

A New Look at Freud's Botanical Monograph Dream

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The theory of sleep cycling offered on this website, which attempts to link NREM-REM sleep cycling to procedural learning, contains numerous implications for dream analysis. These implications will be explored in this paper and then applied to an analysis of Freud's botanical monograph dream.

It is often assumed that dream recall accurately reflects the mental activities interrupted by awakening. This assumption is clearly incorrect, since procedural learning contains a behavioral programming component that is entirely absent from what is recalled, which primarily involves motivational content. A more credible assumption is that only those components of sleep time mental activities that are suitable for waking consciousness may be recalled, which is not all-inclusive simply because this state of consciousness differs from that of any sleep stage. What we think of as a dream may be likened to a two-dimensional shadow of a three-dimensional reality. Nevertheless, dream recall should reflect at least some characteristics of sleep time mental activities, particularly when they are examined from a psychoanalytic point of view.

Some support for the honing process I have postulated can be seen in the results of a study of sequential dreaming that was conducted by Offenkrantz and Rechtschaffen (1963), who examined the psychological content of the sequential REM dreams of a subject undergoing psychiatric treatment in terms of T.M. French's psychoanalytic viewpoint (e.g., French, 1952). They found that "the organization of any particular dream depends at least in part on the consequences of the attempted solution to the conflict in the previous dreams. For example, when the solution of a problem in one dream was relatively gratifying, the dreamer usually would attempt an even bolder gratification of a disturbing wish in the next dream. In turn, reactive motives such as fear of retaliation, fear of loss of love, guilt, or shame were stimulated by the bolder gratification. Thus, an alternation of predominantly gratifying and predominantly disturbing dreams in the same night was not unusual." I interpret this data as indicating that the dreamer learned something from each REM dream and attempted to use that information in the next dream in honing his adaptations for use in his subsequent waking interval. A struggle to reconcile opposing forces is also suggested.

The last REM period before awakening from a normal night of sleep can persist for 45 min or more, yet when REM dreams are recalled upon awakening, the corresponding mental activity reports are invariably shorter than what one would imagine the report of a 45-min dream should be. While it may be supposed that much content has simply been forgotten, this does not seem to be the whole story. The dream that we will examine, Freud's botanical monograph dream, is a case in point. This is a very short dream, and is probably derived from a long REM dream, yet when it is analyzed psychoanalytically it seems to be a complete dream that begins at the beginning.

That REM dreams are not continuous entities is suggested by the finding (Dement and Wolpert, 1958) that REM presentation may cease momentarily several times during the course of a long REM dream. It is theorized that a reorganized REM dream starts after each of the stoppages, so that the last REM segment before awakening represents the culmination of a person's adaptive efforts. This last segment therefore should most accurately reflect the adaptations a person exhibits upon awakening. This implies that a careful psychoanalytic analysis of this dream segment should be predictive, or at worst

consonant with, the actions, feelings, emotions, and behavioral tendencies the dreamer exhibits the next day.

Another implication for dream analysis of the sleep theory I have outlined is that REM dream content should reflect the concurrent consideration of several life concerns. This implies that any example of dream analysis that results in an interpretation involving a single life concern is probably inadequate. Either the analyst is being selective in the memories used in interpreting the dream or some of the memories are being misconstrued in arriving at a single interpretive stance.

The sleep theory also implies that dreams should contain only interrelated memories: memories of currently unresolved situations, which indicate the subjects of the dream, and memories of past situations that came to definite outcomes, which should be interpretable as having a bearing on the dream subjects. That is, the situations involved with the past memories should be similar to the current situations, and they should contain lessons that apply rationally to the subjects of the dream. There should be no extraneous memories, no memories, that is, whose life lessons have no logical bearing on the subjects of the dream.

This means that, theoretically at least, dream analysis should be very straightforward. The personal significance of the current events referred to in a dream should come from the dreamer, as should the life lessons learned from each of the past experiences and the ways in which those lessons apply to the current situations the dreamer is facing. In practice, however, not all of that information may be consciously available to the dreamer. Nevertheless, dream analysis should proceed in a more rule-bound fashion than has been true in the past.

The method of REM dream interpretation to be illustrated here involves the following steps:

- Consider each REM dream moment to consist of an array of elements (persons, places, things, actions) that are experienced together to evoke a particular set of memories at a particular time.
- Systematically apply Freudian free-association to each element of each dream moment to unearth the memories that presumably gave each element its meaning. This step should be considered as providing the sequence in which memories were brought into play during the dream.
- Next, group the memories according to whether they relate to currently unresolved life situations or situations that have arrived at definite outcomes in the dreamer's past.
- Determine the developmental goals the dreamer hopes to achieve in meeting each of the currently unresolved life situations. These goals are the subjects of the dream, with each subject defining a thematic plane.
- Determine from the dreamer the life lessons learned from each of the concluded past situations alluded to in the dream. Distribute these life lessons among the thematic planes they evidently belong. Do this for each dream moment, to provide an indication of the dreamer's thought processes with respect to each thematic plane as the dream proceeds.
- Interpret the thought corresponding to each thematic plane as representing a "solution" and as having the purpose of helping provide the motivational basis for the person's behavior in the next waking interval. That is, assume that dream

content provides unconscious motivational structure to the dreamer's subsequent waking interval by functioning in a manner similar to a set of post-hypnotic suggestions.

Two comments should be made before we apply this concept of dream interpretation to the analysis of Freud's botanical monograph dream. One is that in conceiving of dividing dream content into several thematic planes, I have made implicit use of the theory of conceptual integration (blending) (Fauconnier and Turner, 2002). Much of so-called blending theory relates to the creation, apprehension, and communication of meaning through creative uses of language, particularly metaphorical expressions. Use of metaphor is depicted as enlisting two or more "mental spaces" in creating a blended mental space, which serves as the basis for the metaphor's meaning. The mental space for the blended expression may also contain content that was not found in any of the input mental spaces. This is called "emergent" content.

In our analysis of Freud's dream, we will resolve the blended mental space of the dream into its component mental spaces, and will arrive at a concept of the meanings of the dream to Freud through the meanings found on each thematic plane. No attempt will be made to discern emergent content. This will be seen as a consequence of the paucity of information available by free-association and not because emergent content is lacking.

The second comment involves the caution that the memories one works with in analyzing a dream represent only the skeletal remains of the thoughts that occupied the dreamer during sleep, and a complete skeleton should not be assumed. Careful application of free-association and the steps I have outlined, however, should allow one to follow dream thoughts in a general way throughout the course of a REM dream segment.

In what follows, we will examine Freud's developmental goals, the lessons he took from related past experiences, and the bearing those lessons had on the achievement of his goals. In attempting to reconstruct Freud's dream thoughts, we will assume that Freud examined remembered realities in a rational fashion. Neither flights of fancy nor appeals to delirious reasoning will be used in analyzing this dream.

An Analysis of Freud's Botanical Monograph Dream

Freud offers two descriptions of the botanical monograph dream that are equivalent for our purposes, so only the first description will be reproduced here (all dream association quotes are from Freud, 1900):

I had written a monograph on a certain plant. The book lay before me and I was at the moment turning over a folded colored plate. Bound up in each copy there was a dried specimen of the plant, as though it had been taken from a herbarium.

One problem with analyzing the dream in the manner I have indicated is that Freud says precious little about his current life situation, and even less about his developmental desires at the time of the dream. Fortunately, we know when Freud dreamed the botanical monograph dream because he mentioned having received a distinctive letter from his close friend, Berlin nose and throat specialist Wilhelm Fliess, in his associations to the dream. That letter has not survived, but Freud obviously referred to the same letter in answering it on March 10, 1898. Since it was Freud's practice to answer Fliess's letters within a day of receiving them, we can suppose that the dream

was dreamt the night of March 9th. As it happens, there is a great deal that is known about Freud's life at this time, which can be used in providing background information for the interpretation of the dream.

The botanical monograph dream is ideal from the point of view of an introductory discussion of dream interpretation because it is short and fairly well documented. Shortcomings relate mainly to the circumstance that Freud did not offer this dream for the purposes of extensive dream analysis. Even though he did refer to it continually in different contexts throughout his book, *The Interpretation of Dreams*, most of these passages merely rehash old information. Freud also abruptly terminated the analysis of the dream and eliminated some associations while preparing the final version of the book, as is evident from a typo concerning "thoughts about Italy" that has survived to this day. Freud also did not adhere to the practice of systematically associating to each element of each dream moment, as he did with the dream of Irma's injection. Additionally, he failed to provide a clear sequence of dream moments. For example, did he notice the dried specimen before he began turning over the colored plate? The bit later in his associations he indicates that he did more than merely turn over the folded colored plate in the dream; he unfolded it to look at it better. By doing so, did he cover up the dried specimen? Also, what were his feelings when perusing the book? Was there a sense of pride? These questions remain impossible to answer definitively. Finally, Freud's associations do not lend themselves to an in-depth psychoanalytic treatment of the dream, again in contrast to the Irma dream.

Let us begin by attempting to define a timeline for the events in the dream. The dream begins with the book lying before Freud and Freud having the sense of it being written by him and of it being about an unspecified plant. A fraction of a second later, he notices a dried plant specimen bound into the book and a colored plate. Which, however, did he notice first? In his associations, Freud mentions the dried plant specimen before he turns to consider the colored plate, which may indicate the time sequence in the dream, but is not conclusive evidence of it. Considering the dream to be real-life experience, however, does support that position. For Freud to notice the dried plant, the book must have been open initially to the page containing the bound-in specimen, which then would have become covered over as Freud unfolded the page containing the colored plate to examine it better.

Let us now turn to the more difficult problem of assigning memories to each dream element, using Freud's stated free-associations, such as they are. We will consider his associations in turn as they evidently apply to each thematic plane.

Remembering Martha's Flowers

Freud's analysis of the dream opens with the memory of seeing a book in a bookshop the previous day, bearing the title *The Genus Cyclamen*. Cyclamens were his wife's favorite flowers, and at some point he reproached himself for rarely remembering to buy them for her, even though doing so would please her greatly. It is unclear whether these thoughts came to Freud's mind upon seeing the book or later in the day, or the next day when associating to the dream. Freud repeatedly points to seeing the book as an example of an indifferent experience, which would imply that its connection with his wife became revealed to him at some later time. Yet Freud also indicates that he didn't have much of the interest in botany, which would cause one to wonder why he noticed the book in the first place. Actually Freud had more of an interest in flowers than he admits to in his associations. So it would seem that the word "cyclamen" might have attracted his attention, with its connection to his wife, Martha, perhaps not reaching

consciousness at that moment. In the blended mental space that gave rise to the dream, then, the dreamed book may be considered to refer to the book on cyclamens, and thus the issue Freud created between himself and his wife by “forgetting” to buy her flowers, even though he regularly remembered to buy his mother flowers at this time (Grinstein, 1961).

The situation involving Freud and his wife’s flowers defines a thematic plane relating to a currently unresolved situation. It is unresolved in the sense that Freud is continuing to not buy his wife flowers, with the question being whether he should change his behavior. Over the course of his night of sleep, Freud reached a conclusion in this matter. On this thematic plane, Freud builds emotional support for acting on the decision upon awakening.

Freud does not explicitly relate the dried specimen to any of the associations that pertain to this thematic plane, but it seems logical to assume that the specimen refers to a type of flower and that associations to flowers became activated upon experiencing this element. In this regard, Freud recounts the memory of an incident he had learned of probably from his former patient Frau L. Other memories that were apparently associated with the dreamed botanical specimen include the remembrance that Frau L. had recently talked to Martha and that Martha continues buying Freud his “favorite flowers,” artichokes, despite his continuing forgetfulness. During the next moment, when the colored plate is experienced, a memory of an artichoke being torn apart becomes activated. This is the seeming grab bag of memories we have to work with.

Actually there is one more element. The incident with Frau L. involved her expecting a bouquet of flowers from her husband on her birthday. One year, this token of his affection failed to appear, causing Frau L. to burst into tears because she took her husband’s forgetfulness as meaning that she no longer held the same place in his thoughts. It was irrelevant whether Frau L. was right or wrong in her supposition, as far as the rest of Freud’s analysis of the dream is concerned, so it is quite odd that he went out of his way to indicate that Frau L. was indeed correct, and do so in such a way as to indict himself in the process. Freud does this by mentioning a theory he was developing at the time, according to which “forgetting is very often determined by an unconscious purpose and that it [the theory] always enables one to deduce the secret intentions of the person who forgets.” By saying that the Frau L. incident provided evidence for his theory, Freud suggests that there was more to his own forgetfulness than meets the eye, that he, like Frau L.’s husband, continues to “forget” to buy flowers because of hard feelings he had toward his wife.

The reason for these hard feelings is perhaps alluded to in Freud’s associations. Freud indicates that all lines of thought in the dream, including those pertaining to his wife, were prompted by a conversation he had the previous evening with his friend Dr. Leopold Königstein, an ophthalmic surgeon Freud had known since his medical school days. The most important aspect of this apparently wide-ranging discussion concerned “a matter which never fails to excite my feelings whenever it is raised,” which apparently involved Freud being “blamed for being too much absorbed in my favorite hobbies.”

There is some disagreement about what Königstein meant by Freud’s hobbies. Spence (1981) speculates that Königstein was critical of Freud’s new method of interpreting dreams, while Cole (1998) sees Freud as being rebuked for the extravagance of his book purchases. In another place in his article, however, Cole hits closer to the mark: “Behind

the dream of the botanical monograph is the story of an ambitious young man who wanted, perhaps too desperately, to make a name for himself.”

Freud’s longstanding approach to fame and fortune consisted of get-rich-and-famous-quick schemes, the first of which he devised in early 1884 when he pinned his professional hopes on a new method of staining samples of brain tissue for microscopic examination. When that led nowhere, and after a mentor advised him to turn his attention to subjects of interest to physicians, Freud sought fame and fortune through research on cocaine, which was then a relatively unknown drug. Again, however, fame passed him by. Then Freud focused on gaining a fundamental understanding of neuroses, particularly hysteria, his aim in this case apparently being to mount the pedestal vacated by the deceased “Napoleon of Neurosis,” Jean Martin Charcot. This effort culminated with the development of the seduction theory of hysteria in 1896, which Freud denounced as wrongheaded in his September 21, 1897, letter to Fliess (all quotes from Freud’s letters to Fliess are from Masson, 1985). In voicing his disappointment, Freud says, “The expectation of eternal fame was so beautiful, as was that of certain wealth, complete independence, travels, and lifting the children above the severe worries that robbed me of my youth. Everything depended upon whether or not hysteria would come out right. Now I can once again remain quiet and modest, go on worrying and saving.” Farther down in the letter, he says, “In this collapse of everything valuable, ... the dream [book] stands entirely secure and my beginnings of the metapsychological work have only grown in my estimation. It is a pity that one cannot make a living, for instance, on dream interpretation!” At the time of the botanical monograph dream, even the promise of his latest bid for fame, the dream book, seemed in jeopardy. The dream book in question would of course become the most famous book ever written on dreams, Freud’s *The Interpretation of Dreams*.

In criticizing Freud’s hobbies, Königstein was criticizing Freud’s mode of achieving success, and he apparently suggested that Freud boost his medical practice by extending his medical knowledge rather than continuing to follow frivolous pursuits like the dream book.

It would be quite understandable if Martha had in some way echoed Königstein’s criticism of Freud on this point. She never took an interest in any of Freud’s theories even after he became famous, so it is difficult to see how she could be sympathetic to Freud’s theoretical efforts at this point when Freud’s devotion to them was making it difficult for her to put food on the table. Criticism from her in this matter would be doubly hurtful to Freud because it would echo his mother’s criticism of his father, implying that Freud was just like his father, who was faulted as being a poor wage earner precisely because he couldn’t keep his mind on his profession, being lured continually by the siren call of fanciful schemes that never brought in a penny. Her disparaging remarks or attitude would contain the prophecy that Freud would end up just as his father did, a penniless old man who went to his grave relying on charity from relatives and friends to meet his obligations as a husband and father.

A lack of support by Martha in this area would also open old wounds. Freud was by no means indifferent to Martha’s level of interest in his theories. Cole quotes passages from Freud’s letters to his then fiancée to show his love for her: “Martha is mine, the sweet girl of whom everyone speaks with admiration...who strengthened my faith in my own value and gave me new hope and energy to work when I needed it most.” “With you I am allowed to feel rich and to enjoy unlimited praise and recognition.” “I know that you do love me and it is your doing that I have become a self-confident, courageous man.” These are expressions of love for Martha, but blended with the love

talk is something else. Psychoanalytically speaking, Freud may be seen as coaching Martha, as telling her what he expected from her. He expected her to continue helping him become a self-confident, courageous man and continue in strengthening his faith in his own value and in giving him new hope and energy to work when he needed it most, just as he wished his mother had done—and do so by becoming his intellectual companion. Jones (1958) writes that Freud sought “fusion rather than union” with Martha, but fusion based on Martha becoming molded into a “comrade in arms.” Jones also documents that Martha steadfastly resisted these manipulative efforts.

Freud apparently felt that Martha would change once they were married, because he initially tried discussing his patients’ cases with her, but this practice quickly ceased as Martha made it clear that she would run his household and bear his children, but that he would have to turn to someone else for anything more. And so Freud did, his first intellectual companion being Minna Berneys, Martha’s sister, who moved in with the family in late 1896. Next came Emma Eckstein, a former patient who Freud was training as a psychoanalyst at the time of the botanical monograph dream. Many more female intellectual companions would follow, culminating with Freud’s youngest daughter, Anna.

So this thematic plane concerns Freud’s vengeful resistance to buying Martha her favorite flowers because a longstanding grievance that was probably brought into prominence by something Martha said to indicate that she in effect sided with Königstein. Freud’s goal involves achieving revenge in a manner that does not provoke Martha’s retaliation. The dream opens with a reference to the situation and then goes on to deal with it. Lacking specific information on how Freud interpreted the memories he mentioned, I will appeal to common sense.

It is not difficult to imagine the lesson Freud took from Frau L.’s episode and the bearing this memory had on Freud’s situation with his wife. If Frau L. could become upset upon concluding that forgetfulness in buying flowers meant a diminishment of love on her husband’s part, so could Martha. This memory thus contains the warning that Martha might soon become upset at Freud’s forgetfulness. The memory that Martha recently chatted with Frau L. adds a sense of urgency to the need for a solution because even if Frau L. did not relate the husband-forgetting-flowers story to Martha, she certainly might the next time they met, which could cause Martha to connect forgetfulness to resentment on Freud’s part, if she hasn’t done so already. To perhaps indicate that things haven’t yet escalated to a crisis stage, Freud includes the memory that she continues buying him artichokes and preparing them for him.

This is one possible scenario based on Freud’s stated associations. It assumes that Martha’s critical attitude was not related to Freud not buying flowers. Another possible scenario would have Freud putting caustic commentary from Martha about his hobbies together with the fact that Martha has not made artichokes recently and concluding that Martha is already upset and would become even angrier, should Frau L. tell her the husband-forgetting-flowers story. In yet another scenario, Freud might have supposed that she is already upset because Frau L. told Martha the husband-forgetting-flowers story and her interpretation of it. The latter two scenarios convey much more of a sense of urgency, and quite possibly one of them was used by Freud to motivate himself to change his manner of revenge. It should be noted that the three scenarios differ in the way the same memories have been interpreted and organized. This is one kind of organizational change I referred to in outlining my concept of the normal night of sleep.

Upon experiencing the colored plate, a memory of pulling an artichoke apart leaf by leaf becomes activated. This action could correspond to either Martha preparing artichokes for Freud or to Freud pulling an artichoke apart while eating it. In either case, the memory is one of life as normal. Freud provides no further insight into the circumstances surrounding this memory, but theoretical considerations suggest that the memory corresponded to a time when Freud successfully soothed Martha's feelings, leading her to make Freud his favorite meal. Thus, the memory in the dream would function as an expression of confidence that Freud's solution will work—Martha will be soothed, and life with her will continue on a normal basis without concern for womanly reprisals.

At first glance, Freud's dream associations seem to jump from warnings to the aftermath of a solution having been found, with the solution itself being absent. This perception persists until one considers the possibility that the solution, like the proverbial 500 lb elephant in the room, may have escaped notice even though it was staring one in the face. The key lies in recognizing that dreams have the purpose of motivating dreamers to take specific actions upon awakening, and we know of at least one thing Freud did the next day—he wrote down his associations to the dream, and did so initially in a very peculiar way. He begins the analysis of the dream with the subject of Martha's flowers and then starts the analysis anew. It is as if he had something he wanted to get off his chest before settling down to interpreting the main body of the dream. What he wanted to get off his chest is indicated too by his delving unnecessarily into the matter of his resentment toward his wife.

Martha was a hopeless case; there was no question of winning her interest in Freud's intellectual life. The only issue was how to continue exacting revenge in a way that would not attract Martha's notice, thereby avoiding a domestic squabble or retaliation on Martha's part. The solution that Freud arrived at was to switch his manner of revenge to one that Martha would never notice. He would buy her cyclamens the next day to allay her suspicions and then take revenge by publicly declaring his resentment toward her in a book he knew that neither she nor her friends would ever read, his book on dreams.

Continuing with the Dream Book

Freud relates the experience of seeing the dreamed monograph lying before him to a letter he had received from Fliess the day before in which Fliess had said, "I am very much occupied with your dream-book. I see it lying finished before me and I see myself turning over its pages."

"How much I envied him his gift as a seer! If only I could have seen it lying finished before me!" Freud says at this point in his associations. Freud expresses the wish of seeing the book completed so ardently because, as he indicated in his March 10 letter to Fliess, at the time of the dream, work on the dream book "has come to a halt again, and meanwhile the problem has deepened and widened. It seems to me that the theory of wish fulfillment has brought only the psychological solution and not the biological—or, rather, metaphysical—one."

Freud had long suspected that dreams were disguised wish fulfillments and became convinced of it two and a half years earlier in analyzing the dream of Irma's injection. Now, as he started systematically applying that notion in the dream book, he was finding that there was more to dreaming than he had supposed. The initial confidence that had fed his desire to write the book at this

time had therefore become undermined. To make matters worse, Freud's work on the dream book had been roundly criticized by Königstein.

The dream opens with Freud perusing a book in the same manner Fliess described in his letter. So in the blended mental space that gave rise to the dream, the dreamed book also refers to the dream book Freud was writing. The unresolved issue forming the basis for the second thematic plane, therefore, concerned whether Freud should continue working on the book or begin developing a whole new approach to fame and fortune. Once again, the decision has already been made, and the function of the dream is merely to build emotional support for it.

Freud restarts his analysis of the dream by mentioning a monograph on cocaine he had written in 1884. He does not tie this memory to any specific dream element; however, Grinstein (1961) indicates that the dried specimen may refer to cocaine, because cocaine is derived from the dried leaves of the coca plant. So it is possible that the memory of the cocaine monograph could have been associated with this element, particularly since Freud specifically relates two other cocaine-related memories to the dried specimen. One pertains to an eye operation Freud's father underwent for glaucoma, which was performed using a cocaine solution as a local anesthetic. The other involves having read a copy of a *Festschrift* written by pupils celebrating the jubilee of their teacher and laboratory director. Among the laboratory's claims to distinction enumerated in this book was the fact that Karl Koller, Freud's friend and a fellow intern at the University of Vienna's General Hospital during their medical student days, had at that time discovered that cocaine could be useful as a local anesthetic in eye surgeries. This discovery made Koller famous among eye surgeons throughout the world virtually overnight. Two student memories not relating to cocaine were also associated with the dried specimen; a third such memory was associated with the colored plate, as was a cocaine-related memory.

Freud claims that the cocaine monograph was valuable because it set Koller on the path to discovery, which was not true. He then continues the pursuit of revisionist history by saying, "I had myself indicated this application of the alkaloid in my published paper, but I had not been thorough enough to pursue the matter further." Freud in fact did not speak of the drug's possible use as an anesthetic in eye surgeries; he merely suggested its "occasional use as a local anesthetic, especially in connection with affections of the mucous membrane" (Byck, 1974, p. 73).

Freud took even greater steps toward revisionism years later, when he claimed that it was his wife's fault that he was not famous at an early age. He said then that he was induced to neglect performing the simple experiments that would have verified cocaine's suitability for eye surgeries because he had to rush off to be with his then fiancé, who was living in another city. As Jones indicates, he traveled to see Martha nearly three months after having finished his paper, which would have left him more than enough time to do the needed experiments (which took Koller only one hour to perform [Bernfeld, 1953]). These evasions would indicate that the events surrounding the cocaine monograph held an important place in Freud's life.

They were important because his cocaine research was integral to a get-rich-and-famous scheme that nearly paid off beyond Freud's wildest dreams. Freud knew from personal experience that cocaine had a numbing effect. He probably also knew of eye surgeons' desperate need for a local anesthetic. All he needed to do was make the connection between the two, as Koller did, perform a few obvious experiments, and instant fame would have been his. The lesson Freud took from this memory was that his get-rich-

and-famous-scheme technique could bring him the fame he desired; all he needed to do was be more thorough in following through, and success could conceivably come. In a sense, then, the lesson learned in association with the cocaine project was all Freud needed to encourage himself to continue with the dream book. Freud, however, doesn't rely on this memory alone. Instead, he bolsters this intellectual conclusion emotionally through memories of humiliations that resulted from lapses of thoroughness.

One participating memory concerned a time when Freud's father came down with glaucoma, which happened a few months after Koller's discovery. As Freud looked on, Königstein operated while Koller administered the cocaine anesthetic. The next day, Koller commented to Freud that this case had brought together all three of the men who had a share in the introduction of cocaine, himself, Königstein, and Freud. This memory should be judged in connection with the Festschrift memory, which Freud mentions next in his associations. The Festschrift celebrated Koller's discovery; pointedly, however, there was no mention of Freud. The conjunction of the two memories at once confirms Freud's contribution to Koller's discovery and points up the fact that his participation had faded from public memory at the time of the dream. Incidentally, Freud's contribution was not his cocaine monograph, but the fact that he introduced Koller to cocaine's numbing effect by using Koller as a guinea pig in his experiments.

The poignancy of this conjunction to Freud is suggested by a daydream he had the morning after the dream. He imagined that if he ever developed glaucoma, he would travel "incognito" to Berlin to have eye surgery done at Fliess's home. The physician would then extol the benefits of cocaine in such surgeries in his presence, not knowing that his patient was someone who had a hand in introducing cocaine for this purpose. This daydream expressed denial on Freud's part, because there would have been no need to remain incognito, since even if the surgeon knew his name, he probably would not have associated it with the introduction of cocaine for eye surgeries.

Freud continues the theme of thoroughness with two painful memories from his student days. When Freud was in secondary school, the headmaster asked students to clean out the school's herbarium, which had been infested with small worms. Freud volunteered to help, but the teacher apparently didn't have much faith in Freud doing a thorough job, so he handed him only a few sheets, thereby humiliating Freud. Another humiliating memory related to Freud being put in jeopardy of doing poorly on a preliminary examination in botany during his college years upon failing to identify a crucifer, evidently because he had not been thorough in preparing for the test.

After beating himself up for a lack of thoroughness, Freud ends the dream on a positive note in relation to the colored plate. Freud recalls that he has long been proud of his "hankering for thoroughness," as exemplified by his practice during his medical student years of buying monographs containing the proceedings of medical societies, rather than contenting himself with hashed-over summaries by authors who may not be describing subjects correctly or in sufficient detail.

It would have been helpful to Freud at this point if he had brought to mind an example of this hankering for thoroughness that was more pertinent to the dream book. Actually he does mention such an association, although not in connection with the colored plate. In his concluding remarks, he alludes to his analysis of the dream of Irma's injection (quoted below). This was the first dream he analyzed thoroughly, and in doing so confirmed what he had long suspected, namely, that dreams could be interpreted as wish

fulfillments. It is supposed here, therefore, that this memory was associated with the colored plate.

In conclusion, the second thematic plane concerns Freud's decision to continue with his get-rich-and-famous-scheme approach to success in terms of the dream book. This decision is supported with the memory that thoroughness would have made the difference between spectacular success and humiliating failure in a similar endeavor. The resolve to be more thorough is then stiffened through the memories of stinging humiliations that came because of intellectual carelessness and the bracing realization that thoroughness is a trait Freud always valued and that this trait led him to an important discovery with respect to dreams.

As with the interpretation of the first thematic plane, the conclusions reached with respect to the second plane are in accord with something Freud did the next day. In offering an interpretation of the dream, Freud wrote: "Once again the dream, like the one we first analyzed—the dream of Irma's injection—turns out to have been in the nature of a self-justification, a plea on behalf of my own rights ... What it meant was: 'After all, I'm the man who wrote the valuable and memorable paper (on cocaine)' In both cases what I was insisting was: 'I may allow myself to do this.'" The discussion here reaches a conclusion that is similar to the one reached by Freud, with the difference that nothing hinges on the cocaine monograph being valuable or memorable, which is a plus, because it was neither. Additionally, the dreamed remembrance of the Irma dream could have played a part in inspiring Freud to analyze the botanical monograph dream the next day.

Letting Fliess Help

Freud seems to have unconsciously taken Fliess's imaginary perusal of the dream book to indicate that Fliess was coyly asking to see the current draft of it. This evidently prompted Freud to consider giving Fliess an opportunity to see it, and thus have the chance of criticizing the book in its current rough and unfinished state. The third thematic plane, I feel, concerns Freud's attempt to support a decision to cautiously take Fliess up on his veiled proposal.

This interpretation conflicts with that offered by Palombo (1988). He sees Fliess's language as suggesting an unconscious fantasy in which he, Fliess, is the author of the dream book. According to Palombo, "His vision of himself examining the volume reads like an unconscious appropriation of Freud's work, in Fliess's mind perhaps the joint product of their intellectual collaboration extending over many years." Palombo sees Freud as probably reacting to Fliess's letter with conflicted emotions since the letter "arrived at a time when Freud was in the midst of removing the last traces of Fliess's scientifically obscure speculations from his own thoughts and writing." In the March 10 reply to Fliess's letter, Freud said, "It was no small feat on your part to see the dream book lying before you," which Palombo interprets as possibly meaning, "This is my work. You could not have done it." In apparent confirmation of this interpretation, he quotes a portion of Freud's March 15 letter in which he says, "'I can [sic] let you see it in fragments,' as if to deny Fliess the opportunity to grasp it all at once."

Freud's friendship with Fliess has long been an embarrassment to Freudian psychoanalysts, particularly because of Freud's fawning attitude toward Fliess and his pronounced tendency to yield to him as an authority figure. This led sympathetic historians to present the last stages of their friendship as consisting of Freud disengaging himself theoretically from Fliess (Jones, 1953; Gay, 1988). More objective

scholarship (e.g., Breger, 2000; Sulloway, 1979) has shown that this was not the case, that in fact the exact opposite was true. With the collapse of his seduction theory, Freud was in no position to begin disengaging himself from Fliess's judgment and theoretical expertise.

As for Fliess's statement about the dream book, I see no basis for the conjecture that Fliess wanted to appropriate Freud's work. Apparently up to this point Freud had shown Fliess only isolated examples of dream interpretation. With his curiosity whetted, Fliess was asking obliquely to see more. This is evidently the way Freud interpreted Fliess's remarks, as a full presentation of Freud's statements on the matter in his March 15, 1898, letter shows: "The idea occurred to me that you might like to read my dream study but were too discrete to ask for it. It goes without saying that I would have sent it to you before it goes to press. But since it now has again come to a halt, I can just as well send it to you in fragments." Freud then goes on to describe the fragments that he is sending. Freud does not withhold anything from Fliess. He sent him everything he has, which would seem to contradict Palombo's interpretations, especially since from this point forward Fliess was intimately involved as the editor of the dream book.

Freud gratefully accepted this level of involvement, as can be seen from his May 18, 1898, letter: "I shall change whatever you want and gratefully accept contributions. I am also immensely glad that you are giving me the gift of the Other, a critic and reader—and one of your quality at that. I cannot write entirely without an audience, but do not at all mind writing only for you."

Nevertheless, at the time of the dream, Freud was somewhat concerned that Fliess would unfairly criticize the book and that this could have a discouraging effect on him, a supposition that might lead one to expect the memories Freud marshals to help motivate himself to be cautious in seeking Fliess's help would be of Fliess's unfair criticisms in the matter of similar projects in the past. Such an approach, however, would have precluded Freud from sending Fliess anything, and Freud desperately needed Fliess's help, as the May 18th letter shows. So what Freud assembled as warnings are other memories of unfair criticisms of unfinished projects that influenced Freud for better or for worse, depending on how Freud reacted in response.

An initial search of Freud's associations to the dried specimen turns up no memories of this type. The only memory that we have not yet used concerns an awkwardness regarding the payment of medical fees by medical professionals to their colleagues. Apparently, it was the custom then for Vienna-area physicians to not charge colleagues for services rendered to them and their family members. This practice Freud considered "awkward." Evidently the spirit of the custom was that it would cost physicians nothing in the long run to do this because fees that would have been paid to a particular physician at a particular time would be returned on average when that physician needed medical assistance. So it is difficult to see how there can be any awkwardness when the potential for full reciprocity existed. It would seem that what Freud found awkward was that the potential for full reciprocity did not exist in his case. In other words, physicians would feel obligated to provide Freud and his family with free medical services even though they would never think of asking Freud for the sort of help he provided. The awkwardness on Freud's part could have come, therefore, from his perception that the local medical community was critical of his psychoanalytic treatment.

One need not look far for reasons why Freud might have been criticized. In his September 21, 1897, letter to Fliess, in which he announces his disenchantment with the seduction theory of hysteria that he had been applying in his practice for about a year, Freud describes some of the reasons for his change in attitude: “The continual disappointment in my efforts to bring a single analysis to a real conclusion; the running away of people who for a period of time had been most gripped [by analysis]; the absence of the complete successes on which I had counted....” It is probable that many of the patients who ran from his door came to Freud on referrals from colleagues, and if even only some of them complained to the referring physicians for sending them to such a person, it would be enough for the physicians to stop sending patients to Freud and to advise colleagues to follow suit.

So it is quite likely that Freud’s discussion of the awkwardness of paying medical fees alludes to criticisms by his medical colleagues of Freud’s psychoanalytic practice, which had been informed by his seduction theory. The question to be asked is whether these criticisms were justified in Freud’s mind. The quote above would lead one to conclude that Freud had no recourse but to believe that the criticism of his colleagues was justified, since his seduction theory was wrong. Freud’s December 12, 1897, letter to Fliess, however, indicates that he had not given up on the seduction theory at this time. In that letter, Freud mentions Emma Eckstein, who was treating a woman patient under Freud’s direction. Freud seems to have instructed Emma to be certain not to suggest scenes of seduction to the patient but wait to see what material emerged. What emerged apparently were memories of the same type that had originally convinced Freud of the correctness of the seduction theory. As a result, Freud said in the letter, “My confidence in paternal etiology [the seduction theory] has risen greatly.” So at least at the time of the dream in early March 1898, Freud probably felt that the criticism from his colleagues was unjustified.

Freud made no statements to Fliess or anyone else about whether criticism from his colleagues or the lack of referrals from them played any part in his decision to abandon the seduction theory. It is known, however, that at the time he wrote the September 21 letter, business was virtually nonexistent, leaving Freud copious amounts of time for the dream book and his self-analysis. The method of dream analysis outlined here suggests that Freud’s abandonment of the seduction theory was influenced by what Freud eventually considered to be unfair criticisms from local colleagues and that at the time of the dream Freud had regretted being swayed by these sentiments.

A more clear-cut example of Freud being negatively influenced by criticism concerns events surrounding the cocaine monograph we have not yet considered. Once again, however, we will need to examine realities in Freud’s life that have not been thoroughly documented by historians. The events in question pertain to the reasons why Freud was not thorough enough to hit on the application of cocaine to eye surgery. In explaining why Freud felt he had done so, Jones paraphrases an unpublished April 4, 1885, letter Freud wrote to Martha: “If only, instead of advising Königstein to carry out the experiments on the eye, he had believed more in them himself, and had not shrunk from the trouble of carrying them out, he would not have missed the ‘fundamental fact’ (i.e., of anesthesia) as Königstein did.” Jones then quotes Freud directly: “But I was led astray by so much incredulity on all sides” (Jones 1958, p. 89).

The most important source of whatever skepticism Freud met in suggesting that cocaine might have eye applications would have been Königstein, who was six years older than Freud, a skilled eye surgeon, and a member of the General Hospital’s Ophthalmology Department. It is not known what Königstein thought of the notion, but there is

evidence of a negative attitude. This relates to Königstein's reaction to Freud's request that he experimentally investigate the possibility that the anesthetic action of cocaine may have application to diseases of the eye. Königstein's attitude can be taken from the fact that he botched the experiments in a way that smacks of unconscious sabotage. According to Koller (Byck 1974, p. 293), when Königstein experimented with cocaine at Freud's suggestion, he dissolved the drug in alcohol, whose irritating effect masked the drug's numbing quality. Koller by contrast dissolved the drug in distilled water, which was what Freud used. It is inconceivable that an experienced professional like Königstein could not have guessed that alcohol would have an irritating effect on eye tissues, so there seems to be no logic to his use of alcohol rather than the more usual distilled water, unless Königstein was more interested in proving Freud wrong than he was in admitting to the possibility that he might be right. It is known also that when Königstein heard of Koller's claims, his first reaction was disbelief and that he subsequently became so disturbed by the news of Koller's discovery that he belatedly performed a set of confirming experiments correctly with Freud's help and then attempted to claim that he had discovered cocaine's usefulness independently of any knowledge of Koller's work, in a transparent attempt to snatch some of Koller's glory for himself. It is, therefore, not inconceivable that Königstein was highly critical of the notion that cocaine could have eye applications and that this criticism, which turned out to be unfounded, played a crucial role in Freud missing out on a glorious opportunity.

With regard to the third thematic plane, then, there do seem to be at least two associations to the dried plant specimen that relate to instances of Freud being wrongly criticized by colleagues with respect to get-rich-quick schemes and of Freud becoming discouraged as a result, leading to further negative consequences. This brings us to the subject of the folded colored plate and the associations to it, which do continue the theme of receiving criticism. Freud says, "When I myself had begun to publish papers, I had been obliged to make my own drawings to illustrate them and I remembered that one of them had been so wretched that a friendly colleague had jeered at me over it."

It is unclear from this statement whether the drawings had been completed at the time they were criticized. If they had been, the criticism would seem to have been justified and apparently unrelated to the subject of unfair criticism with regard to unfinished projects that occupies this thematic plane. If the criticism were, however, of an early version of the drawing, then this would be one more instance of unfair criticism with a particular relevance to the issue of whether Fliess should be shown an early draft of the dream book. This theory of dream interpretation would predict that if more information about this incident ever emerged, it would be learned that the latter was the case, that the "colleague" in question was an authority figure, and that either a positive consequence followed from Freud ignoring the criticism or a negative consequence befell Freud upon yielding to the criticism.

The last associations to be covered are found in the following quote: "It had once amused my father to hand over a book with *colored plates* (an account of a journey through Persia) for me and my eldest sister to destroy. Not easy to justify from the educational point of view! I had been five years old at the time and my sister not yet three; and the picture of the two of us blissfully pulling the book to pieces ... was almost the only plastic memory that I retained from that period of my life. Then, when I became a student, I had developed a passion for collecting and owning books, which was analogous to my liking for learning out of monographs: a

favorite hobby I had become a *bookworm*. I had always, from the time I first began to think about myself, referred this first passion of mine back to the childhood memory I have mentioned. Or rather, I had recognized that the childhood scene was a 'screen memory' for my later bibliophile propensities. [Freud's paper on screen memories is referenced.] And I had early discovered, of course, the passions often lead to sorrow. When I was seventeen I had run up a largish account at the bookseller's and had nothing to meet it with; and my father had scarcely taken it as an excuse that my inclinations might have chosen a worse outlet."

To make sure that we have all relevant information for this analysis, we will begin with a consideration of the remark that the memory Freud had of tearing up a book under his father's direction was a screen memory and the fact that Freud directed readers to his paper on screen memories in a footnote. Two questions need to be pursued. One is whether the memory was actually a screen memory, which would indicate that it was a fantasy and not a real memory, and the other is what motivated Freud to include the reference, if it was not a screen memory.

Cole (1998) does not consider the screen memory monograph to contain pertinent information about the dream, and neither does Spence (1981), but Grinstein (1961) and Palombo (1988) do. Cole takes the position that the reference amounts to nothing more than Freud pointing the reader to an explanation of a technical term. It is clear from what he says that he knows of the Freudian rule of thumb that remarks made about a dream are to be taken as associations to it, but is concerned about the 1899 date of the publication. It is difficult to see how a monograph published in 1899 could be an association to a dream dreamt in 1898. Grinstein deals with this matter by saying that although Freud sent the monograph to the publishers in the middle of May 1899, he "certainly had the material in mind before publishing the paper."

A letter Freud wrote to Fliess dated January 3, 1899, would seem to contradict this supposition. The letter begins with the mention of a meteor that was apparently streaming across the sky at that time. Freud then waxes poetical in considering the various things that were illuminated by its brightness: "In the first place, a small bit of my self-analysis has forced its way through and confirmed that fantasies are products of later periods and are projected back from what was then the present into earliest childhood...." A screen memory, in Freud's view, is just such a fantasy parading as a real memory, so Freud would seem to have hit upon the basis for screen memories long after the botanical monograph dream. Furthermore, Freud in his associations indicates that he had a continuous memory of the book-destroying incident, which does not square with the notion of a screen memory, which is something made up after years have elapsed. We are therefore left to ask why Freud called this actual memory a screen memory and attempted to legitimize that claim by citing a reference.

Grinstein's justification for including material from the monograph on screen memories in his discussion of the dream additionally appeals to another Freudian rule of thumb, which he quotes: "Glosses on a dream or apparently innocent comments on it often served to disguise a portion of what has been dreamt in the subtlest fashion, though in fact, betraying it." I shall use the same quote in justifying a contrary position.

The screen memory discussion was added after Freud had associated to the dream. It is an attempt to modify the association, and the attempted modification comes immediately after the statement: "I had always, from the time I first began to think about myself, referred this first passion of mine [regarding collecting books] back to the childhood memory I have mentioned." This is a highly significant admission

having to do with Freud rejecting his father's values. It would seem then that Freud attempted to take the sting out of this memory by leading the reader to believe that the childhood memory wasn't real.

So associated with the colored plate are two memories based on Freud's rejection of his father's value system. One is the painful memory that he at one time complied with this value system in tearing up a book, and the other is the positive memory that he subsequently put that chapter of his life behind him with respect to book collecting and provoked his father's criticism as a result. With respect to the latter case, Freud undoubtedly guessed at his father's negative reaction when he ran up the large bill, yet acted in defiance of it by buying the books he needed anyway.

The criticism Freud received from his father was, to Freud's mind, unfair criticism, but it may be seen to relate to a "project" in only the most general way, with the project in this case being Freud's attempt to make a success of his life through higher education. Note, though, that the memories contain the implication that Freud was not like his father, which could help console him that he need not end up as his father did by pursuing get-rich-quick schemes.

In building an emotional wall between himself and his father, Freud could have been separating himself from Fleiss, too, who also spent much of his time pursuing his favorite hobbies. Fliess had just published a monograph, *The Relationship between the Nose and the Female Sexual Organs*, which received mixed reviews. One reviewer was particularly scathing, characterizing the book as "mystical nonsense" and "disgusting gobbledygook" that "has nothing to do with medicine or natural science" (Breger, 2000, p. 134). Freud of course hoped his book would be met more favorably. Seeing himself as being different from Fliess would thus feed his hope of achieving a better outcome.

There is admittedly no solid basis for this conjecture in Freud's associations, but Freud does go out of his way to mention the dream of Irma's injection. Central to understanding that dream, in my estimation, is an occurrence of disastrous consequences that resulted from Freud yielding to Fliess's opinions in permitting him to operate on Freud's patient, Emma Eckstein. Because of a lack of thoroughness on Fliess's part, Emma nearly died. Seeing Emma regularly could not help but keep the memory of the operation on her nose in Freud's mind, because her face was permanently disfigured as a result (Masson, 1984, p.70).

According to the above analysis, the dream's third thematic plane relates to Freud's decision to temper his desire for Fliess's help out of a concern that Fliess may be unduly critical of his dream book in its current form and that this criticism would have a discouraging effect. Accordingly, given the preponderance of negative associations in this regard, it is not surprising that Freud failed to take Fliess up on his veiled proposal by including the current draft of the book with his March 10th letter. Another thing Freud does is also entirely in line with this analysis: he tests Fliess within the context of his letter by making a series of outlandish theoretical claims, which Fliess could not let go unchallenged if he had any tendency toward being unduly critical:

"Biologically, dream life seems to me to derived entirely from the residues of the prehistoric period of life (between the ages of one and three)—the same period which is the source of the unconscious and alone contains the etiology of all the psychoneuroses, the period normally characterized by an amnesia analogous to hysterical amnesia. This formula suggests itself to me: what is *seen* in the prehistoric period produces dreams; what is *heard* in it produces fantasies; what is *experienced sexually* in it produces the

psychoneuroses. The repetition of what was experienced in that period is in itself the fulfillment of a wish; a recent wish only leads to a dream if it can put itself in connection with material from this prehistoric period, if the recent wish is a derivative of a prehistoric one or can get itself adopted by one. It is still an open question how far I shall be able to adhere to this extreme theory and how far I can expose it to view in the dream book.”

Apparently Fliess passed the test because, as we have seen, on March 15th Freud sent him everything he had.

Conclusion

The theory of normal adult human sleep cycling presented on this website attempts to explain how experiences held in long-term memory continue to influence current behavior. It was assumed that although a concept of reality learned from experience is the basis for current behavior, not all aspects of that reality concept are available for implementation as behavior. Sleep, it was theorized, is concerned with giving temporary prominence to those aspects of a person’s reality concept that are most appropriate to meeting current life demands. Sleep accomplishes such adaptations by means of a process in which many aspects of a person’s life are considered concurrently in a manner that may be thought of as being similar to parallel distributed processing.

Logical implications of this sleep theory with regard to dreaming were explored, and the correctness of these implications was indicated by means of an analysis of Freud’s botanical monograph dream. Here it was shown that the manifest dream is a form of idiosyncratic language designed to permit thought on several simultaneous fronts. Such a language may seem “bizarre” from the point of view of the limited linear form of thought available to waking consciousness, but the detailed examination of Freud’s dream offered here suggests that dreams do not represent a conceptually deficient form of thought.

A minimalist analysis of the botanical monograph dream was offered here, so it should come as no surprise that the psychological import of the dream was not fully indicated. Nevertheless, Freud may be seen as emerging from a difficult period during which virtually every aspect of his pursuit of success was cast into doubt. During the course of his sleep, he successfully fended off these challenges and found grounds for reaching out to Fliess and his wife, to the extent possible, given his generally negative attitudes toward authority figures and women.

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