), 244-50. Signed "R.G."; full name in table of contents. Reprinted in *Twilight of Gods* (1888) as "Ananda, the Miracle Worker."

Goethe. "The Tale./ By Goethe," 6 (1832), 257-78. Translation signed "D. T." (i.e., Diogenes Teufelsdröckh), by Thomas Carlyle. Introductory note signed "O. Y." (i.e., Oliver Yorke, the editor), also by Carlyle.

Haliburton, Thomas C. "The Old Judge; Or Life in a Colony./ By the Author of 'Sam Slick the Clockmaker,'/ The Keeping-Room of an Inn; or, Judge Beler's Ghost. No. I," 35 (1847), 700-713. Reprinted in *The Old Judge* (1849).

Hawthorne, Julian. "Calladon," NS 22, 102 (1880), 383–96. Signed. Reprinted in *Yellow-Cap, and Other Fairy Stories for Children* (1880).

Hogg, James. "Strange Letter of a Lunatic./To Mr. James Hogg, of Mount Benger," 2 (1830), 526-32.

. "The Unearthly Witness,/ by the Ettrick Shepherd," 2 (1830), 171–78.

. "The Mountain-Dew Men, / By the Ettrick Shepherd," 6 (1832), 161–70.

. "The Ettrick Shepherd's Last Tale,/ Helen Crockett,/ With an introduction by Oliver Yorke," 14 (1836), 425-40.

Keddie, Henrietta. "Meg of Elibank," 54 (1856), 539-59. Reprinted in Meg of Elibank and Other Tales (1860).

Lang, Andrew. "The Romance of the First Radical," NS 22, 102 (1880), 289-300. Signed. Reprinted in *In the Wrong Paradise* (1886).

- Maginn, William. "The First Foot: A Tale," 6 (1832), 302-6. Signed "M." Reprinted in *Magazine Miscellanies* (1841).
- Martin, Marian E. [perhaps]. "The Sacrifices./ A Tale of Ancient Rome," 35 (1847), 40-53. Signed "MEM."

Mulock, Dinah. "Hyas the Athenian," 38 (1848), 16-31. Reprintd in *Romantic Tales* (1859).

Oliphant, Margaret. "Earthbound/A Story of the Seen and the Unseen," NS 21, 101 (1880), 118-44. Signed "Mrs. Oliphant."

Paget, Violet (Vernon Lee). "A Culture-Ghost; or, Winthrop's Adventure," NS 23, 103 (1881), 1–29. Signed "Vernon Lee" in the index. Reprinted as "Winthrop's Adventure" in For Maurice (1927).

Pardoe, Julia [probably]. "The Poet of Prague./ A Bohemian Legend," 31 (1845), 106-15.

Picken, Andrew. "A Legend of MacAlister More," 1 (1830), 46-54.

Ross, Janet. "A Burmese 'Ilpon' (Tale)," NS 14, 94 (1876), 176-80. Signed.

Thackeray, William Makepeace. "The Painter's Bargain./Communicated by Michael Angelo Titmarsh, Esq.," 18 (1838), 687–93. Reprinted in *Works*, Vol. XXII.

- Toft, Peter. "Volundur: a Scandinavian Legend," NS 3,83 (1871), 729–50. Based on the Danish of Adam Öhlenschläger. Signed in introductory note.
- Tolstoy, Count. "What Makes People to Live," NS 26, 106 (1882), 480–96. Translation by Olga Kieréeff de Novikoff; signed "O. K."
- Whyte-Melville, G. J. "The Interpreter./A Tale of the War," 55 (1857), 1-17, 144-60, 265-81, 409-23, 538-53, 663-79; 56 (1857), 47-63, 173-91, 299-317, 425-43, 551-70, 675-98. Signed. Reprinted as *The Interpreter* (1858).

Wodehouse, H. E. "The Legend of the Monkey./ From the Chinese," NS 6, 86 (1872), 296-309. Signed.

. "The Dragon's Head: Being the Conclusion of 'The Legend of the Monkey,' "NS 8, 88 (1873), 447-63.

#### The Cornhill Magazine

Anonymous. "In Suspense," NS 1, 48 (1883), 289-304.

Balair, Owen. "An Advance Sheet," NS 15, 62 (1890), 36-56.

Baldwin, Louisa. "The Uncanny Bairn. / A Story of the Second Sight," NS 19, 66 (1892), 274-90.

- Baring-Gould, Sabine. "Margery of Quether./ By the author of 'John Herring," NS 2, 49 (1884), 337-60, 466-85. Reprinted in *Margery of Quether* (1891).
- Boden, G. H. "The Sluggard Among the Ants," 2nd NS 6, 79 (1899), 636-42. Signed.

Capes, Bernard J. E. "The Moon-Stricken," 2nd NS 1, 74 (1896), 795-810.

Cleland, Robert. "The Piper of Cairndhu," NS 2, 49 (1884), 225-43.

Cresswell, Henry. "An Incident from Borderland," NS 25, 72 (1895), 514-25.

- De la Mare, Walter. "A Mote," 2nd NS 1, 74 (1896), 209-19. Signed "Walter Ramal." Reprinted in Eight Tales (1971).
  - Ramal." Reprinted in Eight Tales (1971).
- \_\_\_. "The Moon's Miracle," 2nd NS 2, 75 (1897), 524-35. Signed "Walter Ramal." Reprinted in Eight Tales (1971).
- Doyle, Arthur Conan. "The Ring of Thoth," NS 14, 61 (1890), 46-61 Signed "A. Conan Doyle." Reprinted in Round the Red Lamp (1892).
- Gaskell, Elizabeth. "Curious, if True/(Extract from a Letter from Richard Whittingham, Esq.)," 1 (1860), 208-19. Reprinted in The Grey Woman, and Other Tales (1865).
- Grant, Charles. "The Phantom Piquet," NS 11, 58 (1888), 378-88.
- Guthrie, Anstey (F. Anstey). "The Curse of the Catafalgues," 46 (1882), 174-94.
- Harris, Ada L. "An Original Edition." NS 11, 58 (1888), 281-91.
- Hawthorne, Julian. "The Rose of Death: a Fantasy," 34 (1876), 358-78. Signed. Hopkins, Tighe. "No. 222," NS 8, 55 (1887), 377-94.
- Kenyon, M. "A Phantom Portrait," NS 16, 63 (1891), 164-70.
- Lang, Andrew. "In Castle Dangerous," NS 6, 53 (1886), 514-23. Reprinted as "In Castle Perilous" in In the Wrong Paradise (1886).
- Signed. Reprinted in The Book of Dreams and Ghosts (1897).
- MacDonald, George. "The Portent," 1 (1860), 617-30, 670-81; 2 (1860), 74-83. Enlarged and reprinted as The Portent (1864).
- Marsh, Richard. "A Set of Chessmen," NS 14, 61 (1890), 389-405.
- Moore, J. "Dr. Studholme's Dream," NS 15, 62 (1890), 153-63.
- Murray, Grenville. "The Clerk of the Weather:/A Chronicle of Nevelundregenstein," 25 (1872), 551-77.
- Parker, Elizabeth Robins. "The Threlkeld Ear," 2nd NS 4, 77 (1898), 44-57. Signed "C. E. Raimond."
- Patching, H. "Ralph Greeley's Ghost," 11 (1865), 743-56.
- Payn, James. "The Eavesdropper. An Unparalled Experience," NS 10, 57 (1888), 449-76, 560-87.
- Proctor, R. A. "A Voyage to the Sun," 25 (1872), 322-35.
- Ralston, W. R. S. "Russian Ghost Stories," 26 (1872), 202-12. Reprinted in Russian Folk-tales (1873).
- Ritchie, Anne Thackeray. "Miss Morier's Visions," 39 (1879), 173-83. Reprinted in Miss Williamson's Divagations (1881) and Da Capo (1878).
- Stephen, Herbert. "No. 11 Welham Square," NS 4, 51 (1885), 505-18, Signed "Edward Masey."
- Stevenson, E. "Macdonald's Return," NS 21, 68 (1893), 71-78.
- Stevenson, Robert Louis. "Thrawn Janet," 44 (1881), 436-43. Signed "R. L. S." Reprinted in The Three Merry Men (1895).

Thomas, Percy W. "How Francy Redeemed His Promise," NS 7, 54 (1886), 414-24.

Turgenev, I. S. "Visions./ From the Russian of Tourguenéff," 41 (1880), 290-311. Translated by Walter Hepworth.

Waite, Victor. "The Black Canoe," 2nd NS 6, 79 (1899), 675-86. Signed.

- Wills, C. J. "A Phenomenal Voice," NS 9, 56 (1887), 312-23.
- Wodehouse, H. E. "The Building of the Bridge: a Chinese Legend," 32 (1875), 334-45. Signed "H. E. W."

#### **Fantasy Criticism**

#### Blackwood's Edinburgh Magazine

- Anonymous. "Melmoth the Wanderer," 8 (1820), 161–68.
- Aytoun, W. E. "Mesmeric Mountebanks," 60 (1846), 223-37.
- \_\_\_\_\_. "Lavengro," 69 (1851), 322-37.
- Blackie, J. S. "Traits and Tendencies of German Literature," 50 (1841), 143-60.
- De Quincey, Thomas. "Gillie's German Stories," 20 (1826), 844-58.
- Gregg, Hilda C. "Early Victorian Fiction," 161 (1897), 636-52.
- Hamley, W. G. "Powers of the Air," 119 (1876), 362-77.
- Hardman, Frederick. "Narratives of Sorcery and Magic," 69 (1851), 450-60.
- Lang, Andrew. "Ghosts Up to Date," 155 (1894), 47-58. Signed "A. Lang."
- Lockhart, J. G. "Popular Tales and Romances of the Northern Nations," 14 (1823), 293–94.
- \_\_\_\_\_. "The Devil's Elixir," 14 (1824), 55–67.
- \_\_\_\_\_. "The Five Nights of St Albans," 26 (1829), 561-66.
- Merivale, J. H. "Phantasmagoriana," 3 (1818), 589-96.
- Millar, J. H. "On Some Books for Boys and Girls," 159 (1896), 386-97.
- \_\_\_\_\_. "Mrs. Oliphant as a Novelist," 162 (1897), 305-19.
- \_\_\_\_\_. "The Works of Mr Kipling," 164 (1898), 470–82.
- \_\_\_\_\_. "A Budget of New Books," 168 (1900), 729-40.
- Moir, George. "Aladdin/ A Dramatic Poem, in Two Parts./ By Adam Oehlenschlaeger," 36 (1834), 620-41.
- O'Donnell, Arnout. "One Heart for Two Loves," 43 (1838), 208-14.

Oliphant, Margaret. "Lord Lytton," 113 (1873), 356-78.

- Oliphant, Margaret, and Alexander Allardyce. "The Old Saloon," 146 (1889), 696-723.
- Scott, Walter. "Remarks on Frankenstein, or The Modern Prometheus; A Novel," 2 (1818), 613–20. Reprinted in *Criticism*, Vol. IV (1841).
- Shand, Alexander I. "General William Hamley," 153 (1893), 879-84.
- Smith, William Henry. "The American Library," 62 (1847), 574-92.
- \_\_\_\_\_. "The Night Side of Nature," 68 (1850), 265–78.

\_. "The Coming Race," 110 (1871), 46–61.

- White, James. "Wolfgang Menzel," 47 (1840), 154-64.
  - \_\_\_\_\_. "Two Dreams," 54 (1843), 672-78.
- Wilson, John. "Letters on Shakespeare No. 1. On Hamlet," 2 (1818), 504-12. Signed "T. C."
- . "Essay on the Lake School of Poetry No. III. Coleridge," 6 (1819), 3-12.
- \_\_\_\_\_[?]. "Hogg's Tales," 7 (1820), 148–54.
- \_\_\_\_\_. "Coleridge's Poetical Works," 36 (1834), 542-70.

#### Fraser's Magazine for Town and Country

- Anonymous [possibly Henry Crabb Robinson, John Strang, or Sarah Austin]. "Tales from Tieck," 4 (1831), 446–60.
- Anonymous. "A Vision of Familiar Faces," 18 (1838), 676-78. (A poem.)
- Anonymous. "The Modern Pythagorean," 19 (1839), 685-93.
- Anonymous. "French Romances," 27 (1843), 184-94.
- Anonymous. "Aspect of Contemporary Literature," 35 (1847), 379-85.
- Anonymous. "Spring Novels," 35 (1847), 548–52 (the first set of pages so numbered), 503–10 (following consecutively, the second set of pages so numbered).
- Anonymous. "Suggestions About Gift-Books," 45 (1852), 141-47.
- Banks, P. W. "Of Macbeth./ By an Apprentice of the Law./ Part IV./ Witchcraft; the Idea of the Play; The Man and Woman," 25 (1842), 81–100.
- Boyd, A. K. H. "Edgar Allan Poe," 55 (1857), 684-700. Signed "K. P. I." Reprinted in *The Critical Essays of a Country Parson* (1865).
- Escott, T. H. S. "Bulwer's Last Three Books," NS 9, 89 (1874), 765-77. Signed.
- Heraud, J. A. "Reminiscences of Coleridge, Biographical, Philosophical, Poetical, and Critical," 10 (1834), 379–403.
- Maginn, William, and [perhaps] J. A. Heraud. "Fashionable Novels/ The Dominie's Legacy," 1 (1830), 318-35.
- Mallock, W. H. "The Golden Ass of Apuleius," NS 14, 94 (1876), 363-74. Signed.
- Paget, Violet (Vernon Lee). "Hoffmann's Kreisler: The First of Musical Romanticists," NS 18, 98 (1878), 767–77. Signed "Vernon Lee."
- Pollock, W. F. "British Novelists," 61 (1860), 20-38. Signed "W. F. P."
- Rose, Edward. "Fairy Plays," NS 14, 94 (1876), 285-93. Signed.
- Thackeray, William Makepeace. "A Grumble about the Christmas Books. By Michael Angelo Titmarsh," 35 (1847), 111–26. (A short review in the article, on Mrs. Perkin's Ball, p. 121, was probably by G. H. Lewes.) Reprinted in Stray Papers by William Makepeace Thackeray, Being Stories, Reviews, Verses, and Sketches (1821–1847), ed. Lewis Melville (1901).
- Thomas, Bertha. "The Fable of Wagner's Nibelungen Trilogy," NS 14, 94 (1876), 25–38. Signed "B. T."
- Whewell, William [possibly]. "A Gossip About the Christman Books," 43 (1851), 37-46.

#### The Cornhill Magazine

Mew, James. "The Arabian Nights," 32 (1875), 711-32.

- Paget, Violet (Vernon Lee). "Faustus and Helena./Notes on the Supernatural in Art," 42 (1880), 212–28. Signed "Vernon Lee." Reprinted in *Belcaro* (1881).
- Stephen, Leslie. "Hours in a Library./No. VI.—Nathaniel Hawthorne," 26 (1872), 717–34. Reprinted in *Hours in a Library*, Vol. I (1874).
- Townsend, Meredith. "Mrs. Oliphant," 2nd NS 6, 79 (1899), 773-79. Signed.

#### Edinburgh Review

- Anonymous. "Mrs Radcliffe's Poetical Works," 59 (1834), 327-41.
- Empson, William [possibly]. "Herbert's Attila," 66 (1838), 261–94.
- Gwynn, Stephen. "The Life and Writings of Mrs Oliphant," 190 (1899), 26-47.
- Hazlitt, William [possibly]. "Dunlop's History of Fiction," 24 (1814), 38-58.
  - . "Melmoth the Wanderer," 35 (1821), 353-62.
- Jeffrey, Francis. "Southey's Thalaba," 1 (1802), 63-83.
- ------. "Hogg's Queen's Wake," 24 (1814), 158-74.
- \_\_\_\_\_. "Lord Byron's Manfred," 28 (1817), 418-31.

Lister, T. H. [possibly]. "Journal of a West India Proprietor," 59 (1834), 73-86.

- Moir, George [possibly]. "Recent English Romances," 65 (1837), 180-204.
- Poole, Stanley Lane. "The Arabian Nights," 164 (1886), 166-99.
- Proctor, B. W. "Edgar Allan Poe," 107 (1858), 215–27 (American edition), 419–42 (British edition).<sup>3</sup>
- Prothero, Rowland. "Modern Poetry," 163 (1886), 466-98.
- Scott, Walter. "Ritson's Metrical Romances," 7 (1806), 387-413. Reprinted in Criticism, Vol. I (1841).
- Shand, Alexander I. "Recent Scotch Novels," 143 (1876), 162-80 (American edition), 317-52 (British edition).
  - ."The Works of Robert Louis Stevenson," 182 (1895), 106-31.
- Spalding, William. "Sir E. Bulwer Lytton: King Arthur," 90 (1849), 173-212.
- Statham, H. H. "Rossetti's Poems," 155 (1882), 322-37.
- Taylor, Una. "Ideals of Romance," 186 (1897), 381-400.
- \_\_\_\_\_. "Fairy Tales as Literature," 188 (1898), 37-59.

#### **Rational Supernatural**

In the following stories, supernatural beings are revealed at the end as fakes, or an otherwise realistic story is made to follow the plot of a traditional fairy tale.

#### Blackwood's Edinburgh Magazine

- Hogg, James. "An Awfu' Leein'-Like Story," 30 (1831), 448-56. Reprinted as "The Laird of Wineholm" in *Tales and Sketches* (1837).
- Macnish, Robert. "The Man with the Nose," 20 (1826), 159–63. Signed "A Modern Pythagorean." Reprinted in *The Modern Pythagorean*, Vol. II, *Tales* (1838).

- Roby, John. "The Witch of Roseberry Topping, or The Haunted Ring./ A Legend of the North," 38 (1835), 809–27.

#### Fraser's Magazine for Town and Country

- Haliburton, Thomas C. "The Old Judge; or, Life in a Colony./ By the author of 'Sam Slick the Clockmaker.'/ No. II./ The Keeping-Room of an Inn; or, Seeing the Devil," 36 (1847), 76–87. Sequel to "Judge Beler's Ghost." Reprinted in *The Old Judge* (1849).
- Hogg, James. "Aunt Susan./ By the Ettrick Shepherd," 3 (1831), 720-26.
- Thackeray, William Makepeace. "Bluebeard's Ghost./by M. A. Titmarsh," 28 (1843), 413-25. Reprinted in *Works*, Vol. XXVI.

#### The Cornhill Magazine

Marsh, Richard. "The Pipe," NS 16, 63 (1891), 264-81.4

- Ritchie, Anne Thackeray. "Cinderella," 13 (1866), 721-42. Reprinted in *Five Old Friends and a Young Prince* (1868).
  - . "The Sleeping Beauty in the Wood," 13 (1866), 556-66. Reprinted in *Five Old Friends and a Young Prince* (1868).

    - \_\_\_\_\_. "Jack the Giant-Killer," 16 (1867), 589-608, 739-60; 17 (1868), 1-29. Reprinted in *Five Old Friends and a Young Prince* (1868).
- - \_\_\_\_. "Jack and the Beanstalk," 28 (1873), 311-34. Reprinted in *Bluebeard's Keys and Other Stories* (1874).

#### **Ruth Berman**

#### Notes

- Walter E. Houghton, ed., The Wellesley Index to Victorian Periodicals, 1824-1900, Vol. I (1966); Vol. II (1972); A. C. Strout, A Bibliography of Articles in Blackwood's Magazine Volume 1 through XVIII, 1817-1825 (Lubbock, Tex.: Texas Technological College Library, 1959).
- Hamley claimed this story was based on fact; see his "Notice Relating to the Story of 'The Missing Bills—an Unsolved Mystery,' Published in our Number for November, 1873," Blackwood's, 115 (1874), 94-99.
- I did not have access to the British edition after 1855. From 1855 to 1880 the pagination of the British and American editions differed.
- 4. As the rational explanation is weak (the demonic figure is an insect unknown to science), this story could also be considered a borderline fantasy. However, Marsh probably intended the ending to be taken at face value; he used no supernatural elements in a sequel, "The Puzzle," *Cornhill*, NS 19, 66 (1892), 493–511.

### **STAR CLUSTER**

#### **New Titles**

Coming after Jem, Gateway, and Beyond the Blue Event Horizon, Fred Pohl's The Cool War (Ballantine, a Del Rey Book, \$10.95) provides a surprising change of pace. Billed as a "dazzling novel of espionage and escapades with a walloping future shock," it reads like a spoof of James Bond. Its protagonist, the Reverend Hornswell Hake, is definitely an antihero, but he, like the plot, lacks the stature of Robinette Broadhead. In somewhat different form portions of the work appeared earlier in Isaac Asimov's Science Fiction Magazine. Slight and amusing, it provides a comic interlude while one waits for the next installment of the Gateway series.

James Gunn's *The Dreamers* (Simon and Schuster, \$10.95) explores a world in which chemical transfer of memory is possible. Structurally the novel creates a dramatic tension between a Mnemonist, a man plugged into the computer which is the nerve center of his world, and the characters whom he observes as he searches the data banks for someone who can forestall/repair the impending breakdown. Thematically, then, the tension is between the "reality" of the raw data which Gunn introduces and the illusions of the beautiful, childlike young people of the world who are willing victims of their perfect urban society. The open ending which is so provocative in *The Listeners*, for example, seems here to be little more than a lack of resolution.

What impresses one about many of the new novels is the manner in which the tone which one associates with fantasy seems to displace that of science fiction. For example, Damon Knight's *The World and Thorinn* 

#### Star Cluster

(Berkley/Putnam, \$12.95) is another journey to the center of the Earth, but from the outset it echoes the Norse sagas. Its young protagonist, Thorinn Goryatson, is imprisoned in a well which has run dry as a sacrifice to Snorri, the demon of the water. An earthquake permits Thorinn to escape into caverns which lead him to a world within the Earth. From that point, of course, the narrative becomes a quest and an exploration of the strange inner world. Similarly, Sharon Newman's *Guinevere* (St. Martin's Press, \$10.95) explores the Arthurian legend from the point of view of the young Guinevere, who brings in an element of magic that she does not have in the historical material. Richard Monaco's *The Final Quest* (Putnam, \$13.95) also makes use of Arthurian materials, concluding the trilogy of Parsival's quest for the Grail.

Even Julian May's *The Many-Colored Land* (Houghton Mifflin, \$12.95) takes on the quality of heroic fantasy despite its dramatiazation of an encounter between humans and aliens in the Pliocene—certainly science fiction hardware. (It is, incidentally, as good as I thought it would be when I had just started it before the last deadline.) The "saga,"—there's that word again—of the Pliocene Exile promises to be May's best work.

The only one which seems to hold equal promise at the moment is Christopher Priest's *The Affirmation* (Scribner, \$10.95), which arrived too late for review in this issue.

One of the two outstanding hardcover anthologies has something of this mixture of fantasy and science fiction. Barbara Ireson's *Tales Out of Time* (Philomel Books, \$8.95)—the American edition of a 1979 Faber & Faber imprint—includes such stories as Walter de la Mare's "Alice's Godmother," August Derleth's "Halloween for Mr. Faulkner," John Wyndham's "Pawley's Peepholes" as well as two tales by Jack Finney, two by H. G. Wells, two by Ray Bradbury, and John Christopher's "Blemish." The volume is made up of familiar works, although many have been long unavailable.

The other anthology contradicts what seems to be the trend of the field. Stanley Schmidt calls *Analog's Golden Anniversary Anthology* (Dial Press, \$10.95) a very personal selection. Among its highlights are Weinbaum's "The Lotus Eaters," Campbell's "Twilight," de Camp's "Language for Time Travelers," Heinlein's "And He Built a Crooked House," van Vogt's "Far Centaurus," and Asimov's "The Dead Past."

Asimov has written a brief introduction to Martin Gardiner's Science Fiction Puzzle Tales (Clarkson N. Potter, paper \$4.95), which brings together the first thirty-six puzzles Gardiner contributed to IASFM. Author of the monthly column, "Mathematical Games," in Scientific American, Gardiner explains, "Good puzzles are usually jumping-off points for serious mathematics. You'd be surprised how much math you can learn by exploring some of the implications and ramifications of what may seem at first no more than a trivial brain-teaser." First come the puzzles and then three sets of answers, the first two, of course, opening up new questions.

Very different is *The Cosmic Carnival of Stanislaw Lem* (Continuum, paper \$7.95), edited with commentary by Michael Kandel. All of the works included are reprinted, and several of them are excerpts from such novels as *Solaris* and *Return from the Stars*.

#### Series

Although rumor has it that Gregg Press has already cut the number of titles it will publish annually, it continues to issue first hardcover editions of significant works that have been unavailable and deserve reprinting. The most recent additions include Frank Herbert's *The Green Brain* (1966), with an introduction by Joseph Milica; Katherine MacLean's *The Diploids* (1962), a collection of stories, with an "Afterword" by Susan Wood; and James H. Schmitz's *The Universe Against Her* (1979), with an introduction by Bob Mecoy. Robert Heinlein's *Beyond This Horizon*, first published in hardback by Fantasy Press in 1948, has been reprinted with an introduction by Norman Spinrad. Brian Aldiss's collection of stories, *The Saliva Tree and Other Strange Growths*, published by Faber & Faber in 1966, is also among the Gregg releases. Peter Nicholls did the introduction.

From Weird Tales Robert Weinberg has rescued three more "Lost Fantasies," his paperback series selling for \$5.50 a number. "Lost Fantasies #7" is Jack Williamson's Dreadful Sleep (1938), while #8 is Edmond Hamilton's The Lake of Life (1937). He has brought together five short stories in #9, the title story being G. G. Pendarves' "The Sin Eater." Also included is Pendarves' "The Withered Heart," Paul Ernst's "Dread Summons," and two by Seabuury Quinn, "Living Buddhess" and "Satan's Palimpsest." All five date from the late 1930s. They should be ordered directly from Weinberg. One may argue that these works do not have the literary quality of the Gregg series, but perhaps even more than the Gregg reprints, Weinberg's selections provide the student of the genre with an historical perspective that is necessary if one is to understand the evolution of the genre. One must recall that for some twenty years, at least, no magazine was more influential than Weird Tales.

#### Juvenile

Atheneum continues to issue the finest group of novels intended for the juvenile audience. On the one hand there is Monica Hughes' Beyond the

Dark River (\$9.95), one of the better creations of a postcatastrophe world which takes as its protagonist a young Amerind girl, Daughter of She Who Came After. At the other end of the spectrum lies Douglas Hill's Deathwing over Veynaa (\$7.95), an action story centering upon the effort to deactivate a weapon which threatens to destroy the planet Veynaa. Sylvia Engdahl's latest title, The Doors of the Universe (\$11.95) involves the efforts of the scholar Noren to adapt his people to and thereby save them from their hostile planet by means of genetic engineering. A similar theme dominates Mildred Ames's Anna to the Infinite Power (Scribner, \$10.95), whose young protagonist, the title character, is part of an experiment in genetic engineering. All of these novels are noteworthy for their quality, and should capture the imaginations of their intended audience. Indeed, they are better than some of the works supposedly published for an adult audience.

#### Paperbacks

Gene Wolfe's *The Shadow of the Torturer* is available from Timescape (Pocket Books, \$2.50), and in keeping with my observation about the new titles, is described as "science fantasy." Incidentally, his *The Island of Doctor Death and Other Stories* (also from Pocket Books, \$2.95) goes very well in class—even during the week before final examinations.

Ballantine/Del Rey has reprinted Robert Silverberg's hilarious Up the Line (\$2.50), while Bantam has released the first paperback edition of Lord Valentine's Castle (\$2.95). One of the questions to be resolved at the Worldcon at Denver, of course, is whether Valentine will win the Hugo.

The number of important paperbacks issued at this particular time is important since the titles should be available for class in the fall. From Pocket Books comes Gregory Benford's Nebula-winning Timescape (\$2.95). Ballantine/Del Rev has reprinted both Theodore Sturgeon's More Than Human (\$2.25) and Philip K. Dick's Martian Time-Slip (\$2.25). Ace has brought out H. Beam Piper's Empire (\$2.50) and Philip José Farmer's The Wind Whales of Ishmael (\$1.95), while Berkley has released a collection of Frank Herbert's short stories, The Book of Frank Herbert (\$2.25). Berkley has also published the first paperback edition of Avram Davidson's delightfully comic incursion into the Dark Ages, Peregrine Secundus (\$2.25). Another first is Dell's paperback edition of Christopher Priest's collection of stories, An Infinite Summer (\$2.75). Finally, Bantam has issued another Doc Savage Double (They Died Twice and The Screaming Man) (\$1.95) for those with a nostalgic bent, and Playboy Paperbacks has published Philip José Farmer's Doc Savage: His Apoca*lvptic Life* (\$2.50).

I suggest that this combination can make up a syllabus for a course any term of the year.

T.D.C.

The Frankenstein Diaries, the Reverend Hubert Venables, ed. New York: Viking Press, 1980. Pp. 128. \$10.00.

One of the premier science fiction novels has remained Mary Shelley's *Frankenstein*. From the first decade of its publication (1818 to 1832), it has inspired numerous imitations; the stage and film versions alone number in the dozens. So powerful was the novel, however, that Frankenstein not only became a household word in the Western world, but it has also inspired a number of pastiches which purport to be biographical information about the "real" Victor Frankenstein.

Mary Shelley's character has, like Sherlock Holmes, become a real human being in the minds of many readers who evidently do not believe it is entirely a work of fiction. Thus, in the last few years a film entitled *Frankenstein: The True Story* was circulated in movie houses and on television, leaving many people with the impression that somehow Mary Shelley had written a biography rather than a novel. While Brian Aldiss's *Frankenstein Unbound* is frankly presented as a novel, the film mentioned above is not clearly fictional. To this number of "true" versions must now be added *The Frankenstein Diaries*, "edited" by the Reverend Hubert Venables, whom the dust jacket vita lists as deceased in 1980.

Printed by the Officine Grafiche A. Nondadori in Verone, the paper has the antique look of facsimile reproduction in all its foxed and tattered glory. I must admit that it is a clever piece of work, one that can and will endlessly fool the gullible and the unwary. In the long and venerable tradition of the author who receives or finds at his disposal a strange manuscript that uncovers a strange tale, Venables (whoever that may be) puts it into shape and seeks to give the story to the world. Even the words that begin the editor's foreword are expected and standard for a book of this type. The first sentence reads: "The tattered bundle of ancient, decaying papers arrived ten years ago from a colleague in Switzerland. . . ."

The work itself is filled with a melange of photographs, purportedly of personages in Victor's life, such as Henri Clerval and Wilhelm Frankenstein (who in the painting shown bears a striking resemblance to Dr. Samuel Johnson!), as well as a series of anatomical drawings which the reader is asked to believe were made in laboratory notebooks by Victor Frankenstein himself. Some are merely gruesome (a cocker spaniel strapped to a dissecting table with its brain visible); some are interesting studies of the artificial man as he gradually assumes a human, though freakish, likeness. These drawings are presented in facsimile, their crumbling edges clearly visible, and were drawn by someone with a better than average knowledge of human anatomy and eighteenth-century surgical tools. The pictures themselves are supported by a book-long series of diary entries "by" Victor which are far more detailed than the sketchy notes Mary Shelley wrote down in her novel. Up to page 42, the diary follows, more or less, the story presented in the original novel, expanding but not taking undue liberties with the text. But with the chapter "The Quest Begins," all similarity with the novel ends abruptly. The setting is shifted to the "Frankenstein Castle" so familiar in the many movie settings (over thirty at last count). Again, true to the movie versions (but certainly not to the novel), Victor acquires his helper and laboratory assistant, Igor. It is true that Radu Florescu in his In Search of Frankenstein has connected the castle Frankenstein on Magnet mountain on the Rhine with the name of the protagonist of the novel. After all, Mary Shelley and her husband visited this area in 1814, just four years before Frankenstein was published. But even that castle is a far cry from the one the reader is now shown in the Diaries.

But that is the least of the inaccuracies! Anyone familiar with the novel and with eighteenth-century medicine and surgery will be greatly distressed with the liberties that the author takes with the state of contemporary science in 1818. Perhaps the most inaccurate and startling error is the machine-shop-like laboratory and its floor plan rendered in great detail in pen and ink. Shelley's novel simply shows Victor doing postgraduate work on his own in Ingolstadt in the unused attic of his rooming house; and it is here, not in a remote castle, that the artificial man first quivers into lethal existence.

The Frankenstein Diaries is a new version of the novel and, like the Isherwood screenplay, will certainly add to the confusion about the origin and contents of Frankenstein. I suppose it is all in good fun, but it is unforgiveable that nowhere in the book is the actual author mentioned or the fictitious nature of the story made clear, even in small print. Serious readers of Frankenstein should be aware that this is a spoof of the intellectual sort and should read it accordingly.

> Sam Vasbinder University of Akron

### BOOKS

#### A Variety of References

**The Blade of Conan**, L. Sprague de Camp, ed. New York: Ace Books, 1979. Pp. 310. \$1.95.

Popular fiction in the last few years has seen the sudden rise to mass popularity of what is known as "swords and sorcery" fantasy. This conjures up images of mighty-muscled heroes, warriors of long-forgotten ages, strange cities reeking of mystery and fear, and, of course, the even stranger appearance of occult magic. Silly and escapist, say the critics. But the public? Who can resist an exciting fight and a beautiful heroine, set against a background of exotic lost kingdoms and supernatural evil?

For those attracted to the "whys and wherefores" of this kind of leisure reading, there is the strange figure of Robert Ervin Howard (1906–36), a young Texas free-lance writer whose life ended in suicide. Howard was a sad and bitter figure in many ways, but he knew how to create exciting prose out of his daydreams. He is indeed the true creator of swords-andsorcery stories. He wrote for the "pulps" of the 1920s and 1930s, but the disappearance of these sensational magazines has not ended his popularity. Mass market paperback companies like Ace, Bantam and Berkeley carry his fiction and his imitators today. His greatest creation was the fierce barbarian hero, Conan of Cimmeria. The latter fought out the reason for his existence in the savage lost civilizations thousands of years before the rise of recorded history.

The Blade of Conan carries some thirty-five essays exploring Howard's fiction—what gives it an attractive power even today, some fifty years after Conan's first appearance in print. L. Sprague de Camp is a good editor and

#### Books

experienced in writing fantasy fiction himself (as well as science fiction) since 1939. He also has a sense of humor much needed in a field and topic all too easily given to pompous gesturing. Selections range from essays on the real evidence for "pre-historic" technology to delightful squabbles backed with faultless logic and historical examples—on the art of dueling with a variety of weapons from the medieval broadsword to a modern fencing foil. De Camp has selected the essays (ten his own) from the leading "fanzine" devoted to Howard and his brand of heroic fantasy. This is *Amra*, founded in 1959 and still flourishing today (P.O. Box 8246, Philadelphia, Pa. 19101). The range of topics testifies to the potential power of creativity that Bob Howard could evoke.

For newcomers to the Conan saga, the editor includes the classic 1938 essay (revised several times since by de Camp), "An Informal Biography of Conan the Cimmerian." Here, authors John D. Clark, P. Schuyler Miller and de Camp give us in summary form the varied adventures of Conan as reflected in the twenty tales which Howard wrote on this hero as well as the additions other authors have made since the 1950s. His Hyborian Age is a terrible but great one.

Then we move into explorations of what an imaginary history will involve. Howard created his own world where magic and monsters moved history, and yet there is a logical consistency amidst the many conflicts of these strange peoples and empires. The authors represented include Fritz Leiber, Poul Anderson, Leigh Brackett, Marion Zimmer Bradley, Glenn Lord, and Lin Carter. The book is a work of love, of impish fun, in getting involved with the most outrageous swashbuckling adventures readers will have come across for many years. Conan's adventures are not for everyone, and this book is a good introduction for readers to test their reaction to Howard's saga. Spells are cast from an ancient world, perhaps this book will let us feel—safely—the excitement of them.

Thomas M. Egan

Historia de la ciencia ficción en España, by Carlos Sainz Cidoncha. Madrid: Sala Editorial, 1976. Pp. 206.

This book is a collection of essays on science fiction, only one of which, the first and longest, is a history of science fiction in Spain. Sainz Cidoncha begins with an interesting survey of some speculative books published in Spain in the early years of the twentieth century. The first works that can be classified as science fiction seem to have belonged generally to the subgenre of "future war stories," beginning with one published in Barcelona in 1897 which foretold a future war between Spain and the U.S. in which the Spanish armed forces soundly defeated the nefarious Yankees. Others published during and after the First World War described a supposed victory of the Central Powers, or the invention of a superweapon that destroyed humanity. In the 1920s, a single author, "Coronel Ignotus" (the pseudonym of José de Elola), produced a series of Jules Verne style stories of interplanetary voyages, anticipating future technological developments, but he remained an isolated figure. A single work by a well-known writer, Ramón Gómez de la Serna, entitled *El dueño del átomo*, was likewise an isolated book.

For the most part, science fiction in Spain has been translated from English and French, with relatively little original work being done. The rest of Sainz's essay thus concentrates on a description of the various publications by Spanish publishers from 1950 to 1975, with the names and titles and plot summaries of the few original stories written by Spanish authors. Although one cannot judge literary quality from brief plot outlines, it seems evident that most Spanish science fiction has been strictly derivative from the action-oriented pulp fiction that characterized the bulk of science fiction in English from the 1920s onward. The derivative nature of Spanish science fiction is clearly revealed by the fact that Spanish writers who attempted to write original stories were obliged by publishing houses to adopt Anglo-Saxon noms de plume. Thus, the prolific creator of the 32volume saga of the space family Aznar, Pascual Enguídamos Usach, had to write as "George H. White" and "Van S. Smith," while Luis García Lecha appeared as "Louis G. Milk." The names of the series in which science fiction stories were published in Spain likewise reveal that science fiction has been largely conceived of by Spanish publishers as the commercial equivalent of the numerous pulp westerns that are still ground out each month. Thus, one of the first collections was "Battlers of Space" (Luchadores del espacio).

The 1960s were for the author the golden age of science fiction in Spain. Large numbers of frequently defective translations from English appeared, and more Spanish authors tried their hands at original stories, some even writing under their true names. In 1966, there appeared the first science fiction magazine, Anticipación, of which seven issues were published. It was followed in 1968 by Nueva Dimensión, edited by three enthusiastic fans, which won the 1972 Eurocon prize as the best specialized professional publication, plus a special award at the Worldcon in Los Angeles in the same vear. Since Spain still languished under the Franco dictatorship during this period, science fiction had to contend as well with the caprices of the official censor. Thus, a translation of Heinlein's Stranger in a Strange Land was seized in the late sixties, and an issue of Neuva Dimensión was suppressed for publishing a story by the Argentine writer Magdalena Mouján Otaño dealing with some Basques in the future. Possibly it suggested to the censor the dangers of separatism, always a sensitive topic in Spain.

At the end of the sixties, reversals of editorial policy and economic

difficulties led to a collapse in the supply of science fiction for Spanish fans (a "strange cosmic plague," as Sainz remarks), and only a few books appeared from then on. Since this essay only goes as far as 1975, one cannot tell whether the fortunes of science fiction have improved in Spain since then. Sainz Cidoncha is obviously an enthusiastic fan, but there is nothing especially profound in any of his remarks and his essay is limited mostly to the superficial aspects of the genre. Nevertheless, it is interesting to see how science fiction has penetrated a country lacking such a tradition in its own literature.

The remaining chapters of the book are short articles dealing with various aspects of science fiction in general. "Science Fiction and Astronautics" examines the ways that various stories have tried to overcome the limitations put on space travel by the speed of light. "Science Fiction and Exobiology" deals with the variety of alien creatures that have been dreamed up by science fiction writers and points out, correctly enough, that very few authors have ever been able to imagine a truly alien creature rather than a human being in a somewhat different body. In "Science Fiction and Military Art," Sainz looks at the different types of weapons that have appeared in science fiction, including the magic weapons imagined in some of Poul Anderson's stories. In "Science Fiction and Cybernetics," Sainz very briefly sketches some of the problems that the existence of robots and other mechanical devices have created in a number of science fiction stories. These essays are relatively short and fairly superficial; however, they show that Sainz Cidoncha is well read in science fiction in both English and in French, as well as in Spanish. He may have more to contribute to science fiction criticism in the future.

> Paul M. Lloyd University of Pennsylvania

#### **Brief Mention**

The Complete Index to Astounding / Analog, compiled by Mike Ashley, with the assistance of Terry Jeeves. Oak Forest, Ill.: Robert and Phyllis Weinberg, 1981. \$29.95.

Because this limited edition covers Astounding/Analog from January 1930 through December 1979, it supercedes all previous indexes. The largest section of the book is given over to an issue by issue description of the magazine, including the cover artist and the interior illustrators. The fiction is listed by both author and title, and the nonfiction by author. This last section is particularly valuable, although at first glance the book reviews seem neglected. One must either search or know that P. Schuyler Miller reviewed for *Astounding/Analog* for nearly twenty years. One must find the other reviewers; perhaps this is quibbling, but the best pres-

entation might well have separated the reviews from the other nonfiction. A worthy innovation is the inclusion of an alphabetical (by author) listing of letters to the editor. although one has no idea what the letters are about because of the lack of annotation. On the other hand, data regarding the changing format over the years, the editorial staff, analyses indicating the most popular writers and fiction provide valuable information for the scholar. Ashley and Jeeves are to be complimented for the thoroughness of their work. The book should be ordered directly from the Weinbergs: 15145 Oxford Dr., Oak Forest, Ill. 60452.

H. P. Lovecraft: An Annotated Bibliography, by S. T. Joshi. Kent, Ohio: Kent State University Press, 1981. \$27.50.

This most recent addition to the notable Serif series is the most valuable single work published on Lovecraft in recent years; it is certainly the most comprehensive bibliography relating to him and will stand as the definitive work. The body of the book divides into three sections: the largest, obviously, is "Works by Lovecraft in English" (195 pages), which divides itself into books, "Contributions to Periodicals," "Materials Included in Books by Others," edited works, and "Apocrypha and Other Miscellany." The second section concerns itself with "Works by Lovecraft in Translation"; the third, "Works

About Lovecraft," includes not only news items, bibliographies, critical articles and books, book reviews. and "Academic Theses and Unpublished Papers," but also "Special Periodicals and Unclassifiable Data." The last group is made up of periodicals-even single issues-devoted largely to HPL and the publications of the two "Amateur Press Associations" devoted to Lovecraft. Throughout the book. the annotations are very complete and very detailed. In his introduction. Joshi emphasizes that the problems of an HPL bibliography "may perhaps be as formidable as those for any writer of this century," and finds the causes in the uneasy attitude that American critics and scholars have had toward the field of fantasy. He points out HPL's "scant critical reputation" in America, although abroad he has been hailed "as among the world's greatest writers." Whatever the eventual judgment regarding Lovecraft's place in American letters, in this volume Joshi has provided scholars with the indispensable tools. It is a model for would-be bibliographers and is an essential acquisition for all teachers and libraries.

Frank R. Stockton, by Henry L. Golemba. Boston: Twayne Publishers, 1981. \$11.95.

In this brief introduction to Stockton, Golemba gives one chapter, essentially, to "The Fireside, Fantasy, and Science Fiction" (pp. 1115-47), of which the last seventeen pages are labelled "Science Fiction." Although Golemba suggests that Stockton "might quite possibly be America's first sciencefiction novelist," his treatment of Stockton's works in the genre are all too brief and superficial. He covers The Great War Syndicate in less than a page and The Great Stone of Sardis in little more than threeand only that much because he gives a detailed plot outline. He concludes: "Stockton's science fiction could have been salvaged had he been more imaginative. . . . Because of his primary values of humor in an absurd if not chaotic world and of fundamental human relations. Stockton's science fiction is closer to that of Kurt Vonnegut in Cat's Cradle than to Jules Verne or H. G. Wells." Except to observe that "A Tale of Negative Gravity" anticipates Wells's The First Men in the Moon in that both are concerned with antigravity devices, Golemba gives little or no indication of the historical importance of Stockton's fantasy and science fiction. Indeed, his tone in the whole matter reminds one of Joshi's remarks about American criticism being uncomfortable with fantasy.

Tarzan and Tradition: Classical Myth in Popular Literature, by Erling B. Holtsmark. Westport, Conn.: Greenwood Press, 1981. \$22.50.

Labelled the first in a projected series, "Contributions to the Study of Popular Culture," Holtsmark's analysis of the first six Tarzan titles deserves a more extended review than this (and will receive it next issue). A Classical scholar, Holtsmark advances the premise that the Tarzan novels make up "an artful and sophisticated modern epic" having "intriguing parallels [with] the sagas of the heroes of ancient Greece and Rome." ERB's protagonist "is a surprisingly complex literary persona whose clear roots in the mythical heroes of antiquity, notably Odysseus, are combined with features borrowed from American Indian traditions." Holtsmark gives attention to "the erotic and Darwinian elements" in Burroughs' themes. This may well prove to be the most challenging assessment of the Tarzan stories published in recent years.

Fantasy: The Literature of Subversion, by Rosemary Jackson. London and New York: Methuen, 1981. \$14.95 hardback; \$6.95 paperback.

After noting that the British reading of fantasy has seen the mode as "transcending' reality, 'escaping' the human condition and constructing superior alternate, 'secondary' worlds," Jackson announces that her aim is "to locate such a transcendentalist approach as part of a nostalgic, humanistic vision, of the same kind as those romance fictions produced by Lewis, Tolkien, T. H. White and other modern fabulists." The book "concentrates upon literary fantasies of the last two centuries, fantasies produced within a

post-Romantic, secularized culture." She regards Todorov's The Fantastic as the "most important and influential study of fantasy" to emerge during that period. Her study divides itself into two parts: "Theory" and "Text." She is most provocative in her discussion of "The Fantastic as a Mode" and "Psychoanalytical Perspectives." She borrows from a number of scholarly sources as she undertakes her examination of various texts. At that point the brevity of her work, as well, perhaps, as her special interest and background, catch up with her. She gives her greatest nineteenth-century attention to works, one of her main points being that throughout English fiction after the Gothic a "dialogue between fantastic and realistic narrative modes often operates within individual texts." If there is a weakness in the book, it occurs because Jackson attempts to move "From Kafka's 'Metamorphosis' to Pvnchon's 'Entropy'" in less than twenty pages. As might be expected. American writers receive far less attention than do the British, and such "mainstream" novelists as Coover, Barthe, Barthelme, and Faulkner gain more (brief) attention than do contemporary fantasy and science fiction writers. Again, perhaps as might be expected, Ursula K. Le Guin is mentioned more frequently than any other science fiction writer. One should be acquainted with this work, but it remains in its present form a kind of

first installment—which hopefully Ms. Jackson will elaborate on.

Doris Lessing: An Annotated Bibliography of Criticism, by Dee Seligman. Westport, Conn.: Greenwood Press, 1981. \$25.00.

Noting that scholarly interest in the work of Lessing has produced an M.L.A. Seminar during the 1970s, a Society, and a Newsletter, Seligman sets herself the task of presenting a comprehensive bibliography through 1978. As the title suggests, she emphasizes secondary works. Her "Works by Lessing"ranging from novels and stories to plays, poems, television scripts, and theater criticism—covers 136 items. but very few of them are annotated. She does annotate some 175 "Works About Lessing"; although some of her notes are perhaps too brief and general, on the whole they are of a good quality. To these she adds a dozen reviews of books about Lessing and lists some 500 reviews of her books. These are gathered under the appropriate title but are unannotated. Finally, Seligman lists the papers that have been given at the M.L.A. Seminar and does annotate the dissertations which have been written. For the present, at least, this volume will remain a basic tool for any studies of Lessing.

Patches of Godlight: The Pattern of Thought in C. S. Lewis, by Robert Houston Smith. Athens, Ga.: University of Georgia Press, 1981. \$18.00.

Smith has undertaken successfully a systematic description of Lewis's philosophy of religionwhat Smith calls his "Christian objectivism." "At its core," writes Smith, "is the conviction that everything in the universe is a manifestation of a single reality." He illushow Lewis's trates basic protestations of Christian orthodoxy are intellectually (and spiritually) enriched by an interweaving of the Platonic tradition, medieval cosmology, and Renaissance "imagery." After an introductory definition, he turns to a consideration of "The Old Western Model of Reality," "Reality and God," "Cosmology," "Universal Truths," "Imagination and the Mystical Ascent," "the Self," and "Evil and Eschatology." Smith concludes that while many of Lewis's contemporaries attempted to formulate worldviews, "none excelled him in the comprehensiveness and beauty of the completed product." Patches of God*light* is a highly satisfactory and scholarly presentation of the workings of Lewis's intellect.

Science Fiction Research Index, vol. 1, compiled by H. W. Hall, Bryan, Tex.: SFBR1, 1981. \$5.00.

Since 1969, Hall has published an ever more comprehensive *Index* listing book reviews relating to science fiction and fantasy. (Gale Research has recently published the second cumulative volume.) This year, however, he has changed his emphasis. As he explains in his

introduction, last spring the field of material he had been building for fifteen years "was converted to a machine-readable form, partially coded by subject, and processed on standard Keyword-In-Context а program." The new volume is "effectively the first supplement to the comprehensive index." He further explains that this volume "updates the file through 1980 and picks up older material which was not in the original file." In addition to a list of standard subject headings, access to material is through the names of individual authors as well as names of individual motion pictures and television shows. The subject headings run from aliens and alternate history through fandom and monsters to vampires and women in sf. The volume should be ordered directly from Hall, 3608 Meadow Oaks, Bryan, Tex. 77801.

Index to the Science Fiction Magazines 1980, compiled by Jerry Boyajian and Kenneth R. Johnson. Cambridge, Mass.: TWACI Press, 1981. \$4.00.

This volume takes the place of *SFBRI*, if Hall has indeed ceased to publish it. The editors go through each of the issues of the science fiction magazines published in 1980 and then provide an author index. In an appendix, they list "SF in Misc. Magazines." Orders should be sent to P.O. Box 87, M.I.T. Branch Post Office, Cambridge, Mass. 02139.

# EXTRAPOLATION



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