

# Book Forum

The books for this month are a holiday gift list:  
books to broaden the library and the mind,  
to provide pleasure and enjoyment,  
to give to oneself and others.

## BIOGRAPHY

**Fermat's Enigma: The Quest to Solve the World's Greatest Mathematical Problem**, by Simon Singh. New York, Walker & Co., 1997, 315 pp., \$23.00.

The capacity for sustained attention to an abstract train of thought is most highly developed in mathematicians. This pleasingly compact book allows the general reader to understand, in simplified terms, the astonishing solution, over an 8-year period of mostly self-imposed solitude, of a problem that seventeenth-century French mathematician Pierre de Fermat claimed he had proved, namely, that there are no solutions of  $X^n + Y^n = Z^n$  for  $n$  greater than 2. Fermat, in his characteristically superior and annoying way, had said he had "a truly marvelous demonstration of this proposition which this margin is too narrow to contain" (p. 62). Indeed, Wiles's prize-winning proof took more than 100 pages. It also employed a remarkable breadth of the developments in mathematics since Fermat's day and could not have been Fermat's solution if he had one.

This provides the pretext for Singh to trace all the roots of Wiles's solution through much of the history of mathematics, a human enterprise marked by black-and-white judgment, fierce competition, and no small amount of bloodshed. A member of the Pythagorean Brotherhood was drowned for breaking his secrecy oath by publishing his discovery of the dodecahedron. The severity afflicted even the occasional female geniuses who stumbled into mathematics, such as Hypatia, whose flesh was scraped from her bones with oyster shells. And then there was Galois, distracted from the promise of his genius by his tragic allegiances to the nineteenth-century French Republican cause. After his father was shamed into suicide, Galois found himself facing an unwinnable duel over a mysterious woman with a superior duelist who may have been a government agent. The night before the duel in which he died, Galois scribbled out solutions to the problems of quintic equations, a precursor in group theory to the solution of Fermat's enigma. More recently, the suicide in 1958 of Taniyama of the Taniyama-Shimura conjecture, unexplained, incomprehensible to Taniyama himself in his suicide note, and surely psychopathological, deprived the world of a Japanese genius. Taniyama linked elliptical equations and modular forms, directly presaging Wiles's solution and making progress toward the grand unification of all fields of mathematics envisioned in 1960 by another Princeton mathematician, Robert Langlands.

Wiles's approach to his own solution speaks volumes about the fierce competition of the mathematical world. Having prepared all his life to prove Fermat's last theorem, Wiles found it necessary to throw his competitors off his track. He prepared a series of papers based on his research in the 1980s on a type of elliptical equation, and, instead of publishing them together, he eked them out bit by bit to give the appearance that he was slowly working on this rather

than his true obsession, as Singh describes it. Wiles also worked in total secrecy, telling no one but his wife, and withdrawing from all but a minimum of his teaching duties. After 6 years in isolation, during which he fathered two children, he let another professor, Nick Katz, in on it in order to check his extensive use of the Kolyvagin-Flach method. Wiles and Katz decided on a series of lectures for graduate students to test out Wiles's extensive, secret work. It was as if Wiles had to speak to someone to finish his proof.

When he finally had the proof completed and announced it to the world, Wiles became an instant—and mathematics' only living—celebrity. But one of the six referees required to check the enormous proof found a gap in it. Had Wiles's 7 years of effort been wasted? He stalled on releasing the flawed proof, fearing another mathematician would find the answer and get the final credit, humiliating him. Again he turned to another mathematician, Richard Taylor, for help. But it was Wiles himself who finally saw that his earlier, discarded method based on Iwasawa theory, taken together with the Kolyvagin-Flach method, each inadequate on its own, together gave the answer.

This intellectual saga with its triumphant conclusion has great charm. It is fun to read in fairly recent books about the recalcitrance of the problem (1). If one wished merely to know the gross structure of the proof, the description of it by Singh and Ribet in *Scientific American* (2) would do. But the human factors in the story, so well drawn by Singh, made me think of our own most difficult enigma in psychiatry, the problem of how psychotherapy works. Reading Wiles's story, I began to glimpse a solution to that ineluctable problem. Alas, there is insufficient space in this review to record it now.

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**Adolf Wölfli: Draftsman, Writer, Poet, Composer**, edited by Elka Spoorri. Ithaca, N.Y., Cornell University Press, 1997, 252 pp., \$39.95.

In recent years there has been a resurgence of scholarly interest and research concerning the relationship between mental illness and artistic creativity. One aspect of this scholarship has focused on artists with psychosis (1), among whom Adolf Wölfli is perhaps the best known and certainly one of the most highly regarded.

Wölfli's talents and accomplishments as an artist were first recognized and encouraged by Walter Morgenthaler, his psychiatrist at the Waldau Mental Asylum near Bern, Switzerland, between 1907 and 1919. Wölfli had been hospitalized

at Waldau in 1895, and he remained there until his death in 1930, at the age of 66. In 1921, Morgenthaler published his highly regarded monograph, *Madness and Art: The Life and Works of Adolf Wölfl* (2).

The book reviewed here, *Adolf Wölfl: Draftsman, Writer, Poet, Composer*, edited by Elka Spoerri, comprises a series of essays documenting and providing critical commentary on all aspects of Wölfl's vast artistic output, which included drawings, prose, poetry, and musical compositions. In addition, the book contains a very brief biography of Adolf Wölfl and a "catalogue" of his existing works. As noted in the preface by Prof. Jean-Pierre Colombo, President of the Adolf Wölfl Foundation, the essays "investigate Wölfl's artistic work not only from an art-historical point of view but also from the perspectives of psychology, psychiatry, literature, text analysis, and musicology." In addition, Colombo notes that another aim of this volume is to "illustrate Wölfl's pictorial work vividly and copiously...[with] 77 color plates and 111 black-and-white illustrations."

The major essay in this book is by Elka Spoerri, who was curator of the Adolf Wölfl Foundation from 1975 to 1996. In this monographic essay, Spoerri provides a summary of Wölfl's life and a chronological description of his massive artistic output. Concerning his narrative oeuvre, she writes that it was of "paramount importance to Wölfl" and "his life's work." Consisting of "prose texts, which are interwoven with poems, musical compositions, and illustrations," Wölfl's fantastic autobiographical narrative included "forty-five large volumes and sixteen school notebooks with a total of twenty-five thousand densely filled pages...[that] is a totally unified work."

Wölfl divided this narrative into five somewhat overlapping chronological groupings: From the Cradle to the Grave, 1908–1916; Geographic and Algebraic Books, 1912–1916; Books With Songs and Dances, 1917–1922; Album Books With Dances and Marches, 1924–1928; and Funeral March, 1928–1930. In addition, Wölfl created a body of work that Morgenthaler called "bread art," i.e., single-sheet drawings, largely produced from 1916 to 1930, which Wölfl made "for others in order to get colored pencils, paper, tobacco, etc."

Other essays included in this volume are Harald Szeemann's "No Catastrophe Without Idyll, No Idyll Without Catastrophe," reprinted from a 1976 exhibition catalog; Louis A. Sass's "Adolf Wölfl, Spatiality, and the Sublime"; Marie-Françoise Chanfrault-Duchet on "Wölfl and Autobiographical Writing"; Allen S. Weiss on "Music and Madness"; Max Wechsler on "Wölfl and Walser: Some Thoughts About Their Congruence in Spite of Their Disparity"; and Daniel Baumann on "The Reception of Adolf Wölfl's Work, 1921–1996." The brief section of diagrams of "Wölfl's Vocabulary of Forms," by Markus Rätz, is most helpful in interpreting the idiosyncratic iconography in Wölfl's drawings.

Since many of the black-and-white reproductions are quite small, it is hard to see details in the drawings that are discussed in the text. Moreover, illustration numbers are often not cited in the text, forcing the reader to search by title for specific illustrations.

In summary, this book contains a rather diverse collection of scholarly essays that merit close reading. When it is time for a break, the reader can turn to the color illustrations of Wölfl's drawings. They are magnificent.

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**Explaining Hitler: The Search for the Origins of His Evil**, by Ron Rosenbaum. New York, Random House, 1998, 448 pp., \$30.00.

In fomenting the murder of tens of millions of his fellows, Adolf Hitler helped define the twentieth century and secured his place as its consensus arch-fiend. During his chancellorship of Germany in the 1930s to his death in 1945, the ferocious and urgent cruelty with which he prosecuted his publicly proclaimed goals of world domination and eradication of the Jews (and other *untermensch*) precipitated World War II. The explanations for, and attempts to understand how, a small-town, essentially uneducated Austrian boy grew up to become a monster of such fiendish ambition, charisma, and unbending will are almost as numerous as the people he killed and the plethora of literature on the matter. Despite the multifarious approaches (psychological, psychoanalytic, philosophical, political, theological, and genealogical, to name a few) and intensity of the scrutiny given to Hitler's developmental history and life processes, he remains (to borrow from Winston Churchill) a riddle wrapped in mystery inside an enigma, largely due to his own deliberate and extensive efforts to obscure his origins.

Ron Rosenbaum, journalist, author, and part-time college professor, develops his conceit: using the journalist's scalpel to dissect Hitler's explainers (some of them, anyway), their times, and their motives, he suggests that their own biases may have affected their exegeses. Rosenbaum is the committed investigator, pursuing the targets of his interest: places, people, theories, and archives; probing, seeking, reading, interviewing, as he maps "the labyrinthine thickets of Hitler explanations." Rosenbaum's approach, especially to the people he interviewed, is respectful but thorough, as he questions, refutes, and substantiates. The result is a rewarding odyssey through time, history, and geography with enriching explorations of psychological, political, economic, and other considerations woven into a compelling and edifying narrative.

Rosenbaum's 35-page introduction, "The Baby Pictures and the Abyss," is a cursory consideration of an astonishing "list" of topics and subjects that came to his attention during the many years of his research, some of which he treats in detail in the seven parts (and 20 chapters) that make up the body of the work. Here and in later chapters Rosenbaum honors courageous persecuted and martyred Germans, especially journalists and editors such as Fritz Gerlich (chapter 9), of the *Munich Post*, who attempted to tell the world about "the strange figure who had arisen from the Munich streets" ("the First Explainers") but who paid with their careers and their lives and are now completely forgotten.

Chapter 1 begins, "I was ready to give up and turn back." He is not confessing to feelings incurred during his long, almost impossible task, but has been caught in an autumnal snowstorm (reminiscent of the winter storm that stopped the Panzers near Moscow in 1941) in "a backwoods quarter of

Austria" as he visits the site (and myths) of the village of Döllersheim, Hitler's reputed ancestral home. The Döllersheimers were forcibly deported and the village destroyed shortly after German annexation of Austria to "erase all traces of certain irregular and disreputable Hitler family events" and in response to his "near apoplectic rages" over repeated visits there by prewar journalists and investigators. Little more than anecdote, myth, fantasy, and hearsay remain. This erasure typifies the extent and viciousness of measures taken by Hitler to hide his past, and the pitifully scant remaining clues are symbolic of the often vaporous trail remaining for anyone tracing the monster's evolution. Chapter 2 continues in the same venue as Rosenbaum visits the myths and fantasies of Hitler's genealogy ("Was Hitler a Jew?") and how the place and its geography, the people, and their history have contributed to the distortions surrounding the "Mysterious Stranger" that Hitler always was.

Chapter 3, "The Poison Kitchen: The Forgotten First Explainers" is a moving homage to the "heroic but doomed reporters" of the *Munich Post* who saw clearly and reported faithfully the rising fortunes of the "political criminal" in their midst. Their efforts earned them the focused hatred of Nazi officials, the derisive appellation used in the chapter title, and, ultimately, their persecution and death at the hands of Nazi thugs. Rosenbaum reviews their published revelations of Hitler's and the Nazi Party's lies and criminality, hoping "to challenge contemporary German journalists to do justice to the men of the Poison Kitchen...who brought so much honor to their profession" by restoring their work to print again. He ends with a plea to restore their street address as a memorial and shrine to their heroism.

A substructure of the opus revolves about broader theories of Hitler's makeup: i.e., normality (Is there a little bit of Hitler in all of us?) versus the unnatural (Was he sexually perverted or crippled?) versus the unprecedented evil (Was he a manifestation of a cosmic malevolent force?) versus the committed, true believer (He was attempting to better mankind by eradicating its unfit elements and the "Jewish virus"). Rosenbaum approaches explainers of whatever stripe from the strength of a very informed position. For each of the chapters there are interviews and conversations with a sobering variety of published interpreters of the Hitler phenomenon: the flip-flopping Hugh Trevor-Roper, an unrepentant Hitler apologist, Holocaust-denier David Irving, Berel Lang, Yehuda Bauer, Milton Himmelfarb, and others—many notable and some more ordinary people who may have been witness to important events. Many of these writers will be familiar to anyone who has followed these matters in depth over the postwar years.

In chapter 8, Rosenbaum examines the "hidden variables theories"—mainly psychoanalytic—which focus on Hitler's sexuality. He is mostly dismissive of the contributions of psychoanalysts and "a whole school that came to be known as psychohistorians" because of the assumptive bases of their commentaries and conclusions. In chapter 11, Rosenbaum's guide during an exploratory visit to Hitler's mountain retreat on the Obersalzberg, "Herr H., ...a forty-five year old Viennese," a collector and purveyor of Hitleriana, and a "relativist" (Stalin was worse, "he invented mass murder and concentration camps") is no intellectual match for the author. His sometime pointed discussions with Herr H. lead easily into examination of the "revisionist" opinions that make up the body of this chapter. Daniel Goldhagen, who is sympathetically portrayed as having been savaged by Jewish (and German) scholars/critics for his *Hitler's Willing Executioners* (1), but facing questions and information refuting some of

his theses, did not complete the interview with Rosenbaum, invoking a possible conflict of publishing interest.

It is not clear (nor is it necessary to know) throughout all this which of the explanations, if any, Rosenbaum subscribes to, but at the end, in a discussion with Milton Himmelfarb, he admits that "I might argue that if I'm an exceptionalist, it's more by default than a metaphysical conviction that Hitler could never be explained by rational means," adding that "he [Hitler] is exceptional, in the sense that, as of now, he has not been pinned to anyone's grid." The more history-minded readership will be familiar with many of the people, theories, and discussions encountered here, but Rosenbaum's cumulative journalism, the depth and breadth of his revelations, and his masterly presentation of the material will engage and inform the most mature professional historian.

Hitler is, indeed, the century's arch-fiend; no explanation has altered that position. As our murder-replete century approaches its close, it is interesting to speculate whether or not, as next century's historians compare the unprecedented mega-horror inflicted by Lenin (2), Stalin (3), and Mao Tse Tung (4) that is only now being revealed, Hitler's station at the apex of this despicable pantheon will survive. Whether such attractively presented scholarship and knowledge will aid in precluding the rise of the next monster politician is, of course, yet to be seen.

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**The Two Mr. Gladstones: A Study in Psychology and History**, by Travis L. Crosby. New Haven, Conn., Yale University Press, 1997, 278 pp., \$35.00.

By any standards, William Ewart Gladstone was an exceptional man. Four times Prime Minister of Great Britain, the moral and political voice of the Victorian era, an inveterate polemicist, a rigorous economist, a mesmerizing orator, and a stern pater familias, his first government was one of the great reforming administrations in British history—passing a comprehensive education bill, enacting the secret ballot, disestablishing the Protestant church in Ireland, and enacting a progressive Irish land bill. The stern, puritanical, controlling, and evangelical Victorian Gladstone is part and parcel of political folklore, but, and thus the title of Travis Crosby's absorbing study, he was also a man of great volatility and passion. Indeed, the Earl of Selborne, Lord Chancellor in two of Gladstone's administrations, characterized him as having "something volcanic in the underground currents of his mind." He worshipped control, particularly self-control, yet continually put himself in situations in which this very quality faced the sharpest of tests, be it negotiating the Home Rule bill for Ireland in the maelstrom of the House of Commons or wrestling with his passions in the company of beautiful, seductive prostitutes in the gaslit streets of London. Gladstone's family was run on the strictest of lines, rules were punctiliously enforced, and the atmosphere was imbued

with a fear of sin and depravity, yet he regularly exploded with incandescent fury in parliamentary debates and conducted intemperate and aggressive campaigns against opponents with scant regard to feelings, theirs or his own.

Crosby proposes a psychological approach to understanding these seeming contradictions. He is at pains to avoid the more familiar psychoanalytically derived approach in favor of one based on, as he puts it, "a loosely-knit group of ideas known as stress and coping theory." He is particularly interested in coping styles—for example, Gladstone's repeated tendency to withdraw in the face of setback. "Diplomatic illnesses, avoidance of cabinet meetings, threats of resignation, and flights from England," he writes, "were as characteristic of his behavior as his mastery of parliamentary practices, his rousing speeches in the countryside, or his assiduously prepared budgets." He sees these and other eccentricities as ingenious methods of coping with the claustrophobic social constraints of the time and the stresses and strains of parliamentary politics.

Crosby pays relatively little attention to early childhood experiences and their putative effects on adult behaviors. Yet, as he admits, Gladstone's early childhood is hardly irrelevant to any attempt to understand him. He came out of a strict Evangelical background that forbade expressions of anger and discontent and emphasized self-control and discipline. Crosby finds himself wondering whether Gladstone's passionate anger, such a striking feature of the adult politician, might be the product of a family dynamic wherein no anger could be expressed and certainly none directed against parental figures.

What Crosby documents but hardly comments on is the extent to which Gladstone was obsessional even by the meticulous standards of the time. He kept a diary virtually every day of his adult life, revealing himself to be a tentative man, introspective, occasionally anguished, meticulous, religiously scrupulous, and drawn to procrastination. There is too the approach-avoidance of his sexual exploits. On the one hand, he was sorely tempted by sexual desire and was constantly exhorting himself to avoid looking at certain books or into the windows of print shops lest he see erotic literature and pictures. At the same time, there is the burning question of what precisely was the nature of his relationships with the many London prostitutes whose well-being so perturbed him and in whose company he spent such lengthy periods. As there are the two Gladstones so there are two opposing views of this behavior. One sees it as the ghastliest of hypocrisy, a man privately indulging in sexual license while publicly professing the standards of morality of a celibate monk. The other insists on the fearless rectitude and purity of his motives and his genuine concern for the moral and physical plight of fallen women. Crosby takes a position in the middle. Yes, Gladstone was genuinely involved with prostitution as a legitimate charity and yes, as his diaries clearly reveal, he was a man drawn to specific prostitutes as "a kind of escape from the stresses and disappointments of his political and social life."

As a biographical account of one of the great and most complex political figures of the last century, *The Two Mr. Gladstones* is a vigorous read—compelling and absorbing with interesting echoes of our own times. But as a psychological explanation or even analysis it fails, despite its patient scholarship, leaving us as puzzled by this contrary and contradictory man as ever.

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**The Sword of Laban: Joseph Smith, Jr., and the Dissociated Mind**, by William D. Morain, M.D. Washington, D.C., American Psychiatric Press, 1998, 238 pp., \$23.95.

William Morain, a retired plastic surgeon from Dartmouth Medical School, has written a psychological history of Joseph Smith, Jr., the founder of the Mormon faith. As with most such histories, there is a story behind the story. In this case, Dr. Morain discovered that Dr. Nathan Smith (no relation to Joseph Smith, Jr.), the founder of Dartmouth Medical School, once performed a surgical operation on the leg of 9-year-old Joseph Smith, Jr. Morain was "raised in more than casual association with the Reorganized Church of Jesus Christ of the Latter Day Saints" in that his great-great-grandmother married Joseph Smith's son, Joseph Smith III.

Morain identifies two events in the history of Joseph Smith, Jr., which he proposes shaped the form and the substance of Mormonism. First, Smith underwent surgery on his leg without the benefit of anesthesia. A published report of the surgery from the perspective of Smith's mother suggests that he was unusually calm and that he behaved most unlike what one would expect of a child his age. Nevertheless, Morain proposes that this surgery underlies many of the violent metaphors inherent in the Mormon faith, not the least of which is found in the title of the book—the sword of Laban. The Laban referred to is not the Biblical Laban but, rather, the son of the patriarch Lehi in The Book of Mormon. Laban, an evil young man, is decapitated by his more virtuous brother, Nephi, with a "wondrous sword." Thus, Nephi is enabled to acquire engraved brass plates with the Judaic record and genealogy of the family. Morain discovers Freud all over this account, and, from the psychoanalytic perspective, his discoveries are not surprising. The second event targeted by Morain is the sudden death of Smith's older brother when Smith was a teenager. Morain suggests that bizarre bereavement fantasies, another focus in the Book of Mormon, contributed to the formation of Mormonism.

Whether one can write a true psychohistory/psychobiography is open to debate. Even if we assume that under favorable conditions such a history can be written, this volume is written under less than favorable conditions. First, reducing the spirit of a religious leader to the psychological is fraught with problems, whether that leader is Moses, Jesus, Mohamed, or Joseph Smith. Second, Morain must rely predominantly on two sources—the sacred books of Mormonism and secondhand accounts regarding Joseph Smith. The few primary writings of Smith, other than his "translations," are remarkable for how little they reveal. Third, the history of the Mormon faith is a young history, and perhaps Morain is too close to this history (especially if he traces his own roots easily to the marriage of the founder's son).

Nevertheless, this is a fun book to read. The narrative moves. The interpretations are clear, although those who are well-grounded in the history of the Mormon faith or in psychodynamic psychiatry will find them simplistic. Morain has attempted an honest inquiry and has dedicated many hours to this pursuit—not bad for a surgeon.

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## LITERATURE

*Cities of the Plain*, by Cormac McCarthy. New York, Alfred A. Knopf, 1998, 293 pp., \$25.00.

With *Cities of the Plain*, Cormac McCarthy completes the Border Trilogy, begun with *All the Pretty Horses* (1) and continued in *The Crossing* (2). McCarthy has again created a work of beauty and suffering, a tragedy wherein motives noble and base are explored. In *Cities of the Plain*, John Grady Cole, the protagonist of *All the Pretty Horses*, and Billy Parham, of *The Crossing*, are working together on a ranch in New Mexico, just north of El Paso. The novel opens with simply told pastoral vignettes of ranch life in the early 1950s and recollections of earlier days, told in McCarthy's spare, precise prose. Cowboy humor, Western history, speculation about the mind of the horse, and details about how ranch work is done are all found. Yet even from the beginning, the theme of loss is heard. Ranching is already past its prime, and the entire way of life is threatened, as the spread itself will soon be swallowed by an Army base. Both the ranch owner and his son-in-law are mourning the recent death of Margaret, their daughter and wife, respectively, and this grief shows no sign of abating. From the ridges and caprock of the ranch, the lights and smoke of El Paso and Juarez, the cities of the plain, are visible. The allusion in the title is more to the Biblical Sodom and Gomorrah than to Proust, for evil does seem to reside there.

John Grady sees Magdalena, a very young prostitute, in Mexico, and comes to love her and seek her for his wife. Although the young woman is beautiful, surprisingly innocent, and welcoming of John Grady's attention and intentions, the impossibility of their love is made clear from the beginning. John Grady is warned, first by Billy, who acts toward him in much the same way as he did toward his lost younger brother; then by a friend, a blind Mexican musician, who says that Magdalena "does not belong here.... I do not mean in this house. I mean here. Among us"; and finally by Magdalena herself. He persists, undeterred, and the story moves inexorably ahead in counterpoint to the pastoral sections, as tension, hope, and doubt build. But the story is not the whole story. As elsewhere in the Border Trilogy, a rather commonplace tale of romance and doom is a vehicle for explorations of morality and grief.

Some readers, even those used to McCarthy's darkness, may expect a grand conclusion to the Border Trilogy, or find *Cities of the Plain* slow moving, at least until the last 60 pages, or think it contains too few of McCarthy's lyrical animal passages, but *Cities of the Plain* need not be a disappointment. It is still commendable as an honest exploration of human irrationality, of the pursuit of the desired object even when success is impossible. John Grady Cole, now 20 years old, is as admirable as he was at 16 in *All the Pretty Horses*—still wise in the ways of horses, tenacious, unflinchingly honest, and tender to those in need: "All his early dreams were the same. Something was afraid and he had come to comfort it. He dreamed it yet." This compassion, coupled with single-mindedness, certainly carries him deep into his fateful relationship with Magdalena. Searching such a novel for insights to help in our work with patients who make unhealthy choices may be an irresistible impulse, but it is probably futile here. We can come away from this book, as from other well-crafted novels, with humility and a renewed appreciation for the complexity of human lives,

whether those in which we must intervene or those we merely observe.

The spiritual dimension is more obviously woven into *Cities of the Plain* than in McCarthy's other work, perhaps in opposition to the bleak, bitter aspects of grief. Christian and other themes are woven in, from the introduction of Magdalena, who is, as was Mary Magdalene in some traditions, epileptic; to Mr. Johnson, the ranch owner, musing on whether creatures can vanish ("I was always what you might call superstitious. I know I damn sure wasn't religious. And it had always seemed to me that something can live and die but the kind of thing they were was always there. I didn't know you could poison that. I ain't heard a wolf howl in thirty odd years. I don't know where you'd go to hear one. There may not be any such place"); to John Grady and Magdalena, wondering, in a late encounter, about forgiveness ("He said that he believed in God even if he was doubtful of men's claims to know God's mind. But that a God unable to forgive was no God at all"). John Grady recalls the Comanches, whose trails remained behind his childhood ranch: "He would ride that trail in the moonlight in the fall of the year and the ghosts of the Comanches would pass all about him on their way to the other world again and again for a thing once set in motion has no ending in this world until the last witness has passed." And, in an otherwise puzzling, cryptical epilogue set in 2002, the aged survivor, dreaming of his lost ones, wandering alone in what used to be his own country, is taken in by a young family and assured by the mother that he'll see a lost one again, that she knows who he is, and that he is not nothing. Here again, the reader is reminded not only that destructive events and behaviors partake of irrationality but also that our antidote to grief is not in the rational realm. So, perhaps, *Cities of the Plain* does not leave the reader bereft, with only the taste of ashes in the mouth. McCarthy makes his reader work for what is gained, and, as before, there is much to gain.

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*The Treatment*, by Daniel Menaker. New York, Alfred A. Knopf, 1998, 288 pp., \$23.00.

Depictions of psychoanalytic treatment are scattered throughout twentieth century American fiction. With occasional exceptions, such as the sympathetically drawn protagonist of Judith Rossner's *August* (1), the analyst is portrayed as an ineffectual buffoon or a faceless narrative device to allow the reader to learn about a character's internal conflict. In Daniel Menaker's new novel, however, we encounter a truly unique psychoanalytic figure, who is deeply dedicated to his work but totally outrageous. Meet Dr. Ernesto Morales, a devoutly Catholic, sternly authoritarian, Castro-hating Cuban who describes himself as "the last Freudian." His patient (or some might prefer "victim") is Jake Singer, an anxiety-ridden underachiever who teaches in a prestigious New York preparatory school. The centerpiece of the novel is the intense, sarcastic, antagonistic, and often hilarious exchanges between the two of them in a rather extraordinary analytic treatment.

In an era in which the analyst's authority is systematically deconstructed, Dr. Morales is dead certain about his formulations of Jake's unconscious. He is also blunt to the point of rudeness. A few examples may serve to illustrate his notion of analytic tact: "You know, Mr. Singer, you are a gigantic pain in the ass." "If you joke, I shall kill you and spare you the effort of this slow suicide." "Listen to your ignorant prattle. You think you can size me up and dress me down!" Jake finds him impossible and talks endlessly of quitting to escape his torment. Nevertheless, he goes back for more and finds himself increasingly invested in the hostile banter with his analyst. As Jake's life steadily improves, Morales demands credit for himself, complains bitterly that Jake does not discuss every decision with him before acting on it, and humiliates his patient at every turn. The treatment finally ends when Jake walks out in open defiance of his analyst.

The reader will undoubtedly find Morales a preposterous character. Yet there is something compelling about him. Menaker has constructed him so deftly that the reader can actually empathize with Singer's continued involvement in the analysis. He is fiercely devoted to his patient despite being a tyrant who wants absolute control of Jake's life. In spite of the sadomasochistic nature of their relationship, Jake somehow gets better and makes profound changes in his life. In a dust-jacket comment, Janet Malcolm, an astute commentator on psychoanalysis, notes, "I am still brooding about the mysterious, over-the-top psychoanalyst Dr. Morales, and wondering whether he is Ariel or Caliban." I share her perplexed reaction. The characterization is almost too farfetched to be a complete fiction, so one begins to imagine what sort of treatment the author himself has endured. The outcome resonates with a frequently observed clinical phenomenon—namely, that a patient can make considerable gains from a highly problematic and countertransference-ridden treatment. Attenuated sadomasochistic enactments, for example, may have undeniably therapeutic aspects to them. The mode of therapeutic action in this case may also involve what Wallerstein (2) called the antitransference cure, in which the patient gets better in defiance of the therapist.

Menaker's complex and absorbing novel is about more than an unorthodox treatment, however. It is also a contemplation of the role of fate in determining the direction that our lives take. The author ponders the imponderable:

Leading or knowing about lives into which chance intrudes ignorantly, with an untimely death or oil under the backyard or finding her phone number in your wallet when you thought you'd lost it or a bullet bouncing off a dog tag, helps you to understand where at least some of the impulse to make things up—to give form and meaning to what lies beyond our control—comes from. Our brains seem to require us to try to account for everything, to transmute the brute happenstance of our lives into logical, explanatory narratives. (p. 95).

Hence the "treatment" of the title has a double meaning. Life is also a treatment to which we are subjected. Indeed, the fabric of the novel is a dialectical tension between the awful randomness of the universe and the unconsciously motivated choices that determine the course of an individual's life. While Dr. Morales insists that there are no accidents, life is teaching Jake otherwise. Menaker believes we all are desperately constructing meaning—whether theological, philosophical, or psychological—to make sense out of chaos. Al-

though his point is well-taken, he sometimes veers into melodrama to illustrate the cruel hand of fate.

Menaker is clearly concerned about our tendency to forsake meaning as well. In the last scene, in which we see Dr. Morales struggling to preserve his island of practice in a sea of competing treatments, the analyst sounds like Tiersias warning of the impending demise of meaningful therapy: "Treatment will no longer consist of explorations of significance and spirit and mystery, but quick fixes, twelve steps, behavioral adjustment, and pills" (p. 261). One finishes the novel with the conviction that one's inner world can be fruitfully understood whatever the vicissitudes of chance. The author has created a story for our time that will both move and tickle the reader while confronting fundamental existential issues.

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**Homer: The Odyssey**, by Robert Fagles (translator). New York, Viking Penguin, 1996, 541 pp., \$35.00.

This new translation of *The Odyssey* is produced by Robert Fagles, who not long ago gave us a celebrated translation of *The Iliad* (1). *The Odyssey* is much harder to translate because it ranges over a vast expanse of space and time, whereas the action of *The Iliad* is packed into a very small area and takes place in a relatively brief period of time, making choices about the style of the poetic translation easier. If one compares this new translation of *The Odyssey* with the other two recent translations likely to be available in the library of psychiatrists (2, 3), one can experience the remarkable differences in the way even extremely competent translators approach Homer's Greek. The special merit of the translation by Fagles is that an outstanding Penguin Audio-book, superbly read by Ian McKellen, is available with it. The audiobook was not sent to me along with the text so I bought it in preparing this review because I think the real test of a translation of Homer is in speaking it out loud. One should never forget that these poems were sung and not read 2,700 years ago.

The actual choice of translation is not as simple as several enthusiastic reviewers of Fagles' recent work have made it appear. There are advantages and disadvantages of each. Fagles produces poetry that is harsh and to the point, a forceful telling of the story packed with action. The Lattimore translation is more faithful to the Greek, but it produces a kind of long-winded singsong effect. The Fitzgerald translation is in-between, preserving more of the poetic beauty than Fagles, but it is not as direct and easy to read or listen to. I will offer two brief examples from some of my favorite lines in Book 1. Lattimore renders lines 32–34 of Book 1 as follows:

Oh for shame how the mortals put the blame upon us  
gods, for they say evils come from us, but it is they,  
rather,  
who by their own recklessness win sorrow beyond what  
is given. (p. 28)

Fitzgerald renders the same three lines as follows:

My word how mortals take the gods to task!  
All their afflictions come from us, we hear.  
And what of their own failings? Greed and folly  
double the suffering in the lot of man. (p. 14)

Fagles offers the following:

Ah how shameless—the way these mortals blame the gods.  
From us alone, they say, come all their miseries, yes,  
but they themselves, with their own reckless ways,  
compound their pains beyond their proper share. (p. 78)

Similarly, in another crucial statement in Book 1 of *The Odyssey*, Lattimore renders lines 341 and 342 as follows:

You should not go on  
clinging to your childhood. You are no longer of an age  
to do that. (p. 34)

Fitzgerald translates it as follows:

You need not bear this insolence of theirs,  
you are a child no longer. (p. 22)

Fagles offers the following:

You must not cling to your boyhood any longer—  
it's time you were a man. (p. 87)

These are crucial quotations from the opening of *The Odyssey*, which very much deals with the fate people bring on themselves and with the coming of age of Telemachus (Telemachos [Lattimore], Telémakhos [Fitzgerald], Telemachus [Fagles]).

Fagles has produced probably the most readable and action-packed version of *The Odyssey*, and it comes with the bonus of a wonderful introduction by the Hellenic scholar Bernard Knox, which offers a learning experience all by itself for those interested in Homer. But translation of poetry from one language to another is incredibly difficult. Having recently translated the *Oedipus Trilogy* of Sophocles into English, I can attest to this from personal experience; the translator inevitably has to read his or her own personality into the Greek or slant the translation for a specified contemporary purpose such as readability, contemporariness, and so on. Readability has always been very important, as anyone who tries to tackle the famous translations of Homer from the eighteenth-century such as that of Pope can attest. Fagles enhances the readability of his translation with 14 pages of notes, a bibliography of suggested further reading, four maps, four family trees, and a 20-page pronouncing glossary of the proper names that occur in the poem.

As Knox explains,

The *Odyssey* owes much of its power to enchant so many generations of readers to its elegant exploitation of something that war temporarily suppresses or corrupts—the infinite variety of the emotional traffic between male and female. In his treatment of these relationships Homer displays an understanding of human psychology that many critics...have been reluctant to recognize. (p. 50)

One of the most interesting aspects of Fagles' translation is a certain awareness on his part of women's issues, leading him to make his rendering of the material involving Helen, Circe, Calypso, Nausicaa, and Penelope considerably more empathic than the usual presentations of these prominent female characters.

Having read other reviews of Fagles' work, I was prepared to be overwhelmed when I listened to the tapes and read the book, but I was not. Although it is true that Fitzgerald's translation at times adds things or omits them, I found it more suitable to my literary taste, but I am the first to admit that this is really a matter of individual preference. Using any of these translations, every psychiatrist should be quite familiar with *The Odyssey*, a book dealing with existential issues that portrays the onset of the age of exploration and human self-reliance and, perhaps, the beginnings of humanism. The poetry is magnificent, and the character of Odysseus, who in Greek is repeatedly referred to as a man of many turns and twists, that is, many clever tricks or wiles, is truly heroic.

Although there are more English versions of Homer than of the Bible, this great archetypal sea epic presents us with the coming of age of Telemachus as he emerges from adolescence and must establish his identity against that of his mother in the absence of his father. There are many passages expressing the adolescent rudeness of Telemachus as he attempts to address his mother throughout the poem, including "much of what he says about her to other people" (p. 51). The final scene, with father and son standing side by side slaying the suitors, as Kohut (4), pointed out, deserves an important comparison to the story of Oedipus and his father. In addition, the closing scenes of *The Odyssey* present one of the most dramatic, moving, and excitingly beautiful endings in the history of all literature.

Every psychiatrist should be familiar with *The Odyssey* and *The Iliad*, not only because of the tremendous lessons they teach us about human nature in its early phase of development in the Western world but also because they are samples of poetic art offering peak aesthetic experiences, yielding information and insights that cannot be found in the jargon of the literature of psychiatry and the behavioral sciences. I suggest that the reader have a look at each of these three translations at the library and pick the one that seems to appeal the most; all are wonderful.

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*Writings on Art and Literature*, by Sigmund Freud. Stanford, Calif., Stanford University Press, 1997, 290 pp., \$45.00; \$15.95 (paper).

This volume consists simply of reprinted essays from *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. The purpose seems to be to collect in one book Freud's classic papers pertaining to artistic and literary works. I imagine that this collection is intended for the use of

teachers in the humanities who are referring to Freud's technique of criticism of the arts. For Freud, interpreting a work of art was less the task of assigning meanings to it than accounting for why the reader or reviewer is so powerfully affected by it. This is a very special kind of "left brain" approach, and it is typical of Freud that he attempted to analyze his own experiences and articulate them:

Works of art do exercise a powerful effect on me, especially those of literature and sculpture, less often of painting. This has occasioned me, when I have been contemplating such things, to spend a long time before them trying to apprehend them in my own way, i.e., to explain to myself what their effect is due to. Whenever I cannot do this, as for instance with music, I am almost incapable of obtaining any pleasure. Some rationalistic or perhaps analytic turn of mind in me rebels against being moved by a thing without knowing why I am thus affected and what it is that affects me. (p. 122)

In these studies, Freud reveals himself to be extremely erudite, with a broad knowledge of the arts, literature, and mythology. There are occasional curious omissions; for example, in referring to the *Oedipus Rex* play by Sophocles, Freud never seems to mention the lines in the play where Jocasta tells Oedipus that most men dream of incest with their mother. Freud's approach often moves from his general impression of the artwork and its main features to focus on many minor details, which he then attempts to analyze in the manner of his typical approach to dream analysis. As Hertz in his foreword explains,

Freud called his shots, pointing out the various ways an original content has undergone distortion—through displacement, through symbolic substitution, through the disguising of an element by its opposite, through the "wishful reversal" of active and passive roles, the replacement of necessity by choice. (p. xix)

Each individual will respond to these various essays in his or her own way. I consider the first of them, "Delusions and Dreams in Jensen's *Gradiva*," published in 1907, one of Freud's literary masterpieces. It is my understanding that many of Freud's generation of psychoanalysts had a reproduction of the Vatican museum relief titled "*Gradiva*," included as a frontispiece in volume 9 of the *Standard Edition*, on a wall of their offices, as Freud did himself. There is not space in a book review to recapitulate this lengthy essay; suffice it to note that it is a wonderful example of Freud's clear prose and his superb capacity to analyze a text, whether it is the narrative of a patient or a literary work. A study of this essay is probably the simplest and most painless introduction to Freud's general ideas and approach, and I highly recommend it to all psychiatrists.

Some of the other gems included in this volume that I find especially powerful are "The Theme of the Three Caskets" (1913), "The Moses of Michelangelo" (1914), "Some Character Types Met With in Psycho-Analytic Work" (1916), and "On Transience" (1916), along with a number of relatively minor writings. The Moses study demonstrates how incredibly keen an observer Freud was, and the way he goes about approaching this great statue is worthy of study by any psychiatrist who works with people at a level beyond prescribing drugs. The same is true, of course, about the essay on character types, which also contains a couple of "asides" of

special interest. For example, at the beginning of the essay, Freud describes the psychoanalyst as one who

makes use of the influence which one human being exercises over another...let us say that the doctor, in his educative work, makes use of one of the components of love....Side by side with the exigencies of life, love is the great educator; and it is by the love of those nearest him that the incomplete human being is induced to respect the decrees of necessity and to spare himself the punishment that follows any infringement of them. (p. 152)

Also in this essay, Freud includes one of his disparaging remarks about women and alludes to a theory of feminine psychology that has been largely discredited.

For those psychiatrists interested in Freud's views, especially his writings on art and literature, and who do not have the complete *Standard Edition*, this little volume is available in an inexpensive paperback and well worth reading. However, I am not comfortable with the use of such a book in courses of an academic nature because I think those unacquainted with Freud's basic writings will have a lot of trouble understanding, much less accepting, where he is coming from in his analyses of these artistic works. It is only with a thorough grounding in the massive clinical material from Freud's consulting room, which generated his basic psychoanalytic theories, that one can grasp the validity of his approach to the arts. This approach, of course, is very one-sided and "left brain," and for this reason, Freud, who lived in Vienna at the turn of the century, a time and place where there was an explosion of modern art and music, seemed unable to comprehend or appreciate any of it. As Hamlet said to the "Roman" stoic materialist Horatio, "There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy."

Fashions in academia come and go, and at one time Freudian criticism was "in"; in some places now, self psychology criticism is "in," while in others, deconstruction is all the rage. For those academics interested in Freudian criticism, I think it would be better to study Freud's basic works on psychoanalysis first. Without a doubt, it is inconceivable that anyone could successfully approach works of art from a Freudian point of view without having had a thorough personal psychoanalysis of his or her own. The danger of a volume such as the one under review here is that it offers a little knowledge, which can then be used to produce a lot of superficial undergraduate and graduate essays.

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## HISTORY

**The History of Mental Symptoms: Descriptive Psychopathology Since the Nineteenth Century**, by German E. Berrios. Cambridge, England, Cambridge University Press, 1996, 533 pp., \$165.00; \$59.95 (paper).

Readers of the *British Journal of Psychiatry* and *Comprehensive Psychiatry* will be familiar with the historical essays of German Berrios, who since the early 1980s has been exploring the roots of descriptive psychopathology in nineteenth-century medicine and philosophy. *The History of Mental Symptoms* is Berrios' magnum opus. It is a remarkable scholarly achievement, a work of enormous ambition,



and, I suspect, one of the most important books in our field. I say "suspect" because this book is difficult for the nonexpert. It is thought-provoking, but it is also repetitive and dotted with dull stretches reminiscent of Biblical "begats."

The central issues for Berrios are what constitutes a symptom and what definitions of symptoms say about the metaphysics of the schools of psychiatry of which they form a part. Symptoms lie on the boundary of internal and external. A symptom is a linguistic utterance that psychiatrists categorize and tend to link to posited inner sensations and to syndromes, diseases, and etiologies. This sequence would seem to admit of a variety of combinations of hypotheses, but, in practice, descriptive psychiatry has, in Berrios' words, remained in a "steady state" for a long while, opinion oscillating among a small set of ideas. Berrios believes that this steady state requires explanation, not only in terms of the stability of the biological signal the symptom represents but also in terms of the "social constructions" that arose at the end of the 1700s.

Berrios opens with a strong chapter on descriptive psychiatry, a form of discourse that begins in the nineteenth century and can be distinguished from the less rule-bound discourses that preceded it. He proceeds to detail the history of a series of symptoms, devoting separate chapters to anhedonia, mental retardation, anxiety, disorders of perception, and 14 other categories. Each symptom is examined chronologically, in a survey that includes literature from French, German, Italian, Spanish, and British sources.

The effect of this exhaustive inquiry is to make the great figures look less original. Pinel, Esquirol, Janet, Jackson, and Kraepelin dissolve into a sea of lesser known theorists. In some regards, the hero of Berrios' account is John Locke, but even he is hard to distinguish in the crowd of philosophers.

Berrios' work elicits an appreciation of the oddness of the material clinicians work with. What constitutes a delusion? Is it merely an aberrant belief? Must it be part of an aberrant system of reasoning? Berrios writes, "However bizarre the content of speech acts might be, clinicians would not be happy to call them 'delusions,' if at the same time they were upheld with a certain coyness, and were accompanied by a correct probabilistic assessment of their reality." Berrios questions whether, finally, delusions represent pathological beliefs. The received view is that the delusional declarative speech act reliably contains information about an inner mental state. Berrios traces this belief to nineteenth-century roots, which is to say to outmoded philosophy. Perhaps delusions are "empty speech acts whose informational content refers to neither world nor self." There may be so little information in delusions that the productive area of study is the pre-delusional state.

The chapter on delusion is an example of Berrios at his best. Throughout, this book is a resource for the historian of science; when Berrios enriches the chronology with his own synthesis, these essays also hold extraordinary rewards for the clinician.

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**The Greatest Benefit to Mankind: A Medical History of Humanity**, by Roy Porter. New York, W.W. Norton & Co., 1998, 831 pp., \$35.00.

They are *shallow* animals; having always employed their minds about Body and Gut, they imagine that in

the whole system of things there is nothing but Gut and Body.

—Samuel Taylor Coleridge, on doctors (1796)

"These are strange times, when we are healthier than ever, but more anxious about our health." Thus begins Roy Porter's superb history of disease and medical practice, ranging from Imhotep, the physician-god of Egypt, to today's organ transplants.

Healthier we are: in 50 years a million Americans may be older than 100, many of them fairly fit but still needing a lot of expensive medical care. We are also a nation of hypochondriacs. A huge proportion of television and print media is devoted to health. Billions are spent on nostrums (called alternative medicine) and other billions on prescription drugs supposed to make you feel better.

Except for tuberculosis, malaria, AIDS, and other, mainly third-world, afflictions, infectious diseases that killed most of us in the nineteenth century have been conquered (although not to the extent that media coverage of each new *E. coli* death does not fan the anxiety that keeps joggers jogging and the rest of us cooking our hamburgers to 165°F).

Porter, a distinguished British medical historian, writes with wit and grace. With his usual flair he has written a book that is readable and scholarly. Hippocrates existed, Porter writes, but absolutely nothing is known about him. Typhus, not the Russians, defeated Napoleon. War, conquest, and empire pave the way for pathogens. The Spanish conquistadors were "immunological supermen"; defenseless native populations dropped before them like flies, often because of flies. The Spaniards spent their childhoods in seaports that served as clearinghouses for swarms of diseases converging from Africa and Asia. Survival in this hazardous environment required becoming hyperimmune.

Man's best friend—the dog—is a disease carrier, as are all domesticated and farmyard animals. Horses are carriers of the common cold. Destroying animal reservoirs such as mosquitoes and rats is easy compared with eliminating dogs, cats, and horses. (Among many, pets inspire more love than human beings.)

The book is rich in these insights. Starting with physicians of antiquity, Porter seems to favor Coleridge's observation over that of Samuel Johnson, who viewed doctors as mankind's greatest benefactors (hence the ironical title). Whether Porter is writing about medieval times, Indian and Chinese medicine, or Western heart surgeons, he remains politely skeptical. He admires Vesalius, Harvey, and Pasteur, but few others—even fewer psychiatrists. He has little good to say about Freud. He gives grudging praise to Esquirol and Pinel. He notes that Griesinger, Maynert, and Carl Wernicke hoped to make psychiatry scientific but failed. He concludes,

The claims of brain scientists to understand consciousness and its terrors have been shown to be shallow, indeed deluded. Whether civilization's treatment of the mentally ill has become more humane in a century which gassed to death tens of thousands of schizophrenics is a question which permits no comforting answers about rationality and sanity.

Porter is not, however, antidoctor. Doctors mirror the limitations of their times. "For centuries," he writes, "medicine was impotent....Its [recent] triumphs are dissolving....Medicine has led to inflated expectations, which the public eagerly swallows. Yet as those expectations become unlimited, they

are unfulfillable: medicine will have to redefine its limits even as it extends its capacities."

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**Consilience: The Unity of Knowledge**, by Edward O. Wilson. New York, Alfred A. Knopf, 1998, 334 pp., \$26.00.

An intellectual pleasure in practicing psychiatry lies in the way we may bring the range of human learning to bear upon our daily clinical work. We agree that all is united in the patient. And yet, for all that we integrate, we proceed with a sense of theoretical strain, disconnection, and incompleteness. The less and less medical psychoanalytic movement courts humanists; drug companies market psychoactive drugs to generalist nontherapist physicians; cookbook psychopharmacology dreams of a neuraxis free of human contexts; and anthropology is given little attention. Our field was never so in need of E.O. Wilson's call for "consilience," a term first used by William Whewell in 1840. The book is a one-volume guide to all disciplines from a noted Harvard entomologist, unmatched student of the ants, and author of sociobiology. It is forward looking in that it critically examines each branch of knowledge in regard to its distance from consilient science, and yet it is conservative, or conservationist, in its scholarly brief for the preservation of the natural world, including ancient human nature, into the far scientific future. This summing up makes for another millennium book, but a welcome compendium because Wilson has gathered such a cornucopia of knowledge to be linked up, and even his plea for consilience is itself consilient.

His motivation, which Wilson calls his Ionian enchantment, goes back to the Ionian Thales, who believed in the unity of science—and that all matter consists of water—and Ernst May, who synthesized Darwinism and modern genetics in the 1940s. Wilson traces the history of enlightened science (which has doubled in practitioners, discoveries, and journals every 15 years from 1700 to 1970) and transcendental antiscience through the ages down to the postmodernist "posture" of "subversion." To Foucault he would say, if he could, "It's not so bad" (p. 43). He damns the postmodernists, "today's celebrants of corybantic Romanticism" (p. 44), with faint praise: "Their ideas are like sparks from firework explosions that travel away in all directions, devoid of following energy, soon to wink out in the dimensionless dark. Yet a few will endure long enough to cast light on unexpected subjects" (p. 44).

Wilson distinguishes the simpler feat of consilience by reduction or dissection into elements from the formidable task of consilience by predictive synthesis: from physics to end points such as biology and the arts is unimaginably more complex. He gives a marvelous example from his own work, his reductive discovery of ant alarm pheromones, and then the task of predictive synthesis of the specifications of their molecular identity and use by a certain species prior to the experiments that end in the environment and social life of the ants. After tracing an American Indian shaman's dream to its molecular psychotropic stimulation, he discusses the Freud versus Hobson theories of dreaming in a most intelligent and consilient way. He raises the possibility that both theories can be "made more concrete and verifiable by neurobiology" (p. 78) and the possibility that "the brain is genetically predisposed to fabricate some images more than others" (p. 78).

"Most biologists favor middle-level models in their theory of cell integration—neither primarily mathematical nor purely descriptive but instead front-loaded with large amounts of empirical information and conceived as genetic networks" (p. 92). Cognitive neurosciences and recurrent neural networks are the cutting edge of the juncture of biology and psychology in the new attempts to describe the mind. Consciousness requires an astronomically large population of cells, limiting the short-term memory (as opposed to the almost unlimited long-term memory). But computer scientists will simulate hundreds of millions of years of evolution in the next 50 years and, Wilson cogently argues, must also model artificial emotions. Another theme Wilson emphasizes is the conservation of our ancient biological nature, which is not always easy to know. For example, evidences of behavior of our 100,000-year-old brain, such as language origins, rarely fossilize. Epigenetic rules are centrally determinative of such things as our gestural paralanguage, our vocabulary for color, and the Westermarck effect on the avoidance of sexuality with people associated with our intimate rearing before 30 months of age. Wilson believes that "the Westermarck effect rocks other boats as well" (p. 179), notably suggesting that moral concepts are derived from innate emotions. To demonstrate heredity-based epigenetic rules, Wilson, ever the bug maven, composes a delightful state-of-the-colony speech for a fantasized evolved supertermite leader.

Moving to the more difficult area of the social sciences, which he finds snarled by disunity and failure of vision and lacking the consilience and success of the medical sciences, Wilson critiques what he calls the "upside down" (and now fading) standard social science model that "human minds do not produce culture but are the product of culture" (p. 188). We could also take this critique to apply to a purely adaptationist neo-Freudian psychoanalytic theory that developed at mid-century in a spirit of universal social and therapeutic potentiality. Wilson sees progress in the fundamental theory of the family compiled by S.T. Emlen at Cornell, in which data about conflict and cooperation between parents and grown offspring were drawn from the instinctive behavior of birds and mammals. Despite "the massive intervention of cultural change...the hard instincts of animals are translatable into the epigenetic rules of humans" (p. 195). Wilson advises theory making in the social sciences, especially mathematical models, to look for parsimony, consilience, and predictiveness, and he regards population genetics as the most respected discipline in evolutionary biology. The process of reasoning itself, understood psychobiologically, will impact future social theory as it is realized that people do not simply maximize utility. Herbert Simon's term "satisficing" combines "satisfying" and "sufficing" and means "taking the first satisfactory choice encountered out of those perceived and reasonably available in the short term, as opposed to visualizing the optimum choice in advance and searching until it is found....People act upon simple cues and heuristics that work most of the time" (p. 206). Philosophers, questioning the consilience from biology to culture, "point to the nonlinearity of the viable equations, to second- and third-order interactions of factors, to stochasticity" (p. 208), but Wilson rejects as he mentions their tidings of hopelessness.

Turning to the arts, and continuing to inveigh against deconstructionism, Wilson does "not read the welcome triumph of feminism, social, economic, and creative, as a brief for postmodernism....Instead it has set the stage for a fuller exploration of the universal traits that unite humanity" (p. 215). Psychoanalysis as well as "postmortem solipsism" have "fared badly" because they have been "guided largely

by unaided intuition about how the brain works" (p. 216), whereas "innovation is a concrete biological process founded upon an intricacy of nerve circuitry and neurotransmitter release" (p. 216). What Wilson calls universals emerged in the evolution of culture, and his list of them is a stimulating and provocative attempt to find biological regularity in art, myth, and anthropology. They include beginning (origin) myths, tribal emigration and confrontation with evil forces, the hero, apocalypse, sources of power, the nurturing woman, the seer, the Virgin, female sexual awakening, the Trickster, and the monster that threatens humanity. Wilson's list risks critiques leveled at Jung for his arbitrariness and for blurring anthropological domains. He finds that the dominating influence in the arts "was the need to impose order on the confusion caused by intelligence" (p. 125), but the interesting question is "why processes of mental development direct attention so consistently toward certain images and narratives" (p. 229). Wilson feels that genetic history will potentially answer this question. The arts "make special" certain human features, and we know from studies of the attractiveness of faces that there are "supernormal stimuli" (p. 231) that are genetically favored almost without an upper limit to their exaggeration. Embracing "all conceivable worlds innately interesting and congenial to the nervous system," the arts are, "in the uniquely human sense, true" (p. 268).

This book is ultimately a religious book in that Wilson presents his empiricist view in contrast to the transcendental Christianity of his childhood rearing. Theology has "done badly...encumbered by precepts based on Iron Age folk knowledge" (p. 269). "At least one form of brain disease [presumably temporal lobe epilepsy] is based upon hyperreligiosity" (p. 258). In his section on ethics and religion, he argues that if transcendentalism were upheld and empiricism disproved, it would be "quite simply the most consequential discovery in human history,...universal consilience fails and the division between science and the humanities will remain permanent all the way to their foundations" (p. 258). He sees a consilient, "material origin of ethics" (p. 241) and presents his sociobiological, genetically favored theory of altruism.

Wilson's final section, *To What End?*, urges us to conserve our habitat and our ancient roots as "Old World, catarrhine primates, brilliant emergent animals" or, overreliant on prosthetic devices, eliminating other species, and surrendering "our genetic nature to machine-aided ratiocination," risk that "we will become nothing" (p. 298). This seems too pessimistic, although, in view of the surging developments in these fields, the reader may feel, as I did, that we are fast embracing whatever this "nothing" will be as our fate.

In sum, Wilson's consilience is a reasoned theory, in a more general frame of reference, of the biopsychosocial, medical basis of psychiatry, and it is difficult to see how we are not in the same boat with it.

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**The Prehistory of the Mind: The Cognitive Origins of Art, Religion and Science**, by Steven Mithen. New York, *Thames and Hudson* (W.W. Norton & Co., distributor), 1996, 283 pp., \$27.50.

The author argues that the human mind is a product of un-directed, selective evolution that has occurred over several million years. He argues that, in order to understand the mind of current humans, it is essential to study the early history of humans, humanoids, and great apes. As an archaeologist, he feels that one can study the behavior of these earlier creatures through the traces left at various archaeological sites. Through studying the skulls and artifacts of these creatures, he argues one can deduce their brain size, their behaviors, and perhaps even their beliefs. These inferences include an understanding of why and how religion developed as human activities. This is theorizing on a grand scale.

There is much that is enjoyable about this volume. It is a fun read. Occasional unnecessary swipes at creationism, which he misunderstands, are minor annoyances that detract from his effort. A major problem, however, is his mistaken belief that cranial volume is a measure of brain size. The fact that cranial volume has not increased is not the critical issue for mental functioning. It is the enormous increase in the size of the cortex as a result of its folding. The difference between chimpanzees and humans in the cortex is not dramatic in terms of its thickness, but there is an enormous difference in its size. Folding permits a skull of the same volume to hold much more cerebral cortex. We cannot judge from archaeological data when this folding took place, but we do know how important it is for mental functioning. The author draws an analogy between a "cognitive" archaeologist and a detective. They both study observables and draw inferences that, one hopes, lead to correct insights. The "cognitive" archaeologist becomes a Sherlock Holmes studying the evolution of the human mind from its prehistorical relics.

The delight of this volume is in its glib drawing of conclusions from data as if they were unique interpretations. It is reminiscent of Holmes remarking to Watson in *A Study in Scarlet* that "You have been in Afghanistan, I perceive." When Holmes explains that Watson is a medical type, has the air of a military man, has a sun tan, and has an injured arm, it is obvious that he has been wounded in Afghanistan. Unfortunately, Watson may have good posture because his mother imposed it on him, may have injured his arm in a fall from a carriage, and may have enjoyed the sun in Italy. There are many explanations for observables. Some are more delightful than others; unfortunately, delight is not an epistemological criterion. Speculations are not hard evidence. A guess is not a fact. Despite these criticisms, the book is wonderful beach reading and is therefore recommended.

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