Among American surgeons, William Stewart Halsted (1852–1922) was never the most dexterous or brilliant. Indeed, he wasn’t even minimally reliable during the second half of his forty-two-year surgical career. Offering spurious excuses, he absented himself for long periods from his duties at the Johns Hopkins University Hospital. When on hand, he delegated most operations to a resident, sometimes walking away in the middle of a risky procedure. And he was worse than useless as a classroom teacher, lecturing over the heads of interns and students and treating them with icy disdain. Yet a case can be made that medical posterity owes more to Halsted than to any of his compatriots from colonial times until now.

When Halsted first picked up his scalpel in 1880, general anesthesia with ether had already rendered most surgery painless. A patient, however, was still as likely as not to die from an infection introduced during the procedure. The germ theory of disease was still in dispute, and doctors used tainted hands and knives to excise tissue. But transatlantic advances made by Louis Pasteur, Robert Koch, and Joseph Lister—the last a demigod in Halsted’s eyes—had rendered antiseptic (and later aseptic) surgery feasible; and it was the methodical, uncompromising Halsted, first briefly in New York and then in Baltimore, who established our national model of the sterile operating environment.

Halsted’s “safe surgery,” perfected at Johns Hopkins, included more elements than clean gowns, rubber gloves, sterilized instruments, and disinfected wounds. One priority was the avoidance of trauma to adjacent flesh that could tip the balance unfavorably between
ambient bacteria and natural defenses. Adapting the best European practice, which he had witnessed at first hand in 1878–1880, Halsted employed minuscule artery forceps to control bleeding. Through trial and error he improved both the material chosen for sutures and their placement when rejoining opened organs. And his meticulousness extended to lengthy and vigilant postoperative care. As his unprecedented success rate—notably with his innovative procedures for treating breast cancer, hernia, and thyroid disease—became widely known, initial resistance to the instituting of his reforms melted away.

Meanwhile, however, Halsted’s most original gift to surgery was one that cost him dearly, leading to the seeming contradiction of meticulous attentiveness and undependability. On September 15, 1884, at a Heidelberg conference, the medical world received the electrifying news that a young Viennese ophthalmologist, Carl Koller, had shown how a solution of cocaine, the most active alkaloid of the coca leaf, could numb an eye for surgery without producing unconsciousness or nausea. Halsted wasn’t there, but he read about the event, and six weeks later he was already at work in New York experimenting with cocaine injections in every nerve he could find throughout the body.

Halsted’s trials, executed on himself and twenty-five to thirty of his medical students, produced results that were both encouraging and disturbing. Cocaine proved capable of deadening not only an individual nerve but all of its descending branches. Only when the solution and dosage were finely calibrated, however, could the drug cancel sensation without causing disruptive side effects. Continual experimentation was called for. By the time, in November 1884, that a dental colleague performed a triumphant tooth extraction using nerve-blocking cocaine, Halsted and his fellow subjects had undergone far too many injections, closely spaced in time. The entire crew was in the grip of cocaine euphoria, and Halsted, formerly known for his calm and decisive manner, was turning manically restless.

It must have been in such a state that Halsted, in 1885, composed a short but rambling and belligerent paper defending the “Invariably Successful Employment [of cocaine] in More than a Thousand Minor Surgical Operations.” Its opening sentence would become notorious as an exhibit of cognitive impairment under cocaine:

Neither indifferent as to which of how many possibilities may best explain, nor yet at a
loss to comprehend, why surgeons have, and that so many, quite without discredit, could have exhibited scarcely any interest in what, as a local anaesthetic, had been supposed, if not declared, by most so very sure to prove, especially to them, attractive, still I do not think that this circumstance, or some sense of obligation to rescue fragmentary reputation for surgeons rather than the belief that an opportunity existed for assisting others to an appreciable extent, induced me, several months ago, to write on the subject in hand the greater part of a somewhat comprehensive paper, which poor health disinclined me to complete.¹

When “poor health” rendered Halsted incapable of functioning any longer in his profession, he was induced by two friends to undertake a lengthy sailing voyage in February 1886, heading for the Windward Islands in the southern Caribbean. He would be allowed to bring some cocaine, but just enough for daily tapering off until he could refrain altogether. The trip proved disastrous when the desperate Halsted, having exhausted his stash, was caught trying to steal drugs from the captain’s medicine locker.

Halsted’s two friends refused to give him up for lost. Aided by one of his brothers, they induced him to commit himself for a seven-month course of rehabilitation at Butler Hospital in Providence. Unfortunately, the treatment featured shots of morphine that were meant to take the place of cocaine. Halsted emerged as a morphine addict, but one whose brain still craved the other drug. And not long after, a cocaine relapse landed him back in Butler for further morphine therapy.

Between the hospital retreats, however, Halsted received the luckiest break of his life. One of those concerned friends, William H. Welch, had been appointed professor of pathology at Johns Hopkins in 1884. Eventually Welch became the dean and guiding spirit of the Hopkins medical school, whose other luminaries would be William Osler, Howard Kelly, and Halsted himself. Believing in Halsted’s capacity for self-mastery, Welch brought him to the university’s new Pathological Laboratory on a provisional basis, permitting him to operate only on dogs for the first two years.

In spite of such setbacks as the second hospitalization, the plan succeeded magnificently. Some of Halsted’s best insights into effective surgical technique were gained in that period, when canine subjects gave him the freedom to execute and refine every hypothesis that occurred to him. From 1890 onward he would be Hopkins’s distinguished surgeon-in-chief and the hands-on mentor to residents who would propagate his methods across the country.

The Hopkins trustees and a few members of the faculty and administration were aware that Halsted had once fallen victim to cocaine. Except for Welch, though, none of them knew that his frequent and prolonged absences were the result of cocaine binges; and not even
Welch, it appears, guessed that his late afternoons at home were reserved for injecting the morphine he needed to combat symptoms of morphine withdrawal. The full truth of Halsted’s dependency emerged only piecemeal, in memoirs and investigations after his death in 1922. Only his wife, herself possibly a morphine addict, would understand that his remoteness, severity, and mordant sarcasm were products of a daily struggle with addiction. Steadied by morphine, Halsted could still be charming in soirées with friends. But at work he had no charity to spare, especially toward those interns and nurses who struck him as observing a lower standard of care than his own.

The story of Halsted’s astonishing ride—from child of privilege and Yale’s diminutive football captain to quick and intrepid young surgeon to helpless addict, and thence to a double life while earning worldwide renown—is crisply told in Gerald Imber’s *Genius on the Edge*. A surgeon himself in Halsted’s line of succession, Imber excels in characterizing Halsted’s techniques and discoveries and the general state of Victorian medicine. But he is equally adept at the more delicate task of portraying Halsted evenhandedly. Halsted’s tenacity, perfectionism, and scientific acumen aren’t easily reconciled with his furtive and precarious private life. Avoiding both censoriousness and idolatry, Imber gives us the fully human Halsted, who disgraced himself more than once, puzzled and alienated many associates, but successfully worked around a handicap he had incurred through an honorable zeal for discovery.

Although it appeared eighteen months ago, *Genius on the Edge* goes unmentioned in Howard Markel’s *An Anatomy of Addiction*, which, in alternating sets of chapters, pairs Halsted and his contemporary Sigmund Freud as major figures who were almost destroyed by cocaine. Where Halsted is concerned, Markel covers roughly the same narrative ground as Imber. He does so, however, with a forced jauntiness that soon becomes annoying. And in nearly every other respect, from accuracy of detail and clarity of prose to consistency of attitude toward his subject, Markel’s book falls short of Imber’s standard.

*An Anatomy of Addiction* shows signs of having been hastily assembled. To Halsted’s baroque sentence about cocaine, quoted above, Markel adds no fewer than seven errors of transcription, one of which turns an already tangled statement into outright nonsense. The pharmaceutical company G.D. Searle is rendered as “John Searle.” And the book’s endnotes, some of which are of dubious pertinence, contain numerous errors of citation.

Markel’s diction repeatedly misses its mark: “pandered for new patients,” “a harem of student nurses,” not eyes but “steely-blue orbits.” Clichés abound,² and dead metaphors mischievously come to life: “these pharmacological morality plays end with the drug relegated to the medical equivalent of the proverbial doghouse”; “as the pyramid rose to its
apex, the surgical wheat was separated from the chaff.”

In spite of such awkwardness, Markel does go beyond Imber in his detailed explanation of the neurophysiological action of both cocaine and morphine. As he writes, when cocaine lies within reach of its daily users, no drug produces more reckless craving or more irrational behavior. Occasional recreational users, however, can get by without it when it is unavailable. Moreover, its withdrawal symptoms are much less severe than those of morphine. Thus we see why the partially reformed Halsted, while capable of postponing his cocaine holidays until he was away from Baltimore, needed to inject morphine every single day. In the long run, his management of his cocaine habit was less preoccupying than his continuous enslavement to morphine.

That fact, however, is precisely what Markel tends to forget from time to time, thanks to his predetermined focus on cocaine. An Anatomy of Addiction begins on a note of cocaine sensationalism and never quite succeeds in establishing a more balanced point of view. Of the two authors, it is Imber who does full justice to the complex outcome of Halsted’s battle with both morphine and cocaine: a shrinkage and embittering of his once outgoing personality but a renewed adherence to scientific principles that could easily have been undermined by the drugs.

Oddly, however, both Imber and Markel grant only slight attention to an intriguing and possibly important topic: Halsted’s sexuality. On the evidence they supply in isolated passages, there can be little doubt that the great surgeon was homosexual. His childless marriage at age thirty-eight to a “mannish” woman who coveted his fortune, lived on a separate floor of his house, and spent half of each year alone in North Carolina hardly counts against that inference.\(^3\) Announcing his plans to a colleague, Franklin P. Mall, Halsted wrote the following sardonic lines:

> I know that you will be amused to know that I am engaged to be married. A good joke for you I know. I wish that I could see your chuckles. Miss Hampton reminds Booker & me very much of you. I suppose that is the reason that I proposed to her.\(^4\)

It is true that Halsted conducted a largely epistolary flirtation, near the end of his life, with a female admirer who was forty years his junior. His professions of fondness, however, were playfully arch, and he was in no condition for lovemaking with either sex. Imber’s sole mistake of judgment, I would say, is to have taken the ironist Halsted’s mock courtship of “Bessie” at face value. (Markel fails to mention that episode at all.)

Why should it matter whether Halsted was gay? Actually, this may have been the key to his very survival. Three interventions when he was most desperate—the seagoing cruise, the
first commitment to Butler Hospital, and the offer of a position at Johns Hopkins—were all undertaken by his dearest friend William Welch, whose homosexuality is not in doubt; and Welch was joined in the first two moves by Thomas McBride, Halsted’s New York housemate, who is said to have lavished gifts on him. The shaken Halsted, just a month after his second release from rehabilitation, was mourning the premature death of McBride when Welch, at great peril to his own career, set him up in the Pathological Laboratory. Mere friendship or esteem for a formerly innovative surgeon can hardly explain such loyalty and daring by the otherwise prudent, consensus-seeking Welch. His animating emotion, surely, was love.

It was to Welch alone, among all of his friends and colleagues, that Halsted confessed each of his cocaine relapses for the rest of his life. He could do so because he knew that Welch, even after having been elevated to the deanship of the medical school, wouldn’t betray his trust. Indeed, Welch made sure that Halsted would never be punished for his injurious brusqueness with students, nurses, and interns or for his cavalier five-month vacations.

With or without this speculative addendum to the story, it remains the case that, with the single exception I have noted, Halsted’s private behavior left no traces on the character of his published work. True, cocaine figured centrally in his development of nerve-blocking anesthesia; but he had employed those doses in a spirit of selfless research. The sober cogency of his later writings constitutes our best evidence that he had disciplined himself to use cocaine only during his extended absences from the operating room and the laboratory.

Here, then, is Halsted’s peculiar triumph. While a portion of his brain kept craving two fearsome drugs, and while he lived in constant jeopardy of exposure and humiliation, he retained the power to solve important problems with the strictest objectivity.

2.

The case of Freud and psychoanalysis is more open to interpretation. If, as Howard Markel proposes, the use of cocaine wrought a “negative effect on virtually every aspect of Sigmund’s personal relationships, behavior, and health,” it is hard not to surmise that the drug had a part in shaping his revolutionary doctrine and movement. Jürgen vom Scheidt made a preliminary case for that proposition in 1973. 5 A decade later, Peter J. Swales, citing Freud’s repeated claim that the neuroses, in Freud’s words, “show the greatest
clinical similarity to the phenomena of intoxication and abstinence that arise from the habitual use of toxic, pleasure-producing substances (alkaloids),” argued that Freud’s conception of libido was an outgrowth of his drug experience. And again in 1983, in a book mixing exasperated polemics with many acute observations, E.M. Thornton maintained that Freud had undergone a “cocaine psychosis” toward the end of the nineteenth century and that psychoanalytic theory displayed conspicuous effects of it. Markel does not wish to be associated with any such position, but he offers no good reason for opposing it. Aspects of the record that he has largely overlooked, moreover, render several links between cocaine and psychoanalysis overwhelmingly plausible. Although the drug didn’t straightforwardly determine Freud’s theory, it sharpened certain of his interests, helped to turn him inward, and encouraged intellectual habits that would prove all too helpful for the devising of his “science.”

At first glance An Anatomy of Addiction inspires confidence that all available resources for research will be exploited. Markel is the George E. Wantz Distinguished Professor of the History of Medicine and director of the Center for the History of Medicine at the University of Michigan. Fifty-five pages of endnotes, roughly half of which are devoted to Freud, promise a thorough engagement with previous investigators. And Markel, implying a close familiarity with primary evidence, expresses gratitude to the administrators of his “workshops,” the libraries containing invaluable Freud manuscripts in Washington, Vienna, and London.

Among those archives, the most essential one for Markel’s topic is the Sigmund Freud Collection in the Library of Congress. It holds some fifteen hundred letters, most of them still unpublished, between Freud and his fiancée, Martha Bernays, during their protracted engagement from 1882 to 1886. Those letters, long inaccessible to anyone but a handful of psychoanalytic insiders, were finally derestricted eleven years ago—and one of their prominent themes is cocaine. Markel’s book contains no sign, however, that he has immersed himself in that correspondence or in any other unpublished documents relating to Freud. For Freud’s period of engagement to Martha Bernays he depends on an inaccurate translation of the ninety-three already bowdlerized letters that Freud’s son Ernst—and, behind the scenes, Ernst’s sister Anna—deemed fit for an admiring readership in 1960. Markel could have found many more engagement letters, of utmost relevance to the cocaine issue, extensively quoted in a 1993 study by Han Israëls that is available in three languages; but the book is apparently unknown to him. Again, he discusses Freud’s early papers on cocaine in ignorance of Albrecht Hirschmüller’s scholarly German edition of those papers, published
in 1991. He relies instead on a 1974 translation whose editorial apparatus was partly supplied by none other than Anna Freud, and whose introduction exaggerated the papers’ scientific value—as Markel does, too.

Markel also fails to deal adequately with the most important published treatments of his topic. He inaccurately cites Jürgen vom Scheidt’s 1973 article on the subject but says nothing about it. Although E.M. Thornton anticipated much of his case for Freud’s metamorphosis under cocaine, he fails to mention her book until page 225 (spelling her name “Thorton”), and then her “disjointed ad hominem brief” is condemned in a patronizing aside. He is less hostile to Peter Swales, conceding that “Freud may have used his cocaine experiences to elaborate and explain some of his concepts.” But Swales’s central point—that cocaine led Freud to one of those concepts—is parried with a numbing irrelevancy:

It is enticing to suggest a causal relationship between Sigmund’s cocaine abuse and the thinking that produced the origins of psychoanalysis. Such a singular answer appeals to the way we humans think but rarely, if ever, explains the human predicament.

More generally, Markel doesn’t realize the extent to which he is endorsing a long-discredited legend. The plan of his book, it seems, called for a parallelism between two “unabashed medical geniuses,” neither of whom “ever lost his zeal for delivering his healing gifts to the world.” Just as Halsted fended off his twin furies long enough to become our greatest surgeon, so Markel’s Freud drew upon reserves of character and intellect to shake off a dependency on cocaine, unlock the secrets of the unconscious, and proceed to the masterly “interpretation of just about everything.”

The paired stories are appealing, but that is what they are: stories, not serious investigations. Markel’s blizzard of endnotes obscures the fact that whenever he ventures beyond what is known by actual Freud scholars—for example, when he asserts that Freud conducted multiple adulterous affairs, that he injected himself with cocaine, and that his doses grew steadily stronger—no documentation is supplied. The author apparently makes these claims simply because they strike him as plausible and dramatic. And his liberties with history shade into kitschy “you are there” narration: “Sigmund seemed oblivious to the chatty guests as he stroked his bushy beard and rubbed a wet, reddened nose that was the direct result of consuming too much cocaine,” and so forth.

For all Markel’s unreliability, however, and for all his hollow deference to psychoanalysis, readers who are partial to Freudian thought will be discomfited by the “Freud” half of his narrative. Not by accident, as we will see, Freud’s dealings with cocaine have never
become a focus of public curiosity. Aimed at a mass readership, An Anatomy of Addiction may put an end to that blackout. If so, there will be no further neglect of the larger question that Markel himself is unprepared to address: Did cocaine facilitate the launching of a therapeutic pseudoscience?

3.

Wishing to keep Halsted and Freud within a single frame as altruistic humanitarians, Markel proposes that Freud had been casting about for a means of freeing his friend and former neurology professor Ernst Fleischl von Marxow from morphine addiction. (Fleischl needed constant analgesia after developing very painful neuromas in the stump of an amputated thumb.) Presumably, Freud’s quest was rewarded when he read about spectacularly good results from a morphine withdrawal treatment aided by cocaine—the exact reverse, then, of the disastrous regimen twice practiced on Halsted at Butler Hospital.

The Library of Congress engagement letters show, however, that in 1884 Freud was seeking not a treatment for Fleischl but any medical novelty that could lift him out of poverty, count toward his academic advancement, and attract patients to the private neurological practice that he would open two years later. If cocaine were to prove itself a miracle drug—a Zaubermittel, as he soon began calling it—Freud would become famous and his postponed wedding could occur at last. As he remarked to Martha Bernays, sounding more like Micawber than Pasteur, “We need no more than one stroke of luck of this kind to consider setting up house.”

Freud’s inspiration came from one report by a German physician, who had found a few soldiers capable of enduring a hard march under cocaine, and from a number of uncritical articles in an American medical journal, the Detroit Therapeutic Gazette. He either didn’t know or didn’t care that he was reading a house organ of the pharmaceutical firm Parke, Davis & Company. (George S. Davis himself was the editor.) The credulous physician-contributors, whether or not they grasped the fact, were serving as participants in Parke, Davis’s aggressive salesmanship for its own brand of cocaine.

Freud observed, first, that back numbers of the Gazette from 1878 to 1880 had featured several articles announcing release from morphine dependency by means of cocaine, but second, that such claims were missing from more recent numbers: four years of curious silence! Freud was puzzled but undeterred; the testimonials had vanished, he preferred to believe, “because the treatment became established as a recognized cure.” On that slender basis, and without asking himself how Fleischl was going to manage in the long term without any painkiller at all, he encouraged his friend to wean himself from morphinism by means of its presumptive antagonist, cocaine, and then to taper off the latter
until he was drug-free.

Fleischl may have begun by drinking dissolved cocaine, but before long he was self-injecting the drug. As we might expect, he soon became a double addict. Frequent high-dose cocaine shots in rapid alternation with morphine produced the doubly toxic effect of “speedballs,” destroying his health, rendering him temporarily paranoid, and closing down a brilliant scientific career. By June 1885 a sleepless Fleischl was hallucinating that snakes and insects were crawling across his skin. But Freud, far from attempting to intervene, was lending half a gram of cocaine to his friend and victim just a few days before the latter hit bottom. A broken Fleischl would die in 1891 at the age of forty-five.

By the last week of June 1884, Freud had already finished a comprehensive-looking paper, “On Coca,” that cited many writings about the drug, some of which he hadn’t even seen. More dangerously, he blurred the key differences between cocaine and the relatively harmless coca leaf, and he falsely implied an extensive medical experience in administering the drug to himself and others. In actuality, only seven weeks had passed since his first packet of cocaine had arrived in the mail from Darmstadt’s Merck Company.

“On Coca” and three further essays that Freud would publish over the next three years described the benign physiological effects of cocaine and touted its many therapeutic uses—above all, its role in relatively trouble-free cures of morphinism. That claim, often repeated, is the most disturbing feature of the early record. Freud stated that Fleischl’s symptoms during the treatment were very mild and that he remained capable of functioning normally (leistungsfähig). In fact, however, owing to an unsupervised deprivation of morphine, Fleischl’s cocaine regimen had come very near to killing him five days after it began.

Moreover, Fleischl was gravely addicted to both drugs when, in March 1885, Freud wrote of him that, during and presumably after the withdrawal treatment, “an increasing antipathy to the use of cocaine was unmistakably evident.” And Freud’s final cocaine paper, published more than two years after the drug had rendered Fleischl psychotic, once again boasted of “the surprisingly favorable results of the first morphine withdrawal by means of cocaine carried out on the Continent.”

By 1887, however, disasters such as Fleischl’s had turned professional and public opinion
against medicinal cocaine and its chief advocate, Freud. His final essay on the topic lashed back at an exaggerated “Fear of Cocaine.” For the first but not the last time, we recognize in this paper the voice of a man who, lacking objective support for his views, haughtily reaffirms his correctness and scoffs at the ignoramuses who would doubt him.

Backing down only slightly, Freud granted that cocaine injections might be harmful, but only for certain “addictive personalities” who were already on morphine. Although names weren’t mentioned, by implication Ernst Fleischl was demeaned as just such a weakling. Freud even alluded to Fleischl’s hallucinations—being careful, however, not to point out that this was the very case for whose “surprisingly favorable results” he was still demanding credit.

In tacitly blaming Fleischl and not himself for Fleischl’s cocaine addiction, Freud was adding character assassination to the damage he had already done. We might ask which of the two physicians, in fact, was more temperamentally prone to addiction. Fleischl had resorted to morphine for the relief of constant pain, and that was why he couldn’t moderate his Freud-induced cocaine habit, either. No misfortune like Fleischl’s would underlie the chronically agitated Freud’s own addiction to another alkaloid, nicotine—twenty cigars a day, a pattern scarcely altered later in his life through thirty-three cancer surgeries that removed most of his jaw and palate.

Understandably, Freud didn’t want the readers of his 1887 paper to know that his total experience in treating morphinists consisted of just one botched case. They would have been even more flabbergasted to realize that he was scoring rhetorical points by treating that case as both a success (his own) and a failure (Fleischl’s). His advice for all withdrawal regimens, he now averred, had been to administer cocaine only in oral solutions; he could hardly be blamed when injections produced an undesired result. Just two years earlier, however, in 1885, he had called for “the administration of cocaine for…withdrawal cures in subcutaneous injections of 0.03–0.05 g per dose, without any fear of increasing the dose.”

Whether Freud himself remembered what he had written is hard to say. If he did, he was now telling an egregious lie. But this and other indefensible statements from the 1884–1887 period are best explained, I believe, in the light of cognitive and emotional changes that had left Freud disposed to assert, in injured sincerity, whatever seemed necessary to preserve his reputation and his ballooning self-regard. Those changes may well have been underway before he became acquainted with cocaine. Indeed, they may have prompted his initial recklessness with the drug. As I will show in a second article, however, his cocaine involvement in the 1890s, just when he was developing the most fundamental tenets of
psychoanalytic theory, left permanent traces on many more minds than his own.

—This is the first of two articles.


2. On one page alone, for example, we read that someone "could not get a word in edgewise" and "beat a hasty retreat," that Welch "laid all his cards on the table," and that Halsted took drugs to escape "a hundred and one other slings and arrows of life" (p. 108).  

3. Caroline Halsted railed against her husband's preference for laboratory research over lucrative private surgery. (He once charged the present-day equivalent of $260,000 for removing a dowager's bile duct stones.) When Johns Hopkins raised its professors' salaries but discouraged outside income, Caroline complained that William's newly fixed pay, roughly $300,000 in our money, constituted a financial sacrifice. Needless to say, she disapproved when he returned much of his salary to the medical school for the benefit of its underpaid employees.  

4. From the outset of his career, Halsted always dressed stylishly and was fastidious about details. His cigarette holders, in Imber's words, "were disposed of the instant a sign of tarnish or wear appeared" (p. 40). Halsted and his New York housemate Thomas McBride "gave small dinner parties several times a week and entertained bright young professional men like themselves" (p. 40). Halsted was the one to ensure that "everything was properly arranged for entertaining, even on those Sunday afternoons when the furniture was repositioned to accommodate an audience for concerts given by male singing quartets" (p. 40). Even before marrying him, Caroline described Halsted as "the most fussy of men" (p. 131). Although these facts hardly prove that he was gay, they comport with the other evidence that he preferred male company and felt no need of a "civilizing" feminine presence in his life.  

See also "Von der Droge zum Traum," *Freiburger Universitätsblätter*, 82 (1983), pp. 49–64.

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The first volume of a long-awaited five-volume edition of the engagement letters was published earlier this year, but too recently to be of service to Markel's book. See Sigmund Freud and Martha Bernays, *Die Brautbriefe, Band 1: Sei mein, wie ich mir's denke: Juni 1882–Juli 1883*, edited by Gerhard Fichtner, Ilse Grubrich-Simitis, and Albrecht Hirschmüller (Frankfurt am Main: S. Fischer, 2011).

10. 10

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12. 12

13. 13
Markel either doesn't know or doesn't believe Freud's heartfelt professions of inaptitude and ineptitude as a physician—a role that was forced upon him by financial necessity and to which he never felt reconciled. As for humanitarian zeal, he despised our entire species and referred to his patients behind their backs as "the fools" (die Narren) and "rabble" (Gesindel). "Patients," Sándor Ferenczi paraphrased him as having said, "only serve to provide us with a livelihood and to learn from. We certainly cannot help them." "I could throttle them all" ("Den Hals umdrehen könnte ich ihnen allen"), he told Ludwig Binswanger. In spite of his public claims to the contrary, at no time was Freud sufficiently deceived to think he had found a cure for the psychoneuroses. See Hanns Sachs, *Freud: Master and Friend* (Harvard University Press, 1946), p. 107; *The Clinical Diary of Sándor Ferenczi*, edited by Judith Dupont, translated from the German by Michael Balint and Nicola Zarday Jackson (Harvard University Press, 1988), p. 93; Ludwig Binswanger, *Erinnerungen an Sigmund Freud* (Franke, 1956), p. 56. For Freud's bitter misanthropy, see Peter Gay, *Freud: A Life for Our Time* (Anchor, 1988), p. 529.

In one note, Markel does offer five citations—three from Freud's engagement letters, one from Ernest Jones, and one from Peter Gay—to warrant the claim that "as [Freud's] use of cocaine progressed, he required more of the stuff to satisfy his brain's urgent pleas" (p. 81). None of the five passages, however, bears on Markel's point. As we will see in Part II of this essay, it is important to note the differences in Freud's cocaine use from that of a typical addict.

Here are some further examples of Markel's poor command of the record:

- There is no evidence that Bertha Pappenheim ("Anna O.") ever "bragged to her friends and family about her wonderful ‘talking cure’" (p. 165). Her many troubling symptoms at the time would have forestalled any such elation.
- Freud's engagement lasted for four years, not six (p. 15).
- His first university year was not "1875–76, when Freud was nineteen" (p. 20), but 1873–74, when he was seventeen.
- When Freud was living within Vienna's General Hospital in 1883, he didn't have
Charcot's embroidered motto, "One must have faith," hanging above his bed (p. 67). If factual, such a detail would have indicated a surprisingly early commitment to Charcot's ideas. Freud asked Martha Bernays to embroider the panel for his private consulting office three years later, after he had returned from Paris.

- Markel asserts that for "one short-lived moment, in 1883," Freud thought he might gain "a modicum of medical fame" from his new technique of staining tissues with a gold chloride solution for microscopic viewing (p. 23). As Freud knew, however, a superior technique to those that were then being employed would have made him a world celebrity. He did rejoice, prematurely, over his innovation in October 1883, but his "one moment" of hope was in fact a span of eight months, during which time he revised his staining method in the expectation of rendering it more uniformly reliable.

Freud finished the first of his three papers on the topic on February 6, 1884, and he was still awaiting publication of the longer, detailed version when he wrote to Martha Bernays on May 21 about his new interest in cocaine. This timing is not a trivial matter. The well-justified misgivings that he now felt about the efficacy of his method, which he was placing before the scientific community with assurances that he had ceased to believe, fed directly into his eagerness to seize upon cocaine for the advancement of his career.

- Leopold Königstein did not, "at Freud's instigation," publish a letter "asserting Freud's primacy as discoverer of cocaine" (p. 266). Rather, Königstein's letter credited Carl Koller with priority in having developed cocaine anesthesia.

- Freud did not "flee" from Vienna to Paris and "nurse his wounded ego" there after losing out to Koller (p. 6). Receipt of the Paris fellowship was the crowning honor of his early career, and he expected great things from his association with Charcot. While in Paris, though suffering from other injuries to his pride, he remained pleased with his renown as an advocate of medical cocaine, and he expressed his satisfaction to his fiancée.

- Freud didn't exhibit "one of his own male patients" in a Vienna lecture on male hysteria (p. 164); he borrowed one.

- Markel reports that in 1898 Freud shared a hotel room with his sister-in-law, Minna Bernays, for two summer weeks (p. 159). The couple was indeed registered as husband and wife, as Markel states. They arrived on Saturday, August 13, and checked out on Monday morning, August 15. (See Franz Maciejewski, "Freud, His Wife, and His 'Wife,'" translated from the German by Jeremy Gaines, with the collaboration of Peter and Julia Swales, *American Imago*, Vol. 63, No. 4 (Winter 2006).) The facts of the case are suggestive enough without a need to turn two nights into two weeks.
• It is untrue that Freud's bond with Wilhelm Fliess broke because "Dr. Fliess simply could not compete with his intellectual juggernaut of a friend" (p. 217). Fliess came to regard Freud as a plagiarist and an incompetent psychologist, an alleged "reader of thoughts" who in fact "perceives nothing in the other, but merely projects his own thoughts." See The Complete Letters of Sigmund Freud to Wilhelm Fliess, 1887–1904, edited and translated from the German by Jeffrey Moussaieff Masson (Belknap Press/Harvard University Press, 1985), p. 450.

7. 17
Letters of Sigmund Freud, p. 108. 

8. 18
Cocaine Papers, p. 70.

9. 19
See the Library of Congress engagement letter of May 30, 1885. Freud expected Fleischl to repay the loan, whereupon, he told Bernays, she would be sent further cocaine for her own use.

0. 20
Cocaine Papers, p. 71; Schriften über Kokain, p. 79.

1. 21
See the Library of Congress engagement letter of May 12, 1884.

2. 22
Cocaine Papers, p. 117.

3. 23
Cocaine Papers, p. 171.

4. 24
Cocaine Papers, p. 172.

5. 25
Cocaine Papers, p. 117.