I

THE SCIENTIFIC LITERATURE ON THE PROBLEMS OF THE DREAM[1]

In the following pages I shall prove that there exists a psychological technique by which dreams may be interpreted, and that upon the application of this method every dream will show itself to be a senseful psychological structure which may be introduced into an assignable place in the psychic activity of the waking state. I shall furthermore endeavour to explain the processes which give rise to the strangeness and obscurity of the dream, and to discover through them the nature of the psychic forces which operate, whether in combination or in opposition, to produce the dream. This accomplished, my investigation will terminate, as it will have reached the point where the problem of the dream meets with broader problems, the solution of which must be attempted through other material.

I must presuppose that the reader is acquainted with the work done by earlier authors as well as with the present status of the dream problem in science, since in the course of this treatise I shall not often have occasion to return to them. For, notwithstanding the effort of several thousand years, little progress has been made in the scientific understanding of dreams. This has been so universally acknowledged by the authors that it seems unnecessary to quote individual opinions. One will find in the writings indexed at the end of this book many stimulating observations and plenty of interesting material for our subject, but little or nothing that concerns the true nature of the

dream or that solves definitively any of its enigmas. Still less of course has been transmitted to the knowledge of the educated laity.

The first book in which the dream is treated as an object of psychology seems to be that of Aristotle[2] (*Concerning Dreams and their Interpretation*). Aristotle asserts that the dream is of demoniacal, though not of divine nature, which indeed contains deep meaning, if it be correctly interpreted. He was also acquainted with some of the characteristics of dream life, *e.g.*, he knew that the dream turns slight sensations perceived during sleep into great ones ("one imagines that one walks through fire and feels hot, if this or that part of the body becomes slightly warmed"), which led him to conclude that dreams might easily betray to the physician the first indications of an incipient change in the body passing unnoticed during the day. I have been unable to go more deeply into the Aristotelian treatise, because of insufficient preparation and lack of skilled assistance.

As everyone knows, the ancients before Aristotle did not consider the dream a product of the dreaming mind, but a divine inspiration, and in ancient times the two antagonistic streams, which one finds throughout in the estimates of dream life, were already noticeable. They distinguished between true and valuable dreams, sent to the dreamer to warn him or to foretell the future, and vain, fraudulent, and empty dreams, the object of which was to misguide or lead him to destruction.[2] This pre-scientific conception of the dream among the ancients was certainly in perfect keeping with their general view of life, which was wont to project as reality in the outer world that which possessed reality only within the mind. It, moreover, accounted for the main impression made upon the waking life by the memory left from the dream in the morning, for in this memory the dream, as compared with the rest of the psychic content, seems something strange, coming, as it were, from another world. It would likewise be wrong to suppose that the theory of the supernatural origin of dreams lacks followers in our own day; for leaving out of consideration all bigoted and mystical authors—who are perfectly justified in adhering to the remnants of the once extensive

realm of the supernatural until they have been swept away by scientific explanation—one meets even sagacious men averse to anything adventurous, who go so far as to base their religious belief in the existence and co-operation of superhuman forces on the inexplicableness of the dream manifestations (Haffner[32]). The validity ascribed to the dream life by some schools of philosophy, *e.g.* the school of Schelling, is a distinct echo of the undisputed divinity of dreams in antiquity, nor is discussion closed on the subject of the mantic or prophetic power of dreams. This is due to the fact that the attempted psychological explanations are too inadequate to overcome the accumulated material, however strongly all those who devote themselves to a scientific mode of thought may feel that such assertions should be repudiated. To write a history of our scientific knowledge of dream problems is so difficult because, however valuable some parts of this knowledge may have been, no progress in definite directions has been discernible. There has been no construction of a foundation of assured results upon which future investigators could continue to build, but every new author takes up the same problems afresh and from the very beginning. Were I to follow the authors in chronological order, and give a review of the opinions each has held concerning the problems of the dream, I should be prevented from drawing a clear and complete picture of the present state of knowledge on the subject. I have therefore preferred to base the treatment upon themes rather than upon the authors, and I shall cite for each problem of the dream the material found in the literature for its solution.

But as I have not succeeded in mastering the entire literature, which is widely disseminated and interwoven with that on other subjects, I must ask my readers to rest content provided no fundamental fact or important viewpoint be lost in my description.

Until recently most authors have been led to treat the subjects of sleep and dream in the same connection, and with them they have also regularly treated analogous states of psychopathology, and other dreamlike states like hallucinations, visions, &c. In the more recent

works, on the other hand, there has been a tendency to keep more closely to the theme, and to take as the subject one single question of the dream life. This change, I believe, is an expression of the conviction that enlightenment and agreement in such obscure matters can only be brought about by a series of detailed investigations. It is such a detailed investigation and one of a special psychological nature, that I would offer here. I have little occasion to study the problem of sleep, as it is essentially a psychological problem, although the change of functional determinations for the mental apparatus must be included in the character of sleep. The literature of sleep will therefore not be considered here.

A scientific interest in the phenomena of dreams as such leads to the following in part interdependent inquiries:

(a) THE RELATION OF THE DREAM TO THE WAKING STATE

The naïve judgment of a person on awakening assumes that the dream—if indeed it does not originate in another world—at any rate has taken the dreamer into another world. The old physiologist, Burdach,[8] to whom we are indebted for a careful and discriminating description of the phenomena of dreams, expressed this conviction in an often-quoted passage, p. 474: "The waking life never repeats itself with its trials and joys, its pleasures and pains, but, on the contrary, the dream aims to relieve us of these. Even when our whole mind is filled with one subject, when profound sorrow has torn our hearts or when a task has claimed the whole power of our mentality, the dream either gives us something entirely strange, or it takes for its combinations only a few elements from reality, or it only enters into the strain of our mood and symbolises reality."

L. Strümpell[66] expresses himself to the same effect in his *Nature and Origin of Dreams* (p. 16), a study which is everywhere justly held in high respect: "He who dreams turns his back upon the world of waking consciousness" (p. 17). "In the dream the memory of the orderly

content of the waking consciousness and its normal behaviour is as good as entirely lost" (p. 19). "The almost complete isolation of the mind in the dream from the regular normal content and course of the waking state…"

But the overwhelming majority of the authors have assumed a contrary view of the relation of the dream to waking life. Thus Haffner[32] (p. 19): "First of all the dream is the continuation of the waking state. Our dreams always unite themselves with those ideas which have shortly before been in our consciousness. Careful examination will nearly always find a thread by which the dream has connected itself with the experience of the previous day." Weygandt[75] (p. 6), flatly contradicts the above cited statement of Burdach: "For it may often be observed, apparently in the great majority of dreams, that they lead us directly back into everyday life, instead of releasing us from it." Maury[48] (p. 56), says in a concise formula: "Nous rêvons de ce que nous avons vu, dit, desiré ou fait." Jessen,[36] in his *Psychology*, published in 1855 (p. 530), is somewhat more explicit: "The content of dreams is more or less determined by the individual personality, by age, sex, station in life, education, habits, and by events and experiences of the whole past life."

The ancients had the same idea about the dependence of the dream content upon life. I cite Radestock[54] (p. 139): "When Xerxes, before his march against Greece, was dissuaded from this resolution by good counsel, but was again and again incited by dreams to undertake it, one of the old rational dream-interpreters of the Persians, Artabanus, told him very appropriately that dream pictures mostly contain that of which one has been thinking while awake."

In the didactic poem of Lucretius, *De Rerum Natura* (IV, v. 959), occurs this passage:—

> "Et quo quisque fere studio devinctus adhaeret,
> aut quibus in rebus multum sumus ante morati
> atque in ea ratione fuit contenta magis mens,
> in somnis eadem plerumque videmur obire;

causidici causas agere et componere leges,
induperatores pugnare ac proelia obire," &c., &c.

Cicero (*De Divinatione*, II) says quite similarly, as does also Maury much later:—

"Maximeque reliquiae earum rerum moventur in animis et agitantur, de quibus vigilantes aut cogitavimus aut egimus."

The contradiction expressed in these two views as to the relation between dream life and waking life seems indeed insoluble. It will therefore not be out of place to mention the description of F. W. Hildebrandt[35] (1875), who believes that the peculiarities of the dream can generally be described only by calling them a "series of contrasts which apparently shade off into contradictions" (p. 8). "The first of these contrasts is formed on the one hand by the strict isolation or seclusion of the dream from true and actual life, and on the other hand by the continuous encroachment of the one upon the other, and the constant dependency of one upon the other. The dream is something absolutely separated from the reality experienced during the waking state; one may call it an existence hermetically sealed up and separated from real life by an unsurmountable chasm. It frees us from reality, extinguishes normal recollection of reality, and places us in another world and in a totally different life, which at bottom has nothing in common with reality…" Hildebrandt then asserts that in falling asleep our whole being, with all its forms of existence, disappears "as through an invisible trap door." In the dream one is perhaps making a voyage to St. Helena in order to offer the imprisoned Napoleon something exquisite in the way of Moselle wine. One is most amicably received by the ex-emperor, and feels almost sorry when the interesting illusion is destroyed on awakening. But let us now compare the situation of the dream with reality. The dreamer has never been a wine merchant, and has no desire to become one. He has never made a sea voyage, and St. Helena is the last place he would take as destination for such a voyage. The dreamer entertains no sympathetic feeling for Napoleon, but on the

contrary a strong patriotic hatred. And finally the dreamer was not yet among the living when Napoleon died on the island; so that it was beyond the reach of possibility for him to have had any personal relations with Napoleon. The dream experience thus appears as something strange, inserted between two perfectly harmonising and succeeding periods.

"Nevertheless," continues Hildebrandt, "the opposite is seemingly just as true and correct. I believe that hand in hand with this seclusion and isolation there can still exist the most intimate relation and connection. We may justly say that no matter what the dream offers, it finds its material in reality and in the psychic life arrayed around this reality. However strange the dream may seem, it can never detach itself from reality, and its most sublime as well as its most farcical structures must always borrow their elementary material either from what we have seen with our eyes in the outer world, or from what has previously found a place somewhere in our waking thoughts; in other words, it must be taken from what we had already experienced either objectively or subjectively."

(b) THE MATERIAL OF THE DREAM—MEMORY IN THE DREAM

That all the material composing the content of the dream in some way originates in experience, that it is reproduced in the dream, or recalled,—this at least may be taken as an indisputable truth. Yet it would be wrong to assume that such connection between dream content and reality will be readily disclosed as an obvious product of the instituted comparison. On the contrary, the connection must be carefully sought, and in many cases it succeeds in eluding discovery for a long time. The reason for this is to be found in a number of peculiarities evinced by the memory in dreams, which, though universally known, have hitherto entirely eluded explanation. It will be worthwhile to investigate exhaustively these characteristics.

It often happens that matter appears in the dream content which one cannot recognise later in the waking state as belonging to one's knowledge and experience. One remembers well enough having dreamed about the subject in question, but cannot recall the fact or time of the experience. The dreamer is therefore in the dark as to the source from which the dream has been drawing, and is even tempted to believe an independently productive activity on the part of the dream, until, often long afterwards, a new episode brings back to recollection a former experience given up as lost, and thus reveals the source of the dream. One is thus forced to admit that something has been known and remembered in the dream that has been withdrawn from memory during the waking state.

Delbœuf[16] narrates from his own experience an especially impressive example of this kind. He saw in his dream the courtyard of his house covered with snow, and found two little lizards half-frozen and buried in the snow. Being a lover of animals, he picked them up, warmed them, and put them back into a crevice in the wall which was reserved for them. He also gave them some small fern leaves that had been growing on the wall, which he knew they were fond of. In the dream he knew the name of the plant: *Asplenium ruta muralis*. The dream then continued, returning after a digression to the lizards, and to his astonishment Delbœuf saw two other little animals falling upon what was left of the ferns. On turning his eyes to the open field he saw a fifth and a sixth lizard running into the hole in the wall, and finally the street was covered with a procession of lizards, all wandering in the same direction, &c.

In his waking state Delbœuf knew only a few Latin names of plants, and nothing of the Asplenium. To his great surprise he became convinced that a fern of this name really existed and that the correct name was *Asplenium ruta muraria*, which the dream had slightly disfigured. An accidental coincidence could hardly be considered, but it remained a mystery for Delbœuf whence he got his knowledge of the name Asplenium in the dream.

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The dream occurred in 1862. Sixteen years later, while at the house of one of his friends, the philosopher noticed a small album containing dried plants resembling the albums that are sold as souvenirs to visitors in many parts of Switzerland. A sudden recollection occurred to him; he opened the herbarium, and discovered therein the Asplenium of his dream, and recognised his own handwriting in the accompanying Latin name. The connection could now be traced. While on her wedding trip, a sister of this friend visited Delbœuf in 1860—two years prior to the lizard dream. She had with her at the time this album, which was intended for her brother, and Delbœuf took the trouble to write, at the dictation of a botanist, under each of the dried plants the Latin name.

The favourable accident which made possible the report of this valuable example also permitted Delbœuf to trace another portion of this dream to its forgotten source. One day in 1877 he came upon an old volume of an illustrated journal, in which he found pictured the whole procession of lizards just as he had dreamed it in 1862. The volume bore the date of 1861, and Delbœuf could recall that he had subscribed to the journal from its first appearance.

That the dream has at its disposal recollections which are inaccessible to the waking state is such a remarkable and theoretically important fact that I should like to urge more attention to it by reporting several other "Hypermnesic Dreams." Maury[48] relates that for some time the word Mussidan used to occur to his mind during the day. He knew it to be the name of a French city, but nothing else. One night he dreamed of a conversation with a certain person who told him that she came from Mussidan, and, in answer to his question where the city was, she replied: "Mussidan is a principal country town in the Département de La Dordogne." On waking, Maury put no faith in the information received in his dream; the geographical lexicon, however, showed it to be perfectly correct. In this case the superior knowledge of the dream is confirmed, but the forgotten source of this knowledge has not been traced.

Jessen[36] tells (p. 55) of a quite similar dream occurrence, from more remote times. "Among others we may here mention the dream of the elder Scaliger (Hennings, *l.c.*, p. 300), who wrote a poem in praise of celebrated men of Verona, and to whom a man, named Brugnolus, appeared in a dream, complaining that he had been neglected. Though Scaliger did not recall ever having heard of him, he wrote some verses in his honour, and his son later discovered at Verona that a Brugnolus had formerly been famous there as a critic.

Myers is said to have published a whole collection of such hypermnesic dreams in the *Proceedings of the Society for Psychical Research*, which are unfortunately inaccessible to me. I believe every one who occupies himself with dreams will recognise as a very common phenomenon the fact that the dream gives proof of knowing and recollecting matters unknown to the waking person. In my psychoanalytic investigations of nervous patients, of which I shall speak later, I am every week more than once in position to convince my patients from their dreams that they are well acquainted with quotations, obscene expressions, &c., and that they make use of these in their dreams, although they have forgotten them in the waking state. I shall cite here a simple case of dream hypermnesia because it was easy to trace the source which made the knowledge accessible to the dream.

A patient dreamed in a lengthy connection that he ordered a "Kontuszówka" in a café, and after reporting this inquired what it might mean, as he never heard the name before. I was able to answer that Kontuszówka was a Polish liquor which he could not have invented in his dream, as the name had long been familiar to me in advertisements. The patient would not at first believe me, but some days later, after he had realised his dream of the café, he noticed the name on a signboard at the street corner, which he had been obliged to pass for months at least twice a day.

I have learned from my own dreams how largely the discovery of the origin of some of the dream elements depends on accident. Thus, for years before writing this book, I was haunted by the picture of a very simply formed church tower which I could not

recall having seen. I then suddenly recognised it with absolute certainty at a small station between Salzburg and Reichenhall. This was in the later nineties, and I had travelled over the road for the first time in the year 1886. In later years, when I was already busily engaged in the study of dreams, I was quite annoyed at the frequent recurrence of the dream picture of a certain peculiar locality. I saw it in definite local relation to my person—to my left, a dark space from which many grotesque sandstone figures stood out. A glimmer of recollection, which I did not quite credit, told me it was the entrance to a beer-cellar, but I could explain neither the meaning nor the origin of this dream picture. In 1907 I came by chance to Padua, which, to my regret, I had been unable to visit since 1895. My first visit to this beautiful university city was unsatisfactory; I was unable to see Giotto's frescoes in the church of the Madonna dell' Arena, and on my way there turned back on being informed that the little church was closed on the day. On my second visit, twelve years later, I thought of compensating myself for this, and before everything else I started out for Madonna dell' Arena. On the street leading to it, on my left, probably at the place where I had turned in 1895, I discovered the locality which I had so often seen in the dream, with its sandstone figures. It was in fact the entrance to a restaurant garden.

One of the sources from which the dream draws material for reproduction—material which in part is not recalled or employed in waking thought—is to be found in childhood. I shall merely cite some of the authors who have observed and emphasized this.

Hildebrandt[35] (p. 23): "It has already been expressly admitted that the dream sometimes brings back to the mind with wonderful reproductive ability remote and even forgotten experiences from the earliest periods."

Strümpell[66] (p. 40): "The subject becomes more interesting when we remember how the dream sometimes brings forth, as it were, from among the deepest and heaviest strata which later years have piled upon the earliest childhood experiences, the pictures of certain places, things, and persons, quite uninjured and with their

original freshness. This is not limited merely to such impressions as have gained vivid consciousness during their origin or have become impressed with strong psychic validity, and then later return in the dream as actual reminiscences, causing pleasure to the awakened consciousness. On the contrary, the depths of the dream memory comprise also such pictures of persons, things, places, and early experiences as either possessed but little consciousness and no psychic value at all, or have long ago lost both, and therefore appear totally strange and unknown both in the dream and in the waking state, until their former origin is revealed."

Volkelt[72] (p. 119): "It is essentially noteworthy how easily infantile and youthful reminiscences enter into the dream. What we have long ceased to think about, what has long since lost for us all importance, is constantly recalled by the dream."

The sway of the dream over the infantile material, which, as is well known, mostly occupies the gaps in the conscious memory, causes the origin of interesting hypermnestic dreams, a few of which I shall here report. Maury[48] relates (p. 92) that as a child he often went from his native city, Meaux, to the neighbouring Trilport, where his father superintended the construction of a bridge. On a certain night a dream transported him to Trilport, and he was again playing in the city streets. A man approached him wearing some sort of uniform. Maury asked him his name, and he introduced himself, saying that his name was C——, and that he was a bridge guard. On waking, Maury, who still doubted the reality of the reminiscence, asked his old servant, who had been with him in his childhood, whether she remembered a man of this name. "Certainly," was the answer, "he used to be watchman on the bridge which your father was building at that time."

Maury reports another example demonstrating just as nicely the reliability of infantile reminiscences appearing in dreams. Mr. F——, who had lived as a child in Montbrison, decided to visit his home and old friends of his family after an absence of twenty-five years. The night before his departure he dreamt that he had reached

his destination, and that he met near Montbrison a man, whom he did not know by sight, who told him he was Mr. F., a friend of his father. The dreamer remembered that as a child he had known a gentleman of this name, but on waking he could no longer recall his features. Several days later, having really arrived at Montbrison, he found the supposedly unknown locality of his dream, and there met a man whom he at once recognised as the Mr. F. of his dream. The real person was only older than the one in the dream picture.

I may here relate one of my own dreams in which the remembered impression is replaced by an association. In my dream I saw a person whom I recognised, while dreaming, as the physician of my native town. The features were indistinct and confused with the picture of one of my colleague teachers, whom I still see occasionally. What association there was between the two persons I could not discover on awakening. But upon questioning my mother about the physician of my early childhood, I discovered that he was a one-eyed man. My teacher, whose figure concealed that of the physician in the dream, was also one-eyed. I have not seen the physician for thirty-eight years, and I have not to my knowledge thought of him in my waking state, although a scar on my chin might have reminded me of his help.

As if to counterbalance the immense rôle ascribed to the infantile impressions in the dream, many authors assert that the majority of dreams show elements from the most recent time. Thus Robert[55] (p. 46) declares that the normal dream generally occupies itself only with the impressions of the recent days. We learn indeed that the theory of the dream advanced by Robert imperatively demands that the old impressions should be pushed back, and the recent ones brought to the front. Nevertheless the fact claimed by Robert really exists; I can confirm this from my own investigations. Nelson,[50] an American author, thinks that the impressions most frequently found in the dream date from two or three days before, as if the impressions of the day immediately preceding the dream were not sufficiently weakened and remote.

Many authors who are convinced of the intimate connection between the dream content and the waking state are impressed by the fact that impressions which have intensely occupied the waking mind appear in the dream only after they have been to some extent pushed aside from the elaboration of the waking thought. Thus, as a rule, we do not dream of a dead beloved person while we are still overwhelmed with sorrow. Still Miss Hallam,[33] one of the latest observers, has collected examples showing the very opposite behaviour, and claims for the point the right of individual psychology.

The third and the most remarkable and incomprehensible peculiarity of the memory in dreams, is shown in the selection of the reproduced material, for stress is laid not only on the most significant, but also on the most indifferent and superficial reminiscences. On this point I shall quote those authors who have expressed their surprise in the most emphatic manner.

Hildebrandt[35] (p. 11): "For it is a remarkable fact that dreams do not, as a rule, take their elements from great and deep-rooted events or from the powerful and urgent interests of the preceding day, but from unimportant matters, from the most worthless fragments of recent experience or of a more remote past. The most shocking death in our family, the impressions of which keep us awake long into the night, becomes obliterated from our memories, until the first moment of awakening brings it back to us with depressing force. On the other hand, the wart on the forehead of a passing stranger, of whom we did not think for a second after he was out of sight, plays its part in our dreams."

Strümpell[66] (p. 39): "…such cases where the analysis of a dream brings to light elements which, although derived from events of the previous day or the day before the last, yet prove to be so unimportant and worthless for the waking state that they merge into forgetfulness shortly after coming to light. Such occurrences may be statements of others heard accidentally or actions superficially observed, or fleeting perceptions of things or persons, or single phrases from books, &c."

CHAPTER I

Havelock Ellis[23] (p. 727): "The profound emotions of waking life, the questions and problems on which we spread our chief voluntary mental energy, are not those which usually present themselves at once to dream-consciousness. It is, so far as the immediate past is concerned, mostly the trifling, the incidental, the "forgotten" impressions of daily life which reappear in our dreams. The psychic activities that are awake most intensely are those that sleep most profoundly."

Binz[4] (p. 45) takes occasion from the above-mentioned characteristics of the memory in dreams to express his dissatisfaction with explanations of dreams which he himself has approved of: "And the normal dream raises similar questions. Why do we not always dream of memory impressions from the preceding days, instead of going back to the almost forgotten past lying far behind us without any perceptible reason? Why in a dream does consciousness so often revive the impression of indifferent memory pictures while the cerebral cells bearing the most sensitive records of experience remain for the most part inert and numb, unless an acute revival during the waking state has shortly before excited them?"

We can readily understand how the strange preference of the dream memory for the indifferent and hence the unnoticed details of daily experience must usually lead us to overlook altogether the dependence of the dream on the waking state, or at least make it difficult to prove this dependence in any individual case. It thus happened that in the statistical treatment of her own and her friend's dreams, Miss Whiton Calkins[12] found 11 per cent. of the entire number that showed no relation to the waking state. Hildebrandt was certainly correct in his assertion that all our dream pictures could be genetically explained if we devoted enough time and material to the tracing of their origin. To be sure, he calls this "a most tedious and thankless job." For it would at most lead us to ferret out all kinds of quite worthless psychic material from the most remote corners of the memory chamber, and to bring to light some very indifferent moments from the remote past which were perhaps buried the next hour after their appearance." I must, however, express my regret

that this discerning author refrained from following the road whose beginning looked so unpromising; it would have led him directly to the centre of the dream problem.

The behaviour of the memory in dreams is surely most significant for every theory of memory in general. It teaches us that "nothing which we have once psychically possessed is ever entirely lost" (Scholz[59]); or as Delbœuf puts it, "que toute impression même la plus insignifiante, laisse une trace inaltérable, indéfiniment susceptible de reparaître au jour," a conclusion to which we are urged by so many of the other pathological manifestations of the psychic life. Let us now bear in mind this extraordinary capability of the memory in the dream, in order to perceive vividly the contradictions which must be advanced in certain dream theories to be mentioned later, when they endeavour to explain the absurdities and incoherence of dreams through a partial forgetting of what we have known during the day.

One might even think of reducing the phenomenon of dreaming to that of memory, and of regarding the dream as the manifestation of an activity of reproduction which does not rest even at night, and which is an end in itself. Views like those expressed by Pilcz[51] would corroborate this, according to which intimate relations are demonstrable between the time of dreaming and the contents of the dream from the fact that the impressions reproduced by the dream in sound sleep belong to the remotest past while those reproduced towards morning are of recent origin. But such a conception is rendered improbable from the outset by the manner of the dream's behaviour towards the material to be remembered. Strümpell[66] justly calls our attention to the fact that repetitions of experiences do not occur in the dream. To be sure the dream makes an effort in that direction, but the next link is wanting, or appears in changed form, or it is replaced by something entirely novel. The dream shows only fragments of reproduction; this is so often the rule that it admits of theoretical application. Still there are

exceptions in which the dream repeats an episode as thoroughly as our memory would in its waking state. Delbœuf tells of one of his university colleagues who in his dream repeated, with all its details, a dangerous wagon ride in which he escaped accident as if by miracle. Miss Calkins[12] mentions two dreams, the contents of which exactly reproduced incidents from the day before, and I shall later take occasion to report an example which came to my notice, showing a childish experience which returned unchanged in a dream.[3]

(c) DREAM STIMULI AND DREAM SOURCES

What is meant by dream stimuli and dream sources may be explained by referring to the popular saying, "Dreams come from the stomach." This notion conceals a theory which conceives the dream as a result of a disturbance of sleep. We should not have dreamed if some disturbing element had not arisen in sleep, and the dream is the reaction from this disturbance. The discussion of the exciting causes of dreams takes up the most space in the descriptions of the authors. That this problem could appear only after the dream had become an object of biological investigation is self-evident. The ancients who conceived the dream as a divine inspiration had no need of looking for its exciting source; to them the dream resulted from the will of the divine or demoniacal powers, and its content was the product of their knowledge or intention. Science, however, soon raised the question whether the stimulus to the dream is always the same, or whether it might be manifold, and thus led to the question whether the causal explanation of the dream belongs to psychology or rather to physiology. Most authors seem to assume that the causes of the disturbance of sleep, and hence the sources of the dream, might be of various natures, and that physical as well as mental irritations might assume the rôle of dream inciters. Opinions differ greatly in preferring this or that one of the dream sources, in ranking them, and indeed as to their importance for the origin of dreams.

Wherever the enumeration of dream sources is complete we ultimately find four forms, which are also utilised for the division of dreams:—

I. External (objective) sensory stimuli.
II. Internal (subjective) sensory stimuli.
III. Internal (organic) physical excitations.
IV. Purely psychical exciting sources.

I. The External Sensory Stimuli

The younger Strümpell, son of the philosopher whose writings on the subject have already more than once served us as a guide in the problem of dreams, has, as is well known, reported his observations on a patient who was afflicted with general anaesthesia of the skin and with paralysis of several of the higher sensory organs. This man merged into sleep when his few remaining sensory paths from the outer world were shut off. When we wish to sleep we are wont to strive for a situation resembling the one in Strümpell's experiment. We close the most important sensory paths, the eyes, and we endeavour to keep away from the other senses every stimulus and every change of the stimuli acting upon them. We then fall asleep, although we are never perfectly successful in our preparations. We can neither keep the stimuli away from the sensory organs altogether, nor can we fully extinguish the irritability of the sensory organs. That we may at any time be awakened by stronger stimuli should prove to us "that the mind has remained in constant communication with the material world even during sleep." The sensory stimuli which reach us during sleep may easily become the source of dreams.

There are a great many stimuli of such nature, ranging from those that are unavoidable, being brought on by the sleeping state or at least occasionally induced by it, to the accidental waking stimuli which are adapted or calculated to put an end to sleep. Thus a strong light may force itself into the eyes, a noise may become perceptible,

or some odoriferous matter may irritate the mucous membrane of the nose. In the spontaneous movements of sleep we may lay bare parts of the body and thus expose them to a sensation of cold, or through change of position we may produce sensations of pressure and touch. A fly may bite us, or a slight accident at night may simultaneously attack more than one sense. Observers have called attention to a whole series of dreams in which the stimulus verified on waking, and a part of the dream content corresponded to such a degree that the stimulus could be recognised as the source of the dream.

I shall here cite a number of such dreams collected by Jessen[36] (p. 527), traceable to more or less accidental objective sensory stimuli. "Every indistinctly perceived noise gives rise to corresponding dream pictures; the rolling of thunder takes us into the thick of battle, the crowing of a cock may be transformed into human shrieks of terror, and the creaking of a door may conjure up dreams of burglars breaking into the house. When one of our blankets slips off at night we may dream that we are walking about naked or falling into the water. If we lie diagonally across the bed with our feet extending beyond the edge, we may dream of standing on the brink of a terrifying precipice, or of falling from a steep height. Should our head accidentally get under the pillow we may then imagine a big rock hanging over us and about to crush us under its weight. Accumulation of semen produces voluptuous dreams, and local pain the idea of suffering ill treatment, of hostile attacks, or of accidental bodily injuries."

"Meier (*Versuch einer Erklärung des Nachtwandelns*, Halle, 1758, p. 33), once dreamed of being assaulted by several persons who threw him flat on the ground and drove a stake into the ground between his big and second toes. While imagining this in his dream he suddenly awoke and felt a blade of straw sticking between his toes. The same author, according to Hemmings (*Von den Traumen und Nachtwandeln*, Weimar, 1784, p. 258) dreamed on another occasion that he was being hanged when his shirt was pinned somewhat tight around his neck. Hauffbauer dreamed in his youth of having fallen from a high

wall and found upon waking that the bedstead had come apart, and that he had actually fallen to the floor….Gregory relates that he once applied a hot-water bottle to his feet, and dreamed of taking a trip to the summit of Mount Ætna, where he found the heat on the ground almost unbearable. After having applied a blistering plaster to his head, a second man dreamed of being scalped by Indians; a third, whose shirt was damp, dreamed of being dragged through a stream. An attack of gout caused the patient to believe that he was in the hands of the Inquisition, and suffering pains of torture (Macnish)."

The argument based upon the resemblance between stimulus and dream content is reinforced if through a systematic induction of stimuli we succeed in producing dreams corresponding to the stimuli. According to Macnish such experiments have already been made by Giron de Buzareingues. "He left his knee exposed and dreamed of travelling in a mail coach at night. He remarked in this connection that travellers would well know how cold the knees become in a coach at night. Another time he left the back of his head uncovered, and dreamed of taking part in a religious ceremony in the open air. In the country where he lived it was customary to keep the head always covered except on such occasions."

Maury[48] reports new observations on dreams produced in himself. (A number of other attempts produced no results.)

1. He was tickled with a feather on his lips and on the tip of his nose. He dreamed of awful torture, viz. that a mask of pitch was stuck to his face and then forcibly torn off, taking the skin with it.

2. Scissors were sharpened on pincers. He heard bells ringing, then sounds of alarm which took him back to the June days of 1848.

3. Cologne water was put on his nose. He found himself in Cairo in the shop of John Maria Farina. This was followed by mad adventures which he was unable to reproduce.

4. His neck was lightly pinched. He dreamed that a blistering plaster was put on him, and thought of a doctor who treated him in his childhood.

5. A hot iron was brought near his face. He dreamed that *chauffeurs*[4] broke into the house and forced the occupants to give up their money by sticking their feet into burning coals. The Duchess of Abrantés, whose secretary he imagined himself in the dream, then entered.

6. A drop of water was let fall on his forehead. He imagined himself in Italy perspiring heavily and drinking white wine of Orvieto.

7. When a burning candle was repeatedly focussed on him through red paper, he dreamed of the weather, of heat, and of a storm at sea which he once experienced in the English Channel.

D'Hervey,[34] Weygandt,[75] and others have made other attempts to produce dreams experimentally.

Many have observed the striking skill of the dream in interweaving into its structure sudden impressions from the outer world in such a manner as to present a gradually prepared and initiated catastrophe (Hildebrandt)[35]. "In former years," this author relates, "I occasionally made use of an alarm clock in order to wake regularly at a certain hour in the morning. It probably happened hundreds of times that the sound of this instrument fitted into an apparently very long and connected dream, as if the entire dream had been especially designed for it, as if it found in this sound its appropriate and logically indispensable point, its inevitable issue."

I shall cite three of these alarm-clock dreams for another purpose.

Volkelt (p. 68) relates: "A composer once dreamed that he was teaching school, and was just explaining something to his pupils. He had almost finished when he turned to one of the boys with the question: 'Did you understand me?' The boy cried out like one possessed 'Ya.' Annoyed at this, he reprimanded him for shouting. But now the entire class was screaming 'Orya,' then 'Euryo,' and finally 'Feueryo.' He was now aroused by an actual alarm of fire in the street."

Garnier (*Traité des Facultés de l' Âme,* 1865), reported by Radestock,[54] relates that Napoleon I., while sleeping in a carriage,

was awakened from a dream by an explosion which brought back to him the crossing of the Tagliamento and the bombarding of the Austrians, so that he started up crying, "We are undermined!"

The following dream of Maury[48] has become celebrated. He was sick, and remained in bed; his mother sat beside him. He then dreamed of the reign of terror at the time of the Revolution. He took part in terrible scenes of murder, and finally he himself was summoned before the Tribunal. There he saw Robespierre, Marat, Fouquier-Tinville, and all the sorry heroes of that cruel epoch; he had to give an account of himself, and, after all sort of incidents which did not fix themselves in his memory, he was sentenced to death. Accompanied by an enormous crowd, he was led to the place of execution. He mounted the scaffold, the executioner tied him to the board, it tipped, and the knife of the guillotine fell. He felt his head severed from the trunk, and awakened in terrible anxiety, only to find that the top piece of the bed had fallen down, and had actually struck his cervical vertebra in the same manner as the knife of a guillotine.

This dream gave rise to an interesting discussion introduced by Le Lorrain[45] and Egger[20] in the *Revue Philosophique*. The question was whether, and how, it was possible for the dreamer to crowd together an amount of dream content apparently so large in the short space of time elapsing between the perception of the waking stimulus and the awakening.

Examples of this nature make it appear that the objective stimuli during sleep are the most firmly established of all the dream sources; indeed, it is the only stimulus which plays any part in the layman's knowledge. If we ask an educated person, who is, however, unacquainted with the literature of dreams, how dreams originate, he is sure to answer by referring to a case familiar to him in which a dream has been explained after waking by a recognised objective stimulus. Scientific investigation cannot, however, stop here, but is incited to further research by the observation that the stimulus influencing the senses during sleep does not appear in the dream at all in its true

form, but is replaced by some other presentation which is in some way related to it. But the relation existing between the stimulus and the result of the dream is, according to Maury,[47] "une affinité quelconque mais qui n'est pas unique et exclusive" (p. 72). If we read, *e.g.*, three of Hildebrandt's "Alarm Clock Dreams," we will then have to inquire why the same stimulus evoked so many different results, and why just these results and no others.

(P. 37). "I am taking a walk on a beautiful spring morning. I saunter through the green fields to a neighbouring village, where I see the natives going to church in great numbers, wearing their holiday attire and carrying their hymn-books under their arms. I remember that it is Sunday, and that the morning service will soon begin. I decide to attend it, but as I am somewhat overheated I also decide to cool off in the cemetery surrounding the church. While reading the various epitaphs, I hear the sexton ascend the tower and see the small village bell in the cupola which is about to give signal for the beginning of the devotions. For another short while it hangs motionless, then it begins to swing, and suddenly its notes resound so clearly and penetratingly that my sleep comes to an end. But the sound of bells comes from the alarm clock."

"A second combination. It is a clear day, the streets are covered with deep snow. I have promised to take part in a sleigh-ride, but have had to wait for some time before it was announced that the sleigh is in front of my house. The preparations for getting into the sleigh are now made. I put on my furs and adjust my muff, and at last I am in my place. But the departure is still delayed, until the reins give the impatient horses the perceptible sign. They start, and the sleigh bells, now forcibly shaken, begin their familiar janizary music with a force that instantly tears the gossamer of my dream. Again it is only the shrill sound of my alarm clock."

Still a third example. "I see the kitchen-maid walk along the corridor to the dining-room with several dozen plates piled up. The porcelain column in her arms seems to me to be in danger of losing its equilibrium. 'Take care,' I exclaim, 'you will drop the whole pile.'

The usual retort is naturally not wanting—that she is used to such things. Meanwhile I continue to follow her with my worried glance, and behold! at the door-step the fragile dishes fall, tumble, and roll across the floor in hundreds of pieces. But I soon notice that the noise continuing endlessly is not really a rattling but a true ringing, and with this ringing the dreamer now becomes aware that the alarm clock has done its duty."

The question why the dreaming mind misjudges the nature of the objective sensory stimulus has been answered by Strümpell,[66] and almost identically by Wundt,[76] to the effect that the reaction of the mind to the attacking stimuli in sleep is determined by the formation of illusions. A sensory impression is recognised by us and correctly interpreted, *i.e.* it is classed with the memory group to which it belongs according to all previous experience, if the impression is strong, clear, and long enough, and if we have the necessary time at our disposal for this reflection. If these conditions are not fulfilled, we mistake the objects which give rise to the impression, and on its basis we form an illusion. "If one takes a walk in an open field and perceives indistinctly a distant object, it may happen that he will at first take it for a horse." On closer inspection the image of a cow resting may obtrude itself, and the presentation may finally resolve itself with certainty into a group of people sitting. The impressions which the mind receives during sleep through outer stimuli are of a similar indistinct nature; they give rise to illusions because the impression evokes a greater or lesser number of memory pictures through which the impression receives its psychic value. In which of the many spheres of memory to be taken into consideration the corresponding pictures are aroused, and which of the possible association connections thereby come into force, this, even according to Strümpell, remains indeterminable, and is left, as it were, to the caprice of the psychic life.

We may here take our choice. We may admit that the laws of the dream formation cannot really be traced any further, and therefore refrain from asking whether or not the interpretation of the

illusion evoked by the sensory impression depends upon still other conditions; or we may suppose that the objective sensory stimulus encroaching upon sleep plays only a modest part as a dream source, and that other factors determine the choice of the memory picture to be evoked. Indeed, on carefully examining Maury's experimentally produced dreams, which I have purposely reported in detail, one is apt to think that the experiment really explains the origin of only one of the dream elements, and that the rest of the dream content appears in fact too independent, too much determined in detail, to be explained by the one demand, viz. that it must agree with the element experimentally introduced. Indeed one even begins to doubt the illusion theory, and the power of the objective impression to form the dream, when one learns that this impression at times experiences the most peculiar and far-fetched interpretations during the sleeping state. Thus B. M. Simon[63] tells of a dream in which he saw persons of gigantic stature[5] seated at a table, and heard distinctly the awful rattling produced by the impact of their jaws while chewing. On waking he heard the clacking of the hoofs of a horse galloping past his window. If the noise of the horse's hoofs had recalled ideas from the memory sphere of "Gulliver's Travels," the sojourn with the giants of Brobdingnag and the virtuous horse-creatures—as I should perhaps interpret it without any assistance on the author's part—should not the choice of a memory sphere so uncommon for the stimulus have some further illumination from other motives?

II. Internal (Subjective) Sensory Stimuli

Notwithstanding all objections to the contrary, we must admit that the rôle of the objective sensory stimuli as a producer of dreams has been indisputably established, and if these stimuli seem perhaps insufficient in their nature and frequency to explain all dream pictures, we are then directed to look for other dream sources acting in an analogous manner. I do not know where the idea originated that along with the outer sensory stimuli the inner (subjective)

stimuli should also be considered, but as a matter of fact this is done more or less fully in all the more recent descriptions of the etiology of dreams. "An important part is played in dream illusions," says Wundt[36] (p. 363), "by those subjective sensations of seeing and hearing which are familiar to us in the waking state as a luminous chaos in the dark field of vision, ringing, buzzing, &c., of the ears, and especially irritation of the retina. This explains the remarkable tendency of the dream to delude the eyes with numbers of similar or identical objects. Thus we see spread before our eyes numberless birds, butterflies, fishes, coloured beads, flowers, &c. Here the luminous dust in the dark field of vision has taken on phantastic figures, and the many luminous points of which it consists are embodied by the dream in as many single pictures, which are looked upon as moving objects owing to the mobility of the luminous chaos. This is also the root of the great fondness of the dream for the most complex animal figures, the multiplicity of forms readily following the form of the subjective light pictures."

The subjective sensory stimuli as a source of the dream have the obvious advantage that unlike the objective stimuli they are independent of external accidents. They are, so to speak, at the disposal of the explanation as often as it needs them. They are, however, in so far inferior to the objective sensory stimuli that the rôle of dream inciter, which observation and experiment have proven for the latter, can be verified in their case only with difficulty or not at all. The main proof for the dream-inciting power of subjective sensory excitements is offered by the so-called hypnogogic hallucinations, which have been described by John Müller as "phantastic visual manifestations." They are those very vivid and changeable pictures which occur regularly in many people during the period of falling asleep, and which may remain for awhile even after the eyes have been opened. Maury,[48] who was considerably troubled by them, subjected them to a thorough study, and maintained that they are related to or rather identical with dream pictures—this has already been asserted by John Müller. Maury states that a certain psychic

passivity is necessary for their origin; it requires a relaxation of the tension of attention (p. 59). But in any ordinary disposition a hypnogogic hallucination may be produced by merging for a second into such lethargy, after which one perhaps awakens until this oft-repeated process terminates in sleep. According to Maury, if one awakens shortly thereafter, it is often possible to demonstrate the same pictures in the dream which one has perceived as hypnogogic hallucinations before falling asleep (p. 134). Thus it once happened to Maury with a group of pictures of grotesque figures, with distorted features and strange headdresses, which obtruded themselves upon him with incredible importunity during the period of falling asleep, and which he recalled having dreamed upon awakening. On another occasion, while suffering from hunger, because he kept himself on a rather strict diet, he saw hypnogogically a plate and a hand armed with a fork taking some food from the plate. In his dream he found himself at a table abundantly supplied with food, and heard the rattle made by the diners with their forks. On still another occasion, after falling asleep with irritated and painful eyes, he had the hypnogogic hallucination of seeing microscopically small characters which he was forced to decipher one by one with great exertion; having been awakened from his sleep an hour later, he recalled a dream in which there was an open book with very small letters, which he was obliged to read through with laborious effort.

Just as in the case of these pictures, auditory hallucinations of words, names, &c., may also appear hypnogogically, and then repeat themselves in the dream, like an overture announcing the principal motive of the opera which is to follow.

A more recent observer of hypnogogic hallucinations, G. Trumbull Ladd,[40] takes the same path pursued by John Müller and Maury. By dint of practice he succeeded in acquiring the faculty of suddenly arousing himself, without opening his eyes, two to five minutes after having gradually fallen asleep, which gave him opportunity to compare the sensations of the retina just vanishing with the dream pictures remaining in his memory. He assures us that an intimate

relation between the two can always be recognised, in the sense that the luminous dots and lines of the spontaneous light of the retina produced, so to speak, the sketched outline or scheme for the psychically perceived dream figures. A dream, *e.g.*, in which he saw in front of him clearly printed lines which he read and studied, corresponded to an arrangement of the luminous dots and lines in the retina in parallel lines, or, to express it in his own words: "The clearly printed page, which he was reading in the dream, resolved itself into an object which appeared to his waking perception like part of an actual printed sheet looked at through a little hole in a piece of paper, from too great a distance to be made out distinctly." Without in any way under-estimating the central part of the phenomenon, Ladd believes that hardly any visual dream occurs in our minds that is not based on material furnished by this inner condition of stimulation in the retina. This is particularly true of dreams occurring shortly after falling asleep in a dark room, while dreams occurring in the morning near the period of awakening receive their stimulation from the objective light penetrating the eye from the lightened room. The shifting and endlessly variable character of the spontaneous luminous excitation of the retina corresponds exactly to the fitful succession of pictures presented to us in our dreams. If we attach any importance to Ladd's observations, we cannot underrate the productiveness of this subjective source of excitation for the dream; for visual pictures apparently form the principal constituent of our dreams. The share furnished from the spheres of the other senses, beside the sense of hearing, is more insignificant and inconstant.

III. Internal (Organic) Physical Excitation

If we are disposed to seek dream sources not outside, but inside, the organism, we must remember that almost all our internal organs, which in their healthy state hardly remind us of their existence, may, in states of excitation—as we call them—or in disease, become for us a source of the most painful sensations, which must be put on

an equality with the external excitants of the pain and sensory stimuli. It is on the strength of very old experience that, *e.g.*, Strümpell[66] declares that "during sleep the mind becomes far more deeply and broadly conscious of its connection with the body than in the waking state, and it is compelled to receive and be influenced by stimulating impressions originating in parts and changes of the body of which it is unconscious in the waking state." Even Aristotle[1] declares it quite possible that the dream should draw our attention to incipient morbid conditions which we have not noticed at all in the waking state (owing to the exaggeration given by the dream to the impressions; and some medical authors, who were certainly far from believing in any prophetic power of the dream, have admitted this significance of the dream at least for the foretelling of disease. (Compare M. Simon, p. 31, and many older authors.)

Even in our times there seems to be no lack of authenticated examples of such diagnostic performances on the part of the dream. Thus Tissié[68] cites from Artigues (*Essai sur la Valeur séméiologique des Réves*), the history of a woman of forty-three years, who, during several years of apparently perfect health, was troubled with anxiety dreams, and in whom medical examination later disclosed an incipient affection of the heart to which she soon succumbed.

Serious disturbances of the internal organs apparently act as inciters of dreams in a considerable number of persons. Attention is quite generally called to the frequency of anxiety dreams in the diseases of the heart and lungs; indeed this relation of the dream life is placed so conspicuously in the foreground by many authors that I shall here content myself with a mere reference to the literature. (Radestock,[54] Spitta,[64] Maury, M. Simon, Tissié.) Tissié even assumes that the diseased organs impress upon the dream content their characteristic features. The dreams of persons suffering from diseases of the heart are generally very brief and terminate in a terrified awakening; the situation of death under terrible circumstances almost always plays a part in their content. Those suffering from diseases of the lungs dream of suffocation, of being crowded, and of

flight, and a great many of them are subject to the well-known nightmare, which, by the way, Boerner has succeeded in producing experimentally by lying on the face and closing up the openings of the respiratory organs. In digestive disturbances the dream contains ideas from the sphere of enjoyment and disgust. Finally, the influence of sexual excitement on the dream content is perceptible enough in every one's experience, and lends the strongest support to the entire theory of the dream excitation through organic sensation.

Moreover, as we go through the literature of the dream, it becomes quite obvious that some of the authors (Maury,[48] Weygandt[75]) have been led to the study of dream problems by the influence of their own pathological state on the content of their dreams.

The addition to dream sources from these undoubtedly established facts is, however, not as important as one might be led to suppose; for the dream is a phenomenon which occurs in healthy persons—perhaps in all persons, and every night—and a pathological state of the organs is apparently not one of its indispensable conditions. For us, however, the question is not whence particular dreams originate, but what may be the exciting source for the ordinary dreams of normal persons.

But we need go only a step further to find a dream source which is more prolific than any of those mentioned above, which indeed promises to be inexhaustible in every case. If it is established that the bodily organs become in sickness an exciting source of dreams, and if we admit that the mind, diverted during sleep from the outer world, can devote more attention to the interior of the body, we may readily assume that the organs need not necessarily become diseased in order to permit stimuli, which in some way or other grow into dream pictures, to reach the sleeping mind. What in the waking state we broadly perceive as general sensation, distinguishable by its quality alone, to which, in the opinion of the physicians, all the organic systems contribute their shares—this general sensation at night attaining powerful efficiency and becoming active with its individual

components—would naturally furnish the most powerful as well as the most common source for the production of the dream presentations. It still remains, however, to examine according to what rule the organic sensations become transformed into dream presentations.

The theory of the origin of dreams just stated has been the favourite with all medical authors. The obscurity which conceals the essence of our being—the "*moi splanchnique*," as Tissié terms it—from our knowledge and the obscurity of the origin of the dream correspond too well not to be brought into relation with each other. The train of thought which makes organic sensation the inciter of the dream has besides another attraction for the physician, inasmuch as it favours the etiological union of the dream and mental diseases, which show so many agreements in their manifestations, for alterations in the organic sensations and excitations emanating from the inner organs are both of wide significance in the origin of the psychoses. It is therefore not surprising that the theory of bodily sensation can be traced to more than one originator who has propounded it independently.

A number of authors have been influenced by the train of ideas developed by the philosopher Schopenhauer in 1851. Our conception of the universe originates through the fact that our intellect recasts the impressions coming to it from without in the moulds of time, space, and causality. The sensations from the interior of the organism, proceeding from the sympathetic nervous system, exert in the day-time an influence on our mood for the most part unconscious. At night, however, when the overwhelming influence of the day's impressions is no longer felt, the impressions pressing upward from the interior are able to gain attention—just as in the night we hear the rippling of the spring that was rendered inaudible by the noise of the day. In what other way, then, could the intellect react upon these stimuli than by performing its characteristic function? It will transform the stimuli into figures, filling space and time, which move at the beginning of causality; and thus the dream originates. Scherner,[58] and after him Volkelt,[72] attempted to penetrate into

closer relations between physical sensations and dream pictures; but we shall reserve the discussion of these attempts for the chapter on the theory of the dream.

In a study particularly logical in its development, the psychiatrist Krauss[39] found the origin of the dream as well as of deliria and delusions in the same element, viz. the organically determined sensation. According to this author there is hardly a place in the organism which might not become the starting point of a dream or of a delusion. Now organically determined sensations "may be divided into two classes: (1) those of the total feeling (general sensations), (2) specific sensations which are inherent in the principal systems of the vegetative organism, which may be divided into five groups: (*a*) the muscular, (*b*) the pneumatic, (*c*) the gastric, (*d*) the sexual, (*e*) the peripheral sensations (p. 33 of the second article)."

The origin of the dream picture on the basis of the physical sensations is conceived by Krauss as follows: The awakened sensation evokes a presentation related to it in accordance with some law of association, and combines with this, thus forming an organic structure, towards which, however, consciousness does not maintain its normal attitude. For it does not bestow any attention on the sensation itself, but concerns itself entirely with the accompanying presentation; this is likewise the reason why the state of affairs in question should have been so long misunderstood (p. 11, &c.). Krauss finds for this process the specific term of "transubstantiation of the feeling into dream pictures" (p. 24).

That the organic bodily sensations exert some influence on the formation of the dream is nowadays almost universally acknowledged, but the question as to the law underlying the relation between the two is answered in various ways and often in obscure terms. On the basis of the theory of bodily excitation the special task of dream interpretation is to trace back the content of a dream to the causative organic stimulus, and if we do not recognise the rules of interpretation advanced by Scherner,[58] we frequently find ourselves

confronted with the awkward fact that the organic exciting source reveals itself in the content of the dream only.

A certain agreement, however, is manifested in the interpretation of the various forms of dreams which have been designated as "typical" because they recur in so many persons with almost the same contents. Among these are the well-known dreams of falling from heights, of the falling out of teeth, of flying, and of embarrassment because of being naked or barely clad. This last dream is said to be caused simply by the perception felt in sleep that one has thrown off the bedcover and is exposed. The dream of the falling out of teeth is explained by "dental irritation," which does not, however, of necessity imply a morbid state of excitation in the teeth. According to Strümpell,[66] the flying dream is the adequate picture used by the mind to interpret the sum of excitation emanating from the rising and sinking of the pulmonary lobes after the cutaneous sensation of the thorax has been reduced to insensibility. It is this latter circumstance that causes a sensation related to the conception of flying. Falling from a height in a dream is said to have its cause in the fact that when unconsciousness of the sensation of cutaneous pressure has set in, either an arm falls away from the body or a flexed knee is suddenly stretched out, causing the feeling of cutaneous pressure to return to consciousness, and the transition to consciousness embodies itself psychically as a dream of falling. (Strümpell, p. 118). The weakness of these plausible attempts at explanation evidently lies in the fact that without any further elucidation they allow this or that group of organic sensations to disappear from psychic perception or to obtrude themselves upon it until the constellation favourable for the explanation has been established. I shall, however, later have occasion to recur to typical dreams and to their origin.

From comparison of a series of similar dreams, M. Simon[63] endeavoured to formulate certain rules for the influence of the organic sensations on the determination of the resulting dream. He says (p. 34): "If any organic apparatus, which during sleep normally

participates in the expression of an affect, for any reason merges into the state of excitation to which it is usually aroused by that affect, the dream thus produced will contain presentations which fit the affect."

Another rule reads as follows (p. 35): "If an organic apparatus is in a state of activity, excitation, or disturbance during sleep, the dream will bring ideas which are related to the exercise of the organic function which is performed by that apparatus."

Mourly Vold[73] has undertaken to prove experimentally the influence assumed by the theory of bodily sensation for a single territory. He has made experiments in altering the positions of the sleeper's limbs, and has compared the resulting dream with his alterations. As a result he reports the following theories:—

1. The position of a limb in a dream corresponds approximately to that of reality, *i.e.* we dream of a static condition of the limb which corresponds to the real condition.

2. When one dreams of a moving limb it always happens that one of the positions occurring in the execution of this movement corresponds to the real position.

3. The position of one's own limb may be attributed in the dream to another person.

4. One may dream further that the movement in question is impeded.

5. The limb in any particular position may appear in the dream as an animal or monster, in which case a certain analogy between the two is established.

6. The position of a limb may incite in the dream ideas which bear some relation or other to this limb. Thus, *e.g.*, if we are employed with the fingers we dream of numerals.

Such results would lead me to conclude that even the theory of bodily sensation cannot fully extinguish the apparent freedom in the determination of the dream picture to be awakened.[6]

CHAPTER I

IV. Psychic Exciting Sources

In treating the relations of the dream to the waking life and the origin of the dream material, we learned that the earliest as well as the latest investigators agreed that men dream of what they are doing in the day-time, and of what they are interested in during the waking state. This interest continuing from waking life into sleep, besides being a psychic tie joining the dream to life, also furnishes us a dream source not to be under-estimated, which, taken with those stimuli which become interesting and active during sleep, suffices to explain the origin of all dream pictures. But we have also heard the opposite of the above assertion, viz. that the dream takes the sleeper away from the interests of the day, and that in most cases we do not dream of things that have occupied our attention during the day until after they have lost for the waking life the stimulus of actuality. Hence in the analysis of the dream life we are reminded at every step that it is inadmissible to frame general rules without making provision for qualifications expressed by such terms as "frequently," "as a rule," "in most cases," and without preparing for the validity of the exceptions.

If the conscious interest, together with the inner and outer sleep stimuli, sufficed to cover the etiology of the dreams, we ought to be in a position to give a satisfactory account of the origin of all the elements of a dream; the riddle of the dream sources would thus be solved, leaving only the task of separating the part played by the psychic and the somatic dream stimuli in individual dreams. But as a matter of fact no such complete solution of a dream has ever been accomplished in any case, and, what is more, every one attempting such solution has found that in most cases there have remained a great many components of the dream, the source of which he was unable to explain. The daily interest as a psychic source of dreams is evidently not far-reaching enough to justify the confident assertions to the effect that we all continue our waking affairs in the dream.

Other psychic sources of dreams are unknown. Hence, with the exception perhaps of the explanation of dreams given by Scherner,[58] which will be referred to later, all explanations found in the literature show a large gap when we come to the derivation of the material for the presentation pictures, which is most characteristic for the dream. In this dilemma the majority of authors have developed a tendency to depreciate as much as possible the psychic factor in the excitations of dreams which is so difficult to approach. To be sure, they distinguish as a main division of dreams the nerve-exciting and the association dreams, and assert that the latter has its source exclusively in reproduction (Wundt,[76] p. 365), but they cannot yet dismiss the doubt whether "they do not appear without being impelled by the psychical stimulus" (Volkelt,[72] p. 127). The characteristic quality of the pure association dream is also found wanting. To quote Volkelt (p. 118): "In the association dreams proper we can no longer speak of such a firm nucleus. Here the loose grouping penetrates also into the centre of the dream. The ideation which is already set free from reason and intellect is here no longer held together by the more important psychical and mental stimuli, but is left to its own aimless shifting and complete confusion." Wundt, too, attempts to depreciate the psychic factor in the stimulation of dreams by declaring that the "phantasms of the dream certainly are unjustly regarded as pure hallucinations, and that probably most dream presentations are really illusions, inasmuch as they emanate from slight sensory impressions which are never extinguished during sleep" (p. 338, &c.). Weygandt[75] agrees with this view, but generalises it. He asserts that "the first source of all dream presentations is a sensory stimulus to which reproductive associations are then joined" (p. 17). Tissié[68] goes still further in repressing the psychic exciting sources (p. 183): "Les rêves d'origine absolument psychique n'existent pas"; and elsewhere (p. 6), "Les pensées de nos rêves nous viennent de dehors…"

Those authors who, like the influential philosopher Wundt, adopt a middle course do not fail to remark that in most dreams there is a co-operation of the somatic stimuli with the psychic

instigators of the dream, the latter being either unknown or recognised as day interests.

We shall learn later that the riddle of the dream formation can be solved by the disclosure of an unsuspected psychic source of excitement. For the present we shall not be surprised at the over-estimation of those stimuli for the formation of the dream which do not originate from psychic life. It is not merely because they alone can easily be found and even confirmed by experiment, but the somatic conception of the origin of dreams thoroughly corresponds to the mode of thinking in vogue nowadays in psychiatry. Indeed, the mastery of the brain over the organism is particularly emphasized; but everything that might prove an independence of the psychic life from the demonstrable organic changes, or a spontaneity in its manifestations, is alarming to the psychiatrist nowadays, as if an acknowledgment of the same were bound to bring back the times of natural philosophy and the metaphysical conception of the psychic essence. The distrust of the psychiatrist has placed the psyche under a guardian, so to speak, and now demands that none of its feelings shall divulge any of its own faculties; but this attitude shows slight confidence in the stability of the causal concatenation which extends between the material and the psychic. Even where on investigation the psychic can be recognised as the primary course of a phenomenon, a more profound penetration will some day succeed in finding a continuation of the path to the organic determination of the psychic. But where the psychic must be taken as the terminus for our present knowledge, it should not be denied on that account.

(d) WHY THE DREAM IS FORGOTTEN AFTER AWAKENING

That the dream "fades away" in the morning is proverbial. To be sure, it is capable of recollection. For we know the dream only by recalling it after awakening; but very often we believe that we remember it only incompletely, and that during the night there was

more of it; we can observe how the memory of a dream which has been still vivid in the morning vanishes in the course of the day, leaving only a few small fragments; we often know that we have been dreaming, but we do not know what; and we are so well used to the fact that the dream is liable to be forgotten that we do not reject as absurd the possibility that one may have been dreaming even when one knows nothing in the morning of either the contents or the fact of dreaming. On the other hand, it happens that dreams manifest an extraordinary retentiveness in the memory. I have had occasion to analyse with my patients dreams which had occurred to them twenty-five years or more previously, and I can remember a dream of my own which is separated from the present day by at least thirty-seven years, and yet has lost nothing of its freshness in my memory. All this is very remarkable, and for the present incomprehensible.

The forgetting of dreams is treated in the most detailed manner by Strümpell.[66] This forgetting is evidently a complex phenomenon; for Strümpell does not explain it by a single reason, but by a considerable number of reasons.

In the first place, all those factors which produce forgetfulness in the waking state are also determinant for the forgetting of dreams. When awake we are wont soon to forget a large number of sensations and perceptions because they are too feeble, and because they are connected with a slight amount of emotional feeling. This is also the case with many dream pictures; they are forgotten because they are too weak, while stronger pictures in proximity will be remembered. Moreover, the factor of intensity in itself is not the only determinant for the preservation of the dream pictures; Strümpell, as well as other authors (Calkins), admits that dream pictures are often rapidly forgotten, although they are known to have been vivid, whereas among those that are retained in memory there are many that are very shadowy and hazy. Besides, in the waking state one is wont to forget easily what happened only once, and to note more easily

things of repeated occurrence. But most dream pictures are single experiences,[7] and this peculiarity equally contributes towards the forgetting of all dreams. Of greater significance is a third motive for forgetting. In order that feelings, presentations, thoughts and the like, should attain a certain degree of memory, it is important that they should not remain isolated, but that they should enter into connections and associations of a suitable kind. If the words of a short verse are taken and mixed together, it will be very difficult to remember them. "When well arranged in suitable sequence one word will help another, and the whole remains as sense easily and firmly in the memory for a long time. Contradictions we usually retain with just as much difficulty and rarity as things confused and disarranged." Now dreams in most cases lack sense and order. Dream compositions are by their very nature incapable of being remembered, and they are forgotten because they usually crumble together the very next moment. To be sure, these conclusions are not in full accord with the observation of Radestock[54] (p. 168), that we retain best just those dreams which are most peculiar.

According to Strümpell, there are still other factors effective in the forgetting of dreams which are derived from the relation of the dream to the waking state. The forgetfulness of the waking consciousness for dreams is evidently only the counterpart of the fact already mentioned, that the dream (almost) never takes over successive memories from the waking state, but only certain details of these memories which it tears away from the habitual psychic connections in which they are recalled while we are awake. The dream composition, therefore, has no place in the company of psychic successions which fill the mind. It lacks all the aids of memory. "In this manner the dream structure rises, as it were, from the soil of our psychic life, and floats in psychic space like a cloud in the sky, which the next breath of air soon dispels" (p. 87). This is also aided by the fact that, upon awakening, the attention is immediately seized by the inrushing sensory world, and only very few dream pictures can

withstand this power. They fade away before the impressions of the new day like the glow of the stars before the sunlight.

As a last factor favouring the forgetting of dreams, we may mention the fact that most people generally take little interest in their dreams. One who investigates dreams for a time, and takes a special interest in them, usually dreams more during that time than at any other; that is, he remembers his dreams more easily and more frequently.

Two other reasons for the forgetting of dreams added by Bonatelli (given by Benini[3]) to those of Strümpell have already been included in the latter; namely, (1) that the change of the general feeling between the sleeping and waking states is unfavourable to the mutual reproductions, and (2) that the different arrangement of the presentation material in the dream makes the dream untranslatable, so to speak, for the waking consciousness.

It is the more remarkable, as Strümpell observes, that, in spite of all these reasons for forgetting the dream, so many dreams are retained in memory. The continued efforts of the authors to formulate laws for the remembering of dreams amounts to an admission that here too there is something puzzling and unsolved. Certain peculiarities relating to the memory of dreams have been particularly noticed of late, *e.g.*, that a dream which is considered forgotten in the morning may be recalled in the course of the day through a perception which accidentally touches the forgotten content of the dream (Radestock,[54] Tissié[68]). The entire memory of the dream is open to an objection calculated to depreciate its value very markedly in critical eyes. One may doubt whether our memory, which omits so much from the dream, does not falsify what it retained.

Such doubts relating to the exactness of the reproduction of the dream are expressed by Strümpell when he says: "It therefore easily happens that the active consciousness involuntarily inserts much in recollection of the dream; one imagines one has dreamt all sorts of things which the actual dream did not contain."

CHAPTER I

Jessen[36] (p. 547) expresses himself very decidedly: "Moreover we must not lose sight of the fact, hitherto little heeded, that in the investigation and interpretation of orderly and logical dreams we almost always play with the truth when we recall a dream to memory. Unconsciously and unwittingly we fill up the gaps and supplement the dream pictures. Rarely, and perhaps never, has a connected dream been as connected as it appears to us in memory. Even the most truth-loving person can hardly relate a dream without exaggerating and embellishing it. The tendency of the human mind to conceive everything in connection is so great that it unwittingly supplies the deficiencies of connection if the dream is recalled somewhat disconnectedly."

The observations of V. Eggers,[20] though surely independently conceived, sound almost like a translation of Jessen's words: "…L'observation des rêves a ses difficultés spéciales et le seul moyen d'eviter toute erreur en pareille matière est de confier au papier sans le moindre retard ce que l'on vient d'éprouver et de remarquer; sinon, l'oubli vient vite ou total ou partiel; l'oubli total est sans gravité; mais l'oubli partiel est perfide; car si l'on se met ensuite à raconter ce que l'on n'a pas oublié, on est exposé à compléter par imagination les fragments incohérents et disjoints fourni par la memoire…; on devient artiste à son insu, et le récit, periodiquement répété s'impose à la créance de son auteur, qui, de bonne foi, le présente comme un fait authentique, dûment établi selon les bonnes méthodes…"

Similarly Spitta,[64] who seems to think that it is only in our attempt to reproduce the dream that we put in order the loosely associated dream elements: "To make connection out of disconnection, that is, to add the process of logical connection which is absent in the dream."

As we do not at present possess any other objective control for the reliability of our memory, and as indeed such a control is impossible in examining the dream which is our own experience, and for

which our memory is the only source, it is a question what value we may attach to our recollections of dreams.

(e) THE PSYCHOLOGICAL PECULIARITIES OF DREAMS

In the scientific investigation of the dream we start with the assumption that the dream is an occurrence of our own psychic activity; nevertheless the finished dream appears to us as something strange, the authorship of which we are so little forced to recognise that we can just as easily say "a dream appeared to me," as "I have dreamt." Whence this "psychic strangeness" of the dream? According to our discussion of the sources of dreams we may suppose that it does not depend on the material reaching the dream content; because this is for the most part common to the dream life and waking life. One may ask whether in the dream it is not changes in the psychic processes which call forth this impression, and may so put to test a psychological characteristic of the dream.

No one has more strongly emphasized the essential difference between dream and waking life, and utilised this difference for more far-reaching conclusions, than G. Th. Fechner[25] in some observations in his *Elements of Psychophysic* (p. 520, part 11). He believes that "neither the simple depression of conscious psychic life under the main threshold," nor the distraction of attention from the influences of the outer world, suffices to explain the peculiarities of the dream life as compared with the waking life. He rather believes that the scene of dreams is laid elsewhere than in the waking presentation life. "If the scene of the psychophysical activity were the same during the sleeping and the waking states, the dream, in my opinion, could only be a continuation of the waking ideation maintaining itself at a lower degree of intensity, and must moreover share with the latter its material and form. But the state of affairs is quite different."

What Fechner really meant has never been made clear, nor has anybody else, to my knowledge, followed further the road, the clue

to which he indicated in this remark. An anatomical interpretation in the sense of physiological brain localisations, or even in reference to histological sections of the cerebral cortex, will surely have to be excluded. The thought may, however, prove ingenious and fruitful if it can be referred to a psychic apparatus which is constructed out of many instances placed one behind another.

Other authors have been content to render prominent one or another of the tangible psychological peculiarities of the dream life, and perhaps to take these as a starting point for more far-reaching attempts at explanation.

It has been justly remarked that one of the main peculiarities of the dream life appears even in the state of falling asleep, and is to be designated as the phenomenon inducing sleep. According to Schleiermacher[61] (p. 351), the characteristic part of the waking state is the fact that the psychic activity occurs in ideas rather than in pictures. But the dream thinks in pictures, and one may observe that with the approach of sleep the voluntary activities become difficult in the same measure as the involuntary appear, the latter belonging wholly to the class of pictures. The inability for such presentation work as we perceive to be intentionally desired, and the appearance of pictures which is regularly connected with this distraction, these are two qualities which are constant in the dream, and which in its psychological analysis we must recognise as essential characters of the dream life. Concerning the pictures—the hypnogogic hallucinations—we have discovered that even in their content they are identical with the dream pictures.

The dream therefore thinks preponderately, but not exclusively, in visual pictures. It also makes use of auditory pictures, and to a lesser extent of the impressions of the other senses. Much is also simply thought or imagined (probably represented by remnants of word presentations), just as in the waking state. But still what is characteristic for the dream is only those elements of the content which act like pictures, *i.e.* which resemble more the perceptions than the memory presentations. Disregarding all the discussions concerning

the nature of hallucinations, familiar to every psychiatrist, we can say, with all well-versed authors, that the dream hallucinates, that is, replaces thoughts through hallucinations. In this respect there is no difference between visual and acoustic presentations; it has been noticed that the memory of a succession of sounds with which one falls asleep becomes transformed while sinking into sleep into an hallucination of the same melody, so as to make room again on awakening, which may repeatedly alternate with falling into a slumber, for the softer memory presentations which are differently formed in quality.

The transformation of an idea into an hallucination is not the only deviation of the dream from a waking thought which perhaps corresponds to it. From these pictures the dream forms a situation, it presents something in the present, it dramatises an idea, as Spitta[64] (p. 145) puts it.[8] But the characteristic of this side of the dream life becomes complete only when it is remembered that while dreaming we do not—as a rule; the exceptions require a special explanation—imagine that we are thinking, but that we are living through an experience, *i.e.*, we accept the hallucination with full belief. The criticism that this has not been experienced but only thought in a peculiar manner—dreamt—comes to us only on awakening. This character distinguishes the genuine sleeping dream from day dreaming, which is never confused with reality. The characteristics of the dream life thus far considered have been summed up by Burdach[8] (p. 476) in the following sentences: "As characteristic features of the dream we may add (*a*) that the subjective activity of our mind appears as objective, inasmuch as our faculty of perception perceives the products of phantasy as if they were sensory activities… (*b*) sleep abrogates one's self-command, hence falling asleep necessitates a certain amount of passivity…. The slumber pictures are conditioned by the relaxation of one's self-command."

It is a question now of attempting to explain the credulity of the mind in reference to the dream hallucinations, which can only appear after the suspension of a certain arbitrary activity. Strümpell[66]

asserts that the mind behaves in this respect correctly, and in conformity with its mechanism. The dream elements are by no means mere presentations, but true and real experiences of the mind, similar to those that appear in the waking state as a result of the senses (p. 34). Whereas in the waking state the mind represents and thinks in word pictures and language, in the dream it represents and thinks in real tangible pictures (p. 35). Besides, the dream manifests a consciousness of space by transferring the sensations and pictures, just as in the waking state, into an outer space (p. 36). It must therefore be admitted that the mind in the dream is in the same relation to its pictures and perceptions as in the waking state (p. 43). If, however, it is thereby led astray, this is due to the fact that it lacks in sleep the criticism which alone can distinguish between the sensory perceptions emanating from within or from without. It cannot subject its pictures to the tests which alone can prove their objective reality. It furthermore neglects to differentiate between pictures that are arbitrarily interchanged and others where there is no free choice. It errs because it cannot apply to its content the law of causality (p. 58). In brief, its alienation from the outer world contains also the reason for its belief in the subjective dream world.

Delbœuf[16] reaches the same conclusion through a somewhat different line of argument. We give to the dream pictures the credence of reality because in sleep we have no other impressions to compare them with, because we are cut off from the outer world. But it is not perhaps because we are unable to make tests in our sleep, that we believe in the truth of our hallucinations. The dream may delude us with all these tests, it may make us believe that we may touch the rose that we see in the dream, and still we only dream. According to Delbœuf there is no valid criterion to show whether something is a dream or a conscious reality, except—and that only in practical generality—the fact of awakening. "I declare delusional everything that is experienced between the period of falling asleep and awakening, if I notice on awakening that I lie in my bed undressed" (p. 84). "I have considered the dream pictures real during sleep in

consequence of the mental habit, which cannot be put to sleep, of perceiving an outer world with which I can contrast my ego."[9]

As the deviation from the outer world is taken as the stamp for the most striking characteristics of the dream, it will be worth while mentioning some ingenious observations of old Burdach[8] which will throw light on the relation of the sleeping mind to the outer world and at the same time serve to prevent us from over-estimating the above deductions. "Sleep results only under the condition," says Burdach, "that the mind is not excited by sensory stimuli… but it is not the lack of sensory stimuli that conditions sleep, but rather a lack of interest for the same; some sensory impressions are even necessary in so far as they serve to calm the mind; thus the miller can fall asleep only when he hears the rattling of his mill, and he who finds it necessary to burn a light at night, as a matter of precaution, cannot fall asleep in the dark" (p. 457).

"The psyche isolates itself during sleep from the outer world, and withdraws from the periphery…. Nevertheless, the connection is not entirely interrupted; if one did not hear and feel even during sleep, but only after awakening, he would certainly never awake. The continuance of sensation is even more plainly shown by the fact that we are not always awakened by the mere sensory force of the impression, but by the psychic relation of the same; an indifferent word does not arouse the sleeper, but if called by name he awakens…: hence the psyche differentiates sensations during sleep…. It is for this reason that we may be awakened by the lack of a sensory stimulus if it relates to the presentation of an important thing; thus one awakens when the light is extinguished, and the miller when the mill comes to a standstill; that is, the awakening is due to the cessation of a sensory activity, which presupposes that it has been perceived, and that it has not disturbed the mind, being indifferent or rather gratifying" (p. 460, &c.).

If we are willing to disregard these objections, which are not to be taken lightly, we still must admit that the qualities of the dream life thus far considered, which originate by withdrawing from the

outer world, cannot fully explain the strangeness of the dream. For otherwise it would be possible to change back the hallucinations of the dream into presentations and the situations of the dream into thoughts, and thus to perform the task of dream interpretation. Now this is what we do when we reproduce the dream from memory after awakening, and whether we are fully or only partially successful in this back translation the dream still retains its mysteriousness undiminished.

Furthermore all the authors assume unhesitatingly that still other more far-reaching alterations take place in the presentation material of waking life. One of them, Strümpell,[66] expresses himself as follows (p. 17): "With the cessation of the objectively active outlook and of the normal consciousness, the psyche loses the foundation in which were rooted the feelings, desires, interests, and actions. Those psychic states, feelings, interests, estimates which cling in the waking state to the memory pictures also succumb to… an obscure pressure, in consequence of which their connection with the pictures becomes severed; the perception pictures of things, persons, localities, events, and actions of the waking state are singly very abundantly reproduced, but none of these brings along its psychic value. The latter is removed from them, and hence they float about in the mind dependent upon their own resources…."

This deprivation the picture suffers of its psychic value, which again goes back to the derivation from the outer world, is according to Strümpell mainly responsible for the impression of strangeness with which the dream is confronted in our memory.

We have heard that even falling asleep carries with it the abandonment of one of the psychic activities—namely, the voluntary conduct of the presentation course. Thus the supposition, suggested also by other grounds, obtrudes itself, that the sleeping state may extend its influence also over the psychic functions. One or the other of these functions is perhaps entirely suspended; whether the remaining ones continue to work undisturbed, whether they can furnish normal work under the circumstances, is the next question. The idea

occurs to us that the peculiarities of the dream may be explained through the inferior psychic activity during the sleeping state, but now comes the impression made by the dream upon our waking judgment which is contrary to such a conception. The dream is disconnected, it unites without hesitation the worst contradictions, it allows impossibilities, it disregards our authoritative knowledge from the day, and evinces ethical and moral dulness. He who would behave in the waking state as the dream does in its situations would be considered insane. He who in the waking state would speak in such manner or report such things as occur in the dream content, would impress us as confused and weak-minded. Thus we believe that we are only finding words for the fact when we place but little value on the psychic activity in the dream, and especially when we declare that the higher intellectual activities are suspended or at least much impaired in the dream.

With unusual unanimity—the exceptions will be dealt with elsewhere—the authors have pronounced their judgments on the dream—such judgments as lead immediately to a definite theory or explanation of the dream life. It is time that I should supplement the *résumé* which I have just given with a collection of the utterances of different authors—philosophers and physicians—on the psychological character of the dream.

According to Lemoine,[42] the incoherence of the dream picture is the only essential character of the dream.

Maury[48] agrees with him; he says (p. 163): "II n'y a pas des rêves absolument raisonnables et qui ne contiennent quelque incohérence, quelque anachronisme, quelque absurdité."

According to Hegel, quoted by Spitta,[64] the dream lacks all objective and comprehensible connection.

Dugas[19] says: "Le rêve, c'est l'anarchie psychique, affective et mentale, c'est le jeu des fonctions livrées à ellesmêmes et s'exerçant sans contrôle et sans but; dans le rêve l'esprit est un automate spirituel."

CHAPTER I

"The relaxation, solution, and confusion of the presentation life which is held together through the logical force of the central ego" is conceded even by Volkelt[72] (p. 14), according to whose theory the psychic activity during sleep seems in no way aimless.

The absurdity of the presentation connections appearing in the dream can hardly be more strongly condemned than it was by Cicero (*De Divin.* II.): "Nihil tam praepostere, tam incondite, tam monstruose cogitari potest, quod non possimus somniare."

Fechner[52] says (p. 522): "It is as if the psychological activity were transferred from the brain of a reasonable being into the brain of a fool."

Radestock[35] (p. 145) says: "It seems indeed impossible to recognise in this absurd action any firm law. Having withdrawn itself from the strict police of the rational will guiding the waking presentation life, and of the attention, the dream whirls everything about kaleidoscopically in mad play."

Hildebrandt[35] (p. 45) says: "What wonderful jumps the dreamer allows himself, *e.g.*, in his chain of reasoning! With what unconcern he sees the most familiar laws of experience turned upside down! What ridiculous contradictions he can tolerate in the orders of nature and society before things go too far, as we say, and the overstraining of the nonsense brings an awakening! We often multiply quite unconcernedly: three times three make twenty; we are not at all surprised when a dog recites poetry for us, when a dead person walks to his grave, and when a rock swims on the water; we go in all earnestness by high command to the duchy of Bernburg or the principality of Lichtenstein in order to observe the navy of the country, or we allow ourselves to be recruited as a volunteer by Charles XII. shortly before the battle of Poltawa."

Binz[4] (p. 33) points to a dream theory resulting from the impressions. "Among ten dreams nine at least have an absurd content. We unite in them persons or things which do not bear the slightest relation to one another. In the next moment, as in a kaleidoscope, the

grouping changes, if possible to one more nonsensical and irrational than before; thus the changing play of the imperfectly sleeping brain continues until we awaken, and put our hand to our forehead and ask ourselves whether we really still possess the faculty of rational imagination and thought."

Maury[48] (p. 50) finds for the relation of the dream picture to the waking thoughts, a comparison most impressive for the physician: "La production de ces images que chez l'homme éveillé fait le plus souvent naître la volonté, correspond, pour l'intelligence, à ce que cont pour la motilité certains mouvements que nous offrent la choreé et les affections paralytiques…." For the rest, he considers the dream "toute une série de dégradation de la faculté pensant et raisonant" (p. 27).

It is hardly necessary to mention the utterances of the authors which repeat Maury's assertion for the individual higher psychic activities.

According to Strümpell,[66] some logical mental operations based on relations and connections disappear in the dream—naturally also at points where the nonsense is not obvious (p. 26). According to Spitta,[64] (p. 148) the presentations in the dream are entirely withdrawn from the laws of causality. Radestock[54] and others emphasize the weakness of judgment and decision in the dream. According to Jodl[37] (p. 123), there is no critique in the dream, and no correcting of a series of perceptions through the content of the sum of consciousness. The same author states that "all forms of conscious activity occur in the dream, but they are imperfect, inhibited, and isolated from one another." The contradictions manifested in the dream towards our conscious knowledge are explained by Stricker[77,78] (and many others), on the ground that facts are forgotten in the dream and logical relations between presentations are lost (p. 98), &c., &c.

The authors who in general speak thus unfavourably about the psychic capacities in the dream, nevertheless admit that the dream retains a certain remnant of psychic activity. Wundt,[76] whose teaching has influenced so many other workers in the dream

problems, positively admits this. One might inquire as to the kind and behaviour of the remnants of the psychic life which manifest themselves in the dream. It is now quite universally acknowledged that the reproductive capacity, the memory in the dream, seems to have been least affected; indeed it may show a certain superiority over the same function in the waking life (*vid. supra*, p. 10), although a part of the absurdities of the dream are to be explained by just this forgetfulness of the dream life. According to Spitta,[64] it is the emotional life of the psyche that is not overtaken by sleep and that then directs the dream. "By emotion ["Gemüth"] we understand the constant comprehension of the feelings as the inmost subjective essence of man" (p. 84).

Scholz[59] (p. 37) sees a psychic activity manifested in the dream in the "allegorising interpretation" to which the dream material is subjected. Siebeck[62] verifies also in the dream the "supplementary interpretative activity" (p. 11) which the mind exerts on all that is perceived and viewed. The judgment of the apparently highest psychic function, the consciousness, presents for the dream a special difficulty. As we can know anything only through consciousness, there can be no doubt as to its retention; Spitta, however, believes that only consciousness is retained in the dream, and not self-consciousness. Delbœuf[16] confesses that he is unable to conceive this differentiation.

The laws of association which govern the connection of ideas hold true also for the dream pictures; indeed, their domination evinces itself in a purer and stronger expression in the dream than elsewhere. Strümpell[62] (p. 70) says: "The dream follows either the laws of undisguised presentations as it seems exclusively or organic stimuli along with such presentations, that is, without being influenced by reflection and reason, aesthetic sense, and moral judgment." The authors whose views I reproduce here conceive the formation of the dream in about the following manner: The sum of sensation stimuli affecting sleep from the various sources, discussed elsewhere, at first awaken in the mind a sum of presentations which

represent themselves as hallucinations (according to Wundt, it is more correct to say as illusions, because of their origin from outer and inner stimuli). These unite with one another according to the known laws of association, and, following the same rules, in turn evoke a new series of presentations (pictures). This entire material is then elaborated as well as possible by the still active remnant of the organising and thinking mental faculties (*cf.* Wundt[76] and Weygandt[75]). But thus far no one has been successful in finding the motive which would decide that the awakening of pictures which do not originate objectively follow this or that law of association.

But it has been repeatedly observed that the associations which connect the dream presentations with one another are of a particular kind, and different from those found in the waking mental activity. Thus Volkelt[72] says: "In the dream, the ideas chase and hunt each other on the strength of accidental similarities and barely perceptible connections. All dreams are pervaded by such loose and free associations." Maury[48] attaches great value to this characteristic of connection between presentations, which allows him to bring the dream life in closer analogy to certain mental disturbances. He recognises two main characters of the *délire*: "(1) une action spontanée et comme automatique de l'esprit; (2) une association vicieuse et irregulière des idées" (p. 126). Maury gives us two excellent examples from his own dreams, in which the mere similarity of sound forms the connection of the dream presentations. He dreamed once that he undertook a pilgrimage (*pélerinage*) to Jerusalem or Mecca. After many adventures he was with the chemist Pelletier; the latter after some talk gave him a zinc shovel (*pelle*) which became his long battle sword in the dream fragment which followed (p. 137). On another occasion he walked in a dream on the highway and read the kilometres on the milestones; presently he was with a spice merchant who had large scales with which to weigh Maury; the spice merchant then said to him: "You are not in Paris; but on the island Gilolo." This was followed by many pictures, in which he saw the flower Lobelia, then

the General Lopez, of whose demise he had read shortly before. He finally awoke while playing a game of lotto.

We are, however, quite prepared to hear that this depreciation of the psychic activities of the dream has not remained without contradiction from the other side. To be sure, contradiction seems difficult here. Nor is it of much significance that one of the depreciators of dream life, Spitta[64] (p. 118), assures us that the same psychological laws which govern the waking state rule the dream also, or that another (Dugas[19]) states: "Le rêve n'est pas déraison ni même irraison pure," as long as neither of them has made any effort to bring this estimation into harmony with the psychic anarchy and dissolution of all functions in the dream described by them. Upon others, however, the possibility seems to have dawned that the madness of the dream is perhaps not without its method—that it is perhaps only a sham, like that of the Danish prince, to whose madness the intelligent judgment here cited refers. These authors must have refrained from judging by appearances, or the appearance which the dream showed to them was quite different.

Without wishing to linger at its apparent absurdity, Havelock Ellis[23] considers the dream as "an archaic world of vast emotions and imperfect thoughts," the study of which may make us acquainted with primitive stages of development of the psychic life. A thinker like Delbœuf[16] asserts—to be sure without adducing proof against the contradictory material, and hence indeed unjustly: "Dans le sommeil, hormis la perception, toutes les facultés de l'esprit, intelligence, imagination, mémoire, volonté, moralité, restant intactes dans leur essence; seulement, elles s'appliquent à des objets imaginaires et mobiles. Le songeur est un acteur qui joue à volonté les fous et les sages, les bourreaus et les victimes, les nains et les géants, les démons et les anges" (p. 222). The Marquis of Hervey, who is sharply controverted by Maury,[48] and whose work I could not obtain despite all effort, seems to combat most energetically the under-estimation of the psychic capacity in the dream. Maury speaks of him as follows

(p. 19): "M. le Marquis d'Hervey prête à l'intelligence, durant le sommeil toute sa liberté d'action et d'attention et il ne semble faire consister le sommeil que dans l'occlusion des sens, dans leur fermeture au monde extérieur; en sorte que l'homme qui dort ne se distingué guère, selon sa manière de voir, de l'homme qui laisse vaguer sa pensée en se bouchant les sens; toute la différence qui séparé alors la pensée ordinaire du celle du dormeur c'est que, chez celui-ci, l'idée prend une forme visible, objective et ressemble, à s'y meprendre, à la sensation déterminée par les objets extérieurs; le souvenir revêt l'apparence du fait présent."

Maury adds, however; "Qu'il y a une différence de plus et capitale à savoir que les facultés intellectuelles de l'homme endormi n'offrent pas l'équilibre qu'elles gardent chez l'homme l'éveillé."

The scale of the estimation of the dream as a psychic product has a great range in the literature; it reaches from the lowest under-estimation, the expression of which we have come to know, through the idea of a value not yet revealed to the over-estimation which places the dream far above the capacities of the waking life. Hildebrandt,[35] who, as we know, sketches the psychological characteristics into three antinomies, sums up in the third of these contradistinctions the extreme points of this series as follows (p. 19): "It is between a climax, often an involution which raises itself to virtuosity, and on the other hand a decided diminution and weakening of the psychic life often leading below the human niveau."

"As for the first, who could not confirm from his own experience that, in the creations and weavings of the genius of the dream, there sometimes comes to fight a profundity and sincerity of emotion, a tenderness of feeling, a clearness of view, a fineness of observation, and a readiness of wit, all which we should modestly have to deny that we possess as a constant property during the waking life? The dream has a wonderful poetry, an excellent allegory, an incomparable humour, and a charming irony. It views the world under the guise of a peculiar idealisation, and often raises the effect of its manifestations into the most ingenious understanding of the essence lying

at its basis. It represents for us earthly beauty in true heavenly radiance, the sublime in the highest majesty, the actually frightful in the most gruesome figure, and the ridiculous in the indescribably drastic comical; and at times we are so full of one of these impressions after awakening that we imagine that such a thing has never been offered to us by the real world."

One may ask, is it really the same object that the depreciating remarks and these inspired praises are meant for? Have the latter overlooked the stupid dreams and the former the thoughtful and ingenious dreams? And if both kinds do occur—that is, dreams that merit to be judged in this or that manner—does it not seem idle to seek the psychological character of the dream? would it not suffice to state that everything is possible in the dream, from the lowest depreciation of the psychic life to a raising of the same which is unusual in the waking state? As convenient as this solution would be it has this against it, that behind the efforts of all dream investigators, it seems to be presupposed that there is such a definable character of the dream, which is universally valid in its essential features and which must eliminate these contradictions.

It is unquestionable that the psychic capacities of the dream have found quicker and warmer recognition in that intellectual period which now lies behind us, when philosophy rather than exact natural science ruled intelligent minds. Utterances like those of Schubert, that the dream frees the mind from the power of outer nature, that it liberates the soul from the chains of the sensual, and similar opinions expressed by the younger Fichte,[10] and others, who represent the dream as a soaring up of the psychic life to a higher stage, hardly seem conceivable to us to-day; they are only repeated at present by mystics and devotees. With the advance of the scientific mode of thinking, a reaction took place in the estimation of the dream. It is really the medical authors who are most prone to underrate the psychic activity in the dream, as being insignificant and invaluable, whereas, philosophers and unprofessional observers—amateur psychologists—whose contributions in this realm can surely

not be overlooked, in better agreement with the popular ideas, have mostly adhered to the psychic value of the dream. He who is inclined to underrate the psychic capacity in the dream prefers, as a matter of course, the somatic exciting sources in the etiology of the dream; he who leaves to the dreaming mind the greater part of its capacities, naturally has no reason for not also admitting independent stimuli for dreaming.

Among the superior activities which, even on sober comparison, one is tempted to ascribe to the dream life, memory is the most striking; we have fully discussed the frequent experiences which prove this fact. Another superiority of the dream life, frequently extolled by the old authors, viz. that it can regard itself supreme in reference to distance of time and space, can be readily recognised as an illusion. This superiority, as observed by Hildebrandt,[35] is only illusional; the dream takes as much heed of time and space as the waking thought, and this because it is only a form of thinking. The dream is supposed to enjoy still another advantage in reference to time; that is, it is independent in still another sense of the passage of time. Dreams like the guillotine dream of Maury,[48] reported above, seem to show that the dream can crowd together more perception content in a very short space of time than can be controlled by our psychic activity in the waking mind. These conclusions have been controverted, however, by many arguments; the essays of Le Lorrain[45] and Egger[20] "Concerning the apparent duration of dreams" gave rise to a long and interesting discussion which has probably not said the last word upon this delicate and far-reaching question.

That the dream has the ability to take up the intellectual work of the day and bring to a conclusion what has not been settled during the day, that it can solve doubt and problems, and that it may become the source of new inspiration in poets and composers, seems to be indisputable, as is shown by many reports and by the collection compiled by Chabaneix.[11] But even if there be no dispute as to the facts, nevertheless their interpretation is open in principle to a great many doubts.

Finally the asserted divinatory power of the dream forms an object of contention in which hard unsurmountable reflection encounters obstinate and continued faith. It is indeed just that we should refrain from denying all that is based on fact in this subject, as there is a possibility that a number of such cases may perhaps be explained on a natural psychological basis.

(f) THE ETHICAL FEELINGS IN THE DREAM

For reasons which will be understood only after cognisance has been taken of my own investigations of the dream, I have separated from the psychology of the dream the partial problem whether and to what extent the moral dispositions and feelings of the waking life extend into the dreams. The same contradictions which we were surprised to observe in the authors' descriptions of all the other psychic capacities strike us again here. Some affirm decidedly that the dream knows nothing of moral obligations; others as decidedly that the moral nature of man remains even in his dream life.

A reference to our dream experience of every night seems to raise the correctness of the first assertion beyond doubt. Jessen[36] says (p. 553): "Nor does one become better or more virtuous in the dream; on the contrary, it seems that conscience is silent in the dream, inasmuch as one feels no compassion and can commit the worst crimes, such as theft, murder, and assassination, with perfect indifference and without subsequent remorse."

Radestock[54] (p. 146) says: "It is to be noticed that in the dream the associations terminate and the ideas unite without being influenced by reflection and reason, aesthetic taste, and moral judgment; the judgment is extremely weak, and ethical indifference reigns supreme."

Volkelt[72] (p. 23) expresses himself as follows: "As every one knows, the sexual relationship in the dream is especially unbridled. Just as the dreamer himself is shameless in the extreme, and wholly lacking moral feeling and judgment, so also he sees others, even the

most honoured persons, engaged in actions which even in thought he would blush to associate with them in his waking state."

Utterances like those of Schopenhauer, that in the dream every person acts and talks in accordance with his character, form the sharpest contrast to those mentioned above. R. P. Fischer[11] maintains that the subjective feelings and desires or affects and passions manifest themselves in the wilfulness of the dream life, and that the moral characteristics of a person are mirrored in his dream.

Haffner[32] (p. 25): "With rare exceptions…a virtuous person will be virtuous also in his dreams; he will resist temptation, and show no sympathy for hatred, envy, anger, and all other vices; while the sinful person will, as a rule, also find in his dreams the pictures which he has before him while awake."

Scholz[59] (p. 36): "In the dream there is truth; despite all masking in pride or humility, we still recognise our own self…. The honest man does not commit any dishonourable offence even in the dream, or, if this does occur, he is terrified over it as if over something foreign to his nature. The Roman emperor who ordered one of his subjects to be executed because he dreamed that he cut off the emperor's head, was not wrong in justifying his action on the ground that he who has such dreams must have similar thoughts while awake. About a thing that can have no place in our mind we therefore say significantly: 'I would never dream of such a thing.'"

Pfaff,[12] varying a familiar proverb, says: "Tell me for a time your dreams, and I will tell you what you are within."

The short work of Hildebrandt,[35] from which I have already taken so many quotations, a contribution to the dream problem as complete and as rich in thought as I found in the literature, places the problem of morality in the dream as the central point of its interest. For Hildebrandt, too, it is a strict rule that the purer the life, the purer the dream; the impurer the former, the impurer the latter.

The moral nature of man remains even in the dream: "But while we are not offended nor made suspicious by an arithmetical error no matter how obvious, by a reversal of science no matter how romantic,

or by an anachronism no matter how witty, we nevertheless do not lose sight of the difference between good and evil, right and wrong, virtue and vice. No matter how much of what follows us during the day may vanish in our hours of sleep—Kant's categorical imperative sticks to our heels as an inseparable companion from whom we cannot rid ourselves even in slumber…. This can be explained, however, only by the fact that the fundamental in human nature, the moral essence, is too firmly fixed to take part in the activity of the kaleidoscopic shaking up to which phantasy, reason, memory, and other faculties of the same rank succumb in the dream" (p. 45, &c.).

In the further discussion of the subject we find remarkable distortion and inconsequence in both groups of authors. Strictly speaking, interest in immoral dreams would cease for all those who assert that the moral personality of the person crumbles away in the dream. They could just as calmly reject the attempt to hold the dreamer responsible for his dreams, and to draw inferences from the badness of his dreams as to an evil strain in his nature, as they rejected the apparently similar attempt to demonstrate the insignificance of his intellectual life in the waking state from the absurdity of his dreams. The others for whom "the categorical imperative" extends also into the dream, would have to accept full responsibility for the immoral dreams; it would only be desirable for their own sake that their own objectionable dreams should not lead them to abandon the otherwise firmly held estimation of their own morality.

Still it seems that no one knows exactly about himself how good or how bad he is, and that no one can deny the recollection of his own immoral dreams. For besides the opposition already mentioned in the criticism of the morality of the dream, both groups of authors display an effort to explain the origin of the immoral dream and a new opposition is developed, depending on whether their origin is sought in the functions of the psychic life or in the somatically determined injuries to this life. The urgent force of the facts then permits the representatives of the responsibility, as well as of the

irresponsibility of the dream life, to agree in the recognition of a special psychic source for the immorality of dreams.

All those who allow the continuance of the morality in the dream nevertheless guard against accepting full responsibility for their dreams. Haffner[32] says (p. 24): "We are not responsible for dreams because the basis upon which alone our life has truth and reality is removed from our thoughts…. Hence there can be no dream wishing and dream acting, no virtue or sin." Still the person is responsible for the sinful dream in so far as he brings it about indirectly. Just as in the waking state, it is his duty to cleanse his moral mind, particularly so before retiring to sleep.

The analysis of this mixture of rejection and recognition of responsibility for the moral content of the dream is followed much further by Hildebrandt. After specifying that the dramatic manner of representation in the dream, the crowding together of the most complicated processes of deliberation in the briefest period of time, and the depreciation and the confusion of the presentation elements in the dream admitted by him must be recognised as unfavourable to the immoral aspect of dreams; he nevertheless confesses that, yielding to the most earnest reflection, he is inclined simply to deny all responsibility for faults and dream sins.

(P. 49): "If we wish to reject very decisively any unjust accusation, especially one that has reference to our intentions and convictions, we naturally make use of the expression: I should never have dreamed of such a thing. By this we mean to say, of course, that we consider the realm of the dream the last and remotest place in which we are to be held responsible for our thoughts, because there these thoughts are only loosely and incoherently connected with our real being, so that we should hardly still consider them as our own; but as we feel impelled expressly to deny the existence of such thoughts, even in this realm, we thus at the same time indirectly admit that our justification will not be complete if it does not reach to that point. And I believe that, though unconsciously, we here speak the language of truth."

CHAPTER I

(P. 52): "No dream thought can be imagined whose first motive has not already moved through the mind while awake as some wish, desire, or impulse." Concerning this original impulse we must say that the dream has not discovered it—it has only imitated and extended it, it has only elaborated a bit of historical material which it has found in us, into dramatic form; it enacts the words of the apostle: He who hates his brother is a murderer. And whereas, after we awaken and become conscious of our moral strength, we may smile at the boldly executed structure of the depraved dream, the original formative material, nevertheless, has no ridiculous side. One feels responsible for the transgressions of the dreamer, not for the whole sum, but still for a certain percentage. "In this sense, which is difficult to impugn, we understand the words of Christ: Out of the heart come evil thoughts—for we can hardly help being convinced that every sin committed in the dream brings with it at least a vague minimum of guilt."

Hildebrandt thus finds the source of the immorality of dreams in the germs and indications of evil impulses which pass through our minds during the day as tempting thoughts, and he sees fit to add these immoral elements to the moral estimation of the personality. It is the same thoughts and the same estimation of these thoughts, which, as we know, have caused devout and holy men of all times to lament that they are evil sinners.

There is certainly no reason to doubt the general occurrence of these contrasting presentations—in most men and even also in other than ethical spheres. The judgment of these at times has not been very earnest. In Spitta[64] we find the following relevant expression from A. Zeller (Article "Irre" in the *Allgemeinen Encyklopädie der Wissenchaften* of Ersch and Grüber, p. 144): "The mind is rarely so happily organised as to possess at all times power enough not to be disturbed, not only by unessential but also by perfectly ridiculous ideas running counter to the usual clear trend of thought; indeed, the greatest thinkers have had cause to complain of this dreamlike disturbing and painful rabble of ideas, as it destroys

their profoundest reflection and their most sacred and earnest mental work."

A clearer light is thrown on the psychological status of this idea of contrast by another observation of Hildebrandt, that the dream at times allows us to glance into the deep and inmost recesses of our being, which are generally closed to us in our waking state (p. 55). The same knowledge is revealed by Kant in his *Anthropology*, when he states that the dream exists in order to lay bare for us our hidden dispositions and to reveal to us not what we are, but what we might have been if we had a different education. Radestock[54] (p. 84) says that the dream often only reveals to us what we do not wish to admit to ourselves, and that we therefore unjustly condemn it as a liar and deceiver. That the appearance of impulses which are foreign to our consciousness is merely analogous to the already familiar disposition which the dream makes of other material of the presentation, which is either absent or plays only an insignificant part in the waking state, has been called to our attention by observations like those of Benini,[3] who says: "Certe nostre inclinazione che si credevano suffocate a spente da un pezzo, si ridestano; passioni vecchie e sepolte rivivono; cose e persone a cui non pensiamo mai, ci vengono dinanzi" (p. 149). Volkelt[72] expresses himself in a similar way: "Even presentations which have entered into our consciousness almost unnoticed, and have never perhaps been brought out from oblivion, often announce through the dream their presence in the mind (p. 105). Finally, it is not out of place to mention here that, according to Schleiermacher,[61] the state of falling asleep is accompanied by the appearance of undesirable presentations (pictures).

We may comprise under "undesirable presentations" this entire material of presentations, the occurrence of which excites our wonder in immoral as well as in absurd dreams. The only important difference consists in the fact that our undesirable presentations in the moral sphere exhibit an opposition to our other feelings, whereas the others simply appear strange to us. Nothing has been done so

far to enable us to remove this difference through a more penetrating knowledge.

But what is the significance of the appearance of undesirable presentations in the dream? What inferences may be drawn for the psychology of the waking and dreaming mind from these nocturnal manifestations of contrasting ethical impulses? We may here note a new diversity of opinion, and once more a different grouping of the authors. The stream of thought followed by Hildebrandt, and by others who represent his fundamental view, cannot be continued in any other way than by ascribing to the immoral impulses a certain force even in the waking state, which, to be sure, is inhibited from advancing to action, and asserting that something falls off during sleep, which, having the effect of an inhibition, has kept us from noticing the existence of such an impulse. The dream thus shows the real, if not the entire nature of man, and is a means of making the hidden psychic life accessible to our understanding. It is only on such assumption that Hildebrandt can attribute to the dream the rôle of monitor who calls our attention to the moral ravages in the soul, just as in the opinion of physicians it can announce a hitherto unobserved physical ailment. Spitta,[64] too, cannot be guided by any other conception when he refers to the stream of excitement which, *e.g.*, flows in upon the psyche during puberty, and consoles the dreamer by saying that he has done everything in his power when he has led a strictly virtuous life during his waking state, when he has made an effort to suppress the sinful thoughts as often as they arise, and has kept them from maturing and becoming actions. According to this conception, we might designate the "undesirable" presentations as those that are "suppressed" during the day, and must recognise in their appearance a real psychic phenomenon.

If we followed other authors we would have no right to the last inference. For Jessen[36] the undesirable presentations in the dream as in the waking state, in fever and other deliria, merely have "the character of a voluntary activity put to rest and a somewhat mechanical process of pictures and presentations produced by inner impulses"

(p. 360). An immoral dream proves nothing for the psychic life of the dreamer except that he has in some way become cognizant of the ideas in question; it is surely not a psychic impulse of his own. Another author, Maury,[48] makes us question whether he, too, does not attribute to the dream state the capacity for dividing the psychic activity into its components instead of destroying it aimlessly. He speaks as follows about dreams in which one goes beyond the bounds of morality: "Ce sont nos penchants qui parlent et qui nous font agir, sans que la conscience nous retienne, bien que parfoit eile nous avertisse. J'ai mes défauts et mes penchants vicieux; a l'état de veille, je tache de lutter contre eux, et il m'arrive assez souvent de n'y pas succomber. Mais dans mes songes j'y succombe toujours ou pour mieux dire j'agis, par leur impulsion, sans crainte et sans remords…. Evidement les visions qui se déroulent devant ma pensée et qui constituent le rêve, me sont suggérées par les incitations que je ressens et que ma volonté absente ne cherche pas à réfouler" (p. 113).

If one believes in the capacity of the dream to reveal an actually existing but repressed or concealed immoral disposition of the dreamer, he could not emphasize his opinion more strongly than with the words of Maury (p. 115): "En rêve l'homme se révèle donc tout entier à soi-même dans sa nudité et sa misère natives. Des qu'il suspend l'exercice de sa volonté, il dévient le jouet de toutes les passions contre lesquelles, à l'etat de veille, la conscience, le sentiment d'honneur, la crainte nous défendent." In another place he finds the following striking words (p. 462): "Dans le rêve, c'est surtout l'homme instinctif que se révèle…. L'homme revient pour ainsi dire á l'état de nature quand il rêve; mais moins les idées acquises ont pénétre dans son esprit, plus les penchants en désaccord avec elles conservent encore sur lui d'influence dans le rêve." He then mentions as an example that his dreams often show him as a victim of just those superstitions which he most violently combats in his writing.

The value of all these ingenious observations for a psychological knowledge of the dream life, however, is marred by Maury through the fact that he refuses to recognise in the phenomena so correctly

observed by him any proof of the "automatisme psychologique" which in his opinion dominates the dream life. He conceives this automatism as a perfect contrast to the psychic activity.

A passage in the studies on consciousness by Strieker[77] reads: "The dream does not consist of delusions merely; if, *e.g.*, one is afraid of robbers in the dream, the robbers are, of course, imaginary, but the fear is real. One's attention is thus called to the fact that the effective development in the dream does not admit of the judgment which one bestows upon the rest of the dream content, and the problem arises what part of the psychic processes in the dream may be real, *i.e.* what part of them may demand to be enrolled among the psychic processes of the waking state?"

(g) DREAM THEORIES AND FUNCTIONS OF THE DREAM

A statement concerning the dream which as far as possible attempts to explain from one point of view many of its noted characters, and which at the same time determines the relation of the dream to a more comprehensive sphere of manifestations, may be called a theory of dreams. Individual theories of the dream will be distinguished from one another through the fact that they raise to prominence this or that characteristic of the dream, and connect explanations and relations with it. It will not be absolutely necessary to derive from the theory a function, *i.e.* a use or any such activity of the dream, but our expectation, which is usually adjusted to teleology, will nevertheless welcome those theories which promise an understanding of the function of the dream.

We have already become acquainted with many conceptions of the dream which, more or less, merit the name of dream theories in this sense. The belief of the ancients that the dream was sent by the gods in order to guide the actions of man was a complete theory of the dream giving information concerning everything in the dream worth knowing. Since the dream has become an object of biological

investigation we have a greater number of theories, of which, however, some are very incomplete.

If we waive completeness, we may attempt the following loose grouping of dream theories based on their fundamental conception of the degree and mode of the psychic activity in the dream:—

1. Theories, like those of Delbœuf,[16] which allow the full psychic activity of the waking state to continue into the dream. Here the mind does not sleep; its apparatus remains intact, and, being placed under the conditions different from the waking state, it must in normal activity furnish results different from those of the waking state. In these theories it is a question whether they are in position to derive the distinctions between dreaming and waking thought altogether from the determinations of the sleeping state. They moreover lack a possible access to a function of the dream; one cannot understand why one dreams, why the complicated mechanism of the psychic apparatus continues to play even when it is placed under conditions for which it is not apparently adapted. There remain only two expedient reactions—to sleep dreamlessly or to awake when approached by disturbing stimuli—instead of the third, that of dreaming.

2. Theories which, on the contrary, assume for the dream a diminution for the psychic activity, a loosening of the connections, and an impoverishment in available material. In accordance with these theories, one must assume for sleep a psychological character entirely different from the one given by Delbœuf. Sleep extends far beyond the mind—it does not consist merely in a shutting off of the mind from the outer world; on the contrary, it penetrates into its mechanism, causing it at times to become useless. If I may draw a comparison from psychiatrical material, I may say that the first theories construct the dream like a paranoia, while the second make it after the model of a dementia or an amentia.

The theory that only a fragment of the psychic activity paralysed by sleep comes to expression is by far the favourite among the

medical writers and in the scientific world. As far as one may presuppose a more general interest in dream interpretation, it may well be designated as the ruling theory of the dream. It is to be emphasized with what facility this particular theory escapes the worst rock threatening every dream interpretation, that is to say, being shipwrecked upon one of the contrasts embodied in the dream. As this theory considers the dream the result of a partial waking (or as Herbart's *Psychology* of the dream says, "a gradual, partial, and at the same time very anomalous waking"), it succeeds in covering the entire series of inferior activities in the dream which reveal themselves in its absurdities, up to the full concentration of mental activity, by following a series of states which become more and more awake until they reach full awakening.

One who finds the psychological mode of expression indispensable, or who thinks more scientifically, will find this theory of the dream expressed in the discussion of Binz[4] (p. 43):—

"This state [of numbness], however, gradually approaches its end in the early morning hours. The accumulated material of fatigue in the albumen of the brain gradually becomes less. It is gradually decomposed or carried away by the constantly flowing circulation. Here and there some masses of cells can be distinguished as awake, while all around everything still remains in a state of torpidity. *The isolated work of the individual groups* now appears before our clouded consciousness, which lacks the control of other parts of the brain governing the associations. Hence the pictures created, which mostly correspond to the objective impressions of the recent past, fit with each other in a wild and irregular manner. The number of the brain cells set free becomes constantly greater, the irrationality of the dream constantly less."

The conception of the dream as an incomplete, partial waking state, or traces of its influence, can surely be found among all modern physiologists and philosophers. It is most completely represented by Maury.[48] It often seems as if this author represented to himself the state of being awake or asleep in anatomical regions; at any rate it

appears to him that an anatomical province is connected with a definite psychic function. I may here merely mention that if the theory of partial waking could be confirmed, there would remain much to be accomplished in its elaboration.

Naturally a function of the dream cannot be found in this conception of the dream life. On the contrary, the criticism of the status and importance of the dream is consistently uttered in this statement of Binz (p. 357): "All the facts, as we see, urge us to characterise the dream as a physical process in all cases useless, in many cases even morbid."

The expression "physical" in reference to the dream, which owes its prominence to this author, points in more than one direction. In the first place, it refers to the etiology of the dream, which was especially clear to Binz, as he studied the experimental production of dreams by the administration of poisons. It is certainly in keeping with this kind of dream theory to ascribe the incitement of the dream exclusively to somatic origin whenever possible. Presented in the most extreme form, it reads as follows: After we have put ourselves to sleep by removing the stimuli, there would be no need and no occasion for dreaming until morning, when the gradual awakening through the incoming stimuli would be reflected in the phenomenon of dreaming. But as a matter of fact, it is not possible to keep sleep free from stimuli; just as Mephisto complains about the germs of life, so stimuli reach the sleeper from every side—from without, from within, and even from certain bodily regions which never give us any concern during the waking state. Thus sleep is disturbed; the mind is aroused, now by this, now by that little thing, and functionates for a while with the awakened part only to be glad to fall asleep again. The dream is a reaction to the stimulus causing a disturbance of sleep—to be sure, it is a purely superfluous reaction.

To designate the dream as a physical process, which for all that remains an activity of the mental organ, has still another sense. It is meant to dispute the dignity of a psychic process for the dream. The application to the dream of the very old comparison of the "ten

fingers of a musically ignorant person running over the keyboard of an instrument," perhaps best illustrates in what estimation the dream activity has been held by the representatives of exact science. In this sense it becomes something entirely untranslatable, for how could the ten fingers of an unmusical player produce any music?

The theory of partial wakefulness has not passed without objection even in early times. Thus Burdach,[8] in 1830, says: "If we say that the dream is a partial wakefulness, in the first place, we explain thereby neither the waking nor the sleeping state; secondly, this expresses nothing more than that certain forces of the mind are active in the dream while others are at rest. But such irregularities take place throughout life…" (p. 483).

Among extant dream theories which consider the dream a "physical" process, there is one very interesting conception of the dream, first propounded by Robert[55] in 1866, which is attractive because it assigns to the dream a function or a useful end. As a basis for this theory, Robert takes from observation two facts which we have already discussed in our consideration of the dream material (see p. 13). These facts are: that one very often dreams about the insignificant impressions of the day, and that one rarely carries over into the dream the absorbing interests of the day. Robert asserts as exclusively correct, that things which have been fully settled never become dream inciters, but only such things as are incomplete in the mind or touch it fleetingly (p. 11). "We cannot usually explain our dreams because their causes are to be found *in sensory impressions of the preceding day which have not attained sufficient recognition by the dreamer.*" The conditions allowing an impression to reach the dream are therefore, either that this impression has been disturbed in its elaboration, or that being too insignificant it has no claim to such elaboration.

Robert therefore conceives the dream "as a physical process of elimination which has reached to cognition in the psychic manifestation of its reaction." *Dreams are eliminations of thoughts nipped in the bud.* "A man deprived of the capacity for dreaming would surely in time become mentally unbalanced, because an immense number

of unfinished and unsolved thoughts and superficial impressions would accumulate in his brain, under the pressure of which there would be crushed all that should be incorporated as a finished whole into memory." The dream acts as a safety-valve for the overburdened brain. *Dreams possess healing and unburdening properties* (p. 32).

It would be a mistake to ask Robert how representation in the dream can bring about an unburdening of the mind. The author apparently concluded from those two peculiarities of the dream material that during sleep such ejection of worthless impressions is effected as a somatic process, and that dreaming is not a special psychic process but only the knowledge that we receive of such elimination. To be sure an elimination is not the only thing that takes place in the mind during sleep. Robert himself adds that the incitements of the day are also elaborated, and "what cannot be eliminated from the undigested thought material lying in the mind becomes connected *by threads of thought borrowed from the phantasy into a finished whole*, and thus enrolled in the memory as a harmless phantasy picture." (p. 23).

But it is in his criticism of the dream sources that Robert appears most bluntly opposed to the ruling theory. Whereas according to the existing theory there would be no dream if the outer and inner sensory stimuli did not repeatedly wake the mind, according to Robert the impulse to dream lies in the mind itself. It lies in the overcharging which demands discharge, and Robert judges with perfect consistency when he maintains that the causes determining the dream which depend on the physical state assume a subordinate rank, and could not incite dreams in a mind containing no material for dream formation taken from waking consciousness. It is admitted, however, that the phantasy pictures originating in the depths of the mind can be influenced by the nervous stimuli (p. 48). Thus, according to Robert, the dream is not quite so dependent on the somatic element. To be sure, it is not a psychic process, and has no place among the psychic processes of the waking state; it is a nocturnal somatic process in the apparatus devoted to mental activity, and has a function to perform, viz. to guard this apparatus

against overstraining, or, if the comparison may be changed, to cleanse the mind.

Another author, Yves Delage,[15] bases his theory on the same characteristics of the dream, which become clear in the selection of the dream material, and it is instructive to observe how a slight turn in the conception of the same things gives a final result of quite different bearing.

Delage, after having lost through death a person very dear to him, found from his own experience that we do not dream of what occupies us intently during the day, or that we begin to dream of it only after it is overshadowed by other interests of the day. His investigations among other persons corroborated the universality of this state of affairs. Delage makes a nice observation of this kind, if it turn out to be generally true, about the dreaming of newly married people: "S'ils ont été fortement épris, presque jamais ils n'ont réve l'un de l'autre avant le mariage ou pendant la lune de miel; et s'ils ont rêve d'amour c'est pour etre infidèles avec quelque personne indifférente ou odieuse." But what does one dream of? Delage recognises that the material occurring in our dreams consists of fragments and remnants of impressions from the days preceding and former times. All that appears in our dreams, what at first we may be inclined to consider creations of the dream life, proves on more thorough investigation to be unrecognised reproductions, "souvenir inconscient." But this presentation material shows a common character; it originates from impressions which have probably affected our senses more forcibly than our mind, or from which the attention has been deflected soon after their appearance. The less conscious, and at the same time the stronger the impression, the more prospect it has of playing a part in the next dream.

These are essentially the same two categories of impressions, the insignificant and the unadjusted, which were emphasized by Robert,[55] but Delage changes the connection by assuming that these impressions become the subject of dreams, not because they are indifferent, but because they are unadjusted. The insignificant

impressions, too, are in a way not fully adjusted; they, too, are from their nature as new impressions "autant de ressorts tendus," which will be relaxed during sleep. Still more entitled to a rôle in the dream than the weak and almost unnoticed impression is a strong impression which has been accidentally detained in its elaboration or intentionally repressed. The psychic energy accumulated during the day through inhibition or suppression becomes the main-spring of the dream at night.

Unfortunately Delage stops here in his train of thought; he can ascribe only the smallest part to an independent psychic activity in the dream, and thus in his dream theory reverts to the ruling doctrine of a partial sleep of the brain: "En somme le rêve est le produit de la pensée errante, sans but et sans direction, se fixant successivement sur les souvenirs, qui ont gardé assez d'intensité pour se placer sur sa route et l'arrêter au passage, établissant entre eux un lien tantôt faible et indécis, tantôt plus fort et plus serré, selon que l'activité actuelle du cerveau est plus ou moins abolie par le sommeil."

In a third group we may include those dream theories which ascribe to the dreaming mind the capacity and propensity for a special psychic activity, which in the waking state it can accomplish either not at all or only in an imperfect manner. From the activity of these capacities there usually results a useful function of the dream. The dignity bestowed upon the dream by older psychological authors falls chiefly in this category. I shall content myself, however, with quoting, in their place, the assertions of Burdach,[8] by virtue of which the dream "is the natural activity of the mind, which is not limited by the force of the individuality, not disturbed by self-consciousness and not directed by self-determination, but is the state of life of the sensible central point indulging in free play" (p. 480).

Burdach and others apparently consider this revelling in the free use of one's own powers as a state in which the mind refreshes itself and takes on new strength for the day work, something after the manner of a vacation holiday. Burdach, therefore, cites with approval

the admirable words in which the poet Novalis lauds the sway of the dream: "The dream is a bulwark against the regularity and commonness of life, a free recreation of the fettered phantasy, in which it mixes together all the pictures of life and interrupts the continued earnestness of grown-up men with a joyous children's play. Without the dream we should surely age earlier, and thus the dream may be considered perhaps not a gift directly from above, but a delightful task, a friendly companion, on our pilgrimage to the grave."

The refreshing and curative activity of the dream is even more impressively depicted by Purkinje.[53] "The productive dreams in particular would perform these functions. They are easy plays of the imagination, which have no connection with the events of the day. The mind does not wish to continue the tension of the waking life, but to release it and recuperate from it. It produces, in the first place, conditions opposed to those of the waking state. It cures sadness through joy, worry through hope and cheerfully distracting pictures, hatred through love and friendliness, and fear through courage and confidence; it calms doubt through conviction and firm belief, and vain expectations through realisation. Many sore spots in the mind, which the day keeps continually open, sleep heals by covering them and guarding against fresh excitement. Upon this the curative effect of time is partially based." We all feel that sleep is beneficial to the psychic life, and the vague surmise of the popular consciousness apparently cannot be robbed of the notion that the dream is one of the ways in which sleep distributes its benefits.

The most original and most far-reaching attempt to explain the dream as a special activity of the mind, which can freely display itself only in the sleeping state, was the one undertaken by Scherner[58] in 1861. Scherner's book, written in a heavy and bombastic style, inspired by an almost intoxicated enthusiasm for the subject, which must repel us unless it can carry us away with it, places so many difficulties in the way of an analysis that we gladly resort to the clearer and shorter description in which the philosopher Volkelt[72] presents Scherner's theories: "From the mystic conglomerations and from all

the gorgeous and magnificent billows there indeed flashes and irradiates an ominous light of sense, but the path of the philosopher does not thereby become clearer." Such is the criticism of Scherner's description from one of his own adherents.

Scherner does not belong to those authors who allow the mind to take along its undiminished capacities into the dream life. He indeed explains how in the dream the centrality and the spontaneous energy of the ego are enervated, how cognition, feeling, will, and imagination become changed through this decentralisation, and how no true mental character, but only the nature of a mechanism, belongs to the remnants of these psychic forces. But instead, the activity of the mind designated as phantasy, freed from all rational domination and hence completely uncontrolled, rises in the dream to absolute supremacy. To be sure, it takes the last building stones from the memory of the waking state, but it builds with them constructions as different from the structures of the waking state as day and night. It shows itself in the dream not only reproductive, but productive. Its peculiarities give to the dream life its strange character. It shows a preference for the unlimited, exaggerated, and prodigious, but because freed from the impeding thought categories, it gains a greater flexibility and agility and new pleasure; it is extremely sensitive to the delicate emotional stimuli of the mind and to the agitating affects, and it rapidly recasts the inner life into the outer plastic clearness. The dream phantasy lacks the language of ideas; what it wishes to say, it must clearly depict; and as the idea now acts strongly, it depicts it with the richness, force, and immensity of the mode in question. Its language, however simple it may be, thus becomes circumstantial, cumbersome, and heavy. Clearness of language is rendered especially difficult by the fact that it shows a dislike for expressing an object by its own picture, but prefers a strange picture, if the latter can only express that moment of the object which it wishes to describe. This is the symbolising activity of the phantasy…. It is, moreover, of great significance that the dream phantasy copies objects not in detail, but only in outline and even this in the broadest manner. Its paintings,

therefore, appear ingeniously light and graceful. The dream phantasy, however, does not stop at the mere representation of the object, but is impelled from within to mingle with the object more or less of the dream ego, and in this way to produce an action. The visual dream, *e.g.*, depicts gold coins in the street; the dreamer picks them up, rejoices, and carries them away.

According to Scherner, the material upon which the dream phantasy exerts its artistic activity is preponderately that of the organic sensory stimuli which are so obscure during the day (comp. p. 29); hence the phantastic theory of Scherner, and the perhaps over-sober theories of Wundt and other physiologists, though otherwise diametrically opposed, agree perfectly in their assumption of the dream sources and dream excitants. But whereas, according to the physiological theory, the psychic reaction to the inner physical stimuli becomes exhausted with the awakening of any ideas suitable to these stimuli, these ideas then by way of association calling to their aid other ideas, and with this stage the chain of psychic processes seeming to terminate according to Scherner, the physical stimuli only supply the psychic force with a material which it may render subservient to its phantastic intentions. For Scherner the formation of the dream only commences where in the conception of others it comes to an end.

The treatment of the physical stimuli by the dream phantasy surely cannot be considered purposeful. The phantasy plays a tantalising game with them, and represents the organic source which gives origin to the stimuli in the correspondent dream, in any plastic symbolism. Indeed Scherner holds the opinion, not shared by Volkelt and others, that the dream phantasy has a certain favourite representation for the entire organism; this representation would be the *house*. Fortunately, however, it does not seem to limit itself in its presentation to this material; it may also conversely employ a whole series of houses to designate a single organ, *e.g.*, very long rows of houses for the intestinal excitation. On other occasions particular parts of the house actually represent particular parts of the body,

as *e.g.*, in the headache-dream, the ceiling of the room (which the dream sees covered with disgusting reptile-like spiders) represents the head.

Quite irrespective of the house symbolism, any other suitable object may be employed for the representation of these parts of the body which excite the dream. "Thus the breathing lungs find their symbol in the flaming stove with its gaseous roaring, the heart in hollow boxes and baskets, the bladder in round, bag-shaped, or simply hollowed objects. The male dream of sexual excitement makes the dreamer find in the street the upper portion of a clarinette, next to it the same part of a tobacco pipe, and next to that a piece of fur. The clarinette and tobacco pipe represent the approximate shape of the male sexual organ, while the fur represents the pubic hair. In the female sexual dream the tightness of the closely approximated thighs may be symbolised by a narrow courtyard surrounded by houses, and the vagina by a very narrow, slippery and soft footpath, leading through the courtyard, upon which the dreamer is obliged to walk, in order perhaps to carry a letter to a gentleman" (Volkelt, p. 39). It is particularly noteworthy that at the end of such a physically exciting dream, the phantasy, as it were, unmasks by representing the exciting organ or its function unconcealed. Thus the "tooth-exciting dream" usually ends with the dreamer taking a tooth out of his mouth.

The dream phantasy may, however, not only direct its attention to the shape of the exciting organ, but it may also make the substance contained therein the object of the symbolisation. Thus the dream of intestinal excitement, *e.g.*, may lead us through muddy streets, the bladder-exciting dream to foaming water. Or the stimulus itself, the manner of its excitation, and the object it covets, are represented symbolically, or the dream ego enters into a concrete combination with the symbolisation of its own state, as *e.g.*, when, in the case of painful stimuli, we struggle desperately with vicious dogs or raging bulls, or when in the sexual dream the dreamer sees herself pursued by a naked man. Disregarding all the possible prolixity of elaboration, a symbolising phantastic activity remains as the central force of

every dream. Volkelt,[72] in his finely and fervently written book, next attempted to penetrate further into the character of this phantasy and to assign to the psychical activity thus recognised, its position in a system of philosophical ideas, which, however, remains altogether too difficult of comprehension for any one who is not prepared by previous schooling for the sympathetic comprehension of philosophical modes of thinking.

Scherner connects no useful function with the activity of the symbolising phantasy in dreams. In the dream the psyche plays with the stimuli at its disposal. One might presume that it plays in an improper manner. One might also ask us whether our thorough study of Scherner's dream theory, the arbitrariness and deviation of which from the rules of all investigation are only too obvious, can lead to any useful results. It would then be proper for us to forestall the rejection of Scherner's theory without examination by saying that this would be too arrogant. This theory is built up on the impression received from his dreams by a man who paid great attention to them, and who would appear to be personally very well fitted to trace obscure psychic occurrences. Furthermore it treats a subject which, for thousands of years, has appeared mysterious to humanity though rich in its contents and relations; and for the elucidation of which stern science, as it confesses itself, has contributed nothing beyond attempting, in entire opposition to popular sentiment, to deny the substance and significance of the object. Finally, let us frankly admit that apparently we cannot avoid the phantastical in our attempts to elucidate the dream. There are also phantastic ganglia cells; the passage cited on p. 63 from a sober and exact investigator like Binz,[4] which depicts how the aurora of awakening flows along the dormant cell masses of the cerebrum, is not inferior in fancifulness and in improbability to Scherner's attempts at interpretation. I hope to be able to demonstrate that there is something actual underlying the latter, though it has only been indistinctly observed and does not possess the character of universality entitling it to the claim of a dream theory. For the present, Scherner's theory of the dream, in its contrast to

the medical theory, may perhaps lead us to realise between what extremes the explanation of dream life is still unsteadily vacillating.

(h) RELATIONS BETWEEN THE DREAM AND MENTAL DISEASES

When we speak of the relation of the dream to mental disturbances, we may think of three different things: (1) Etiological and clinical relations, as when a dream represents or initiates a psychotic condition, or when it leaves such a condition behind it. (2) Changes to which the dream life is subjected in mental diseases. (3) Inner relations between the dream and the psychoses, analogies indicating an intimate relationship. These manifold, relations between the two series of phenomena have been a favourite theme of medical authors in the earlier periods of medical science—and again in recent times—as we learn from the literature on the subject gathered from Spitta,[64] Radestock,[54] Maury,[48] and Tissié.[68] Sante de Sanctis has lately directed his attention to this relationship. For the purposes of our discussion it will suffice merely to glance at this important subject.

In regard to the clinical and etiological relations between the dream and the psychoses, I will report the following observations as paradigms. Hohnbaum asserts (see Krauss, p. 39), that the first attack of insanity frequently originates in an anxious and terrifying dream, and that the ruling idea has connection with this dream. Sante de Sanctis adduces similar observations in paranoiacs, and declares the dream to be, in some of them, the "vraie cause déterminante de la folie." The psychosis may come to life all of a sudden with the dream causing and containing the explanation for the mental disturbances, or it may slowly develop through further dreams that have yet to struggle against doubt. In one of de Sanctis's cases, the affecting dream was accompanied by light hysterical attacks, which in their turn were followed by an anxious, melancholic state. Féré (cited by Tissié) refers to a dream which caused an hysterical paralysis. Here

the dream is offered us as an etiology of mental disturbance, though we equally consider the prevailing conditions when we declare that the mental disturbance shows its first manifestation in dream life, that it has its first outbreak in the dream. In other instances the dream life contained the morbid symptoms, or the psychosis was limited to the dream life. Thus Thomayer[70] calls attention to anxiety dreams which must be conceived as equivalent to epileptic attacks. Allison has described nocturnal insanity (cited by Radestock), in which the subjects are apparently perfectly well in the day-time, while hallucinations, fits of frenzy, and the like regularly appear at night. De Sanctis and Tissié report similar observations (paranoiac dream-equivalent in an alcoholic, voices accusing a wife of infidelity). Tissié reports abundant observations from recent times in which actions of a pathological character (based on delusions, obsessive impulses) had their origin in dreams. Guislain describes a case in which sleep was replaced by an intermittent insanity.

There is hardly any doubt that along with the psychology of the dream, the physician will one day occupy himself with the psychopathology of the dream.

In cases of convalescence from insanity, it is often especially obvious that, while the functions of the day are normal, the dream life may still belong to the psychosis. Gregory is said first to have called attention to such cases (cited by Krauss[39]). Macario (reported by Tissié) gives account of a maniac who, a week after his complete recovery again experienced in dreams the flight of ideas and the passionate impulses of his disease.

Concerning the changes to which the dream life is subjected in chronic psychotic persons, very few investigations have so far been made. On the other hand, timely attention has been called to the inner relationship between the dream and mental disturbance, which shows itself in an extensive agreement of the manifestations occurring to both. According to Maury,[47] Cubanis, in his *Rapports du physique et du moral*, first called attention to this; following him came Lelut, J. Moreau, and more particularly the philosopher Maine de

Biran. To be sure, the comparison is still older. Radestock[54] begins the chapter dealing with this comparison, by giving a collection of expressions showing the analogy between the dream and insanity. Kant somewhere says: "The lunatic is a dreamer in the waking state." According to Krauss "Insanity is a dream with the senses awake." Schopenhauer terms the dream a short insanity, and insanity a long dream. Hagen describes the delirium as dream life which has not been caused by sleep but by disease. Wundt, in the *Physiological Psychology*, declares: "As a matter of fact we may in the dream ourselves live through almost all symptoms which we meet in the insane asylums."

The specific agreements, on the basis of which such an identification commends itself to the understanding, are enumerated by Spitta.[64] And indeed, very similarly, by Maury in the following grouping: "(1) Suspension or at least retardation, of self-consciousness, consequent ignorance of the condition as such, and hence incapability of astonishment and lack of moral consciousness. (2) Modified perception of the sensory organs; that is, perception is diminished in the dream and generally enhanced in insanity. (3) Combination of ideas with each other exclusively in accordance with the laws of association and of reproduction, hence automatic formation of groups and for this reason disproportion in the relations between ideas (exaggerations, phantasms). And as a result of all this: (4) Changing or transformation of the personality and at times of the peculiarities of character (perversities)."

Radestock gives some additional features or analogies in the material: "Most hallucinations and illusions are found in the sphere of the senses of sight and hearing and general sensation. As in the dream, the smallest number of elements is supplied by the senses of smell and taste. The fever patient, like the dreamer, is assaulted by reminiscences from the remote past; what the waking and healthy man seems to have forgotten is recollected in sleep and in disease." The analogy between the dream and the psychosis receives its full value only when, like a family resemblance, it is extended

to the finer mimicry and to the individual peculiarities of facial expression.

"To him who is tortured by physical and mental sufferings the dream accords what has been denied him by reality, to wit, physical well-being and happiness; so the insane, too, see the bright pictures of happiness, greatness, sublimity, and riches. The supposed possession of estates and the imaginary fulfilment of wishes, the denial or destruction of which have just served as a psychic cause of the insanity, often form the main content of the delirium. The woman who has lost a dearly beloved child, in her delirium experiences maternal joys; the man who has suffered reverses of fortune deems himself immensely wealthy; and the jilted girl pictures herself in the bliss of tender love."

The above passage from Radestock, an abstract of a keen discussion of Griesinger[31] (p. 111), reveals with the greatest clearness the wish fulfilment as a characteristic of the imagination, common to the dream and the psychosis. (My own investigations have taught me that here the key to a psychological theory of the dream and of the psychosis is to be found.)

"Absurd combinations of ideas and weakness of judgment are the main characteristics of the dream and of insanity." The overestimation of one's own mental capacity, which appears absurd to sober judgment, is found alike both in one and the other, and the rapid course of ideas in the dream corresponds to the flight of ideas in the psychosis. Both are devoid of any measure of time. The dissociation of personality in the dream, which, for instance, distributes one's own knowledge between two persons, one of whom, the strange one, corrects in the dream one's own ego, fully corresponds to the well-known splitting of personality in hallucinatory paranoia; the dreamer, too, hears his own thoughts expressed by strange voices. Even the constant delusions find their analogy in the stereotyped recurring pathological dreams (*rêve obsedant*). After recovering from a delirium, patients not infrequently declare that the disease appeared to them like an uncomfortable dream; indeed,

they inform us that occasionally, even during the course of their sickness, they have felt that they were only dreaming, just as it frequently happens in the sleeping dream.

Considering all this, it is not surprising that Radestock condenses his own opinion and that of many others into the following: Insanity, an abnormal phenomenon of disease, is to be regarded as an enhancement of the periodically recurring normal dream states" (p. 228).

Krauss[39] attempted to base the relationship between the dream and insanity upon the etiology (or rather upon the exciting sources), perhaps making the relationship even more intimate than was possible through the analogy of the phenomena they manifest. According to him, the fundamental element common to both is, as we have learned, the organically determined sensation, the sensation of physical stimuli, the general feeling produced by contributions from all the organs. *Cf.* Peise, cited by Maury[48] (p. 60).

The incontestable agreement between the dream and mental disturbance, extending into characteristic details, constitutes one of the strongest supports of the medical theory of dream life, according to which the dream is represented as a useless and disturbing process and as the expression of a reduced psychic activity. One cannot expect, however, to derive the final explanation of the dream from the mental disturbances, as it is generally known in what unsatisfactory state our understanding of the origin of the latter remains. It is very probably, however, that a modified conception of the dream must also influence our views in regard to the inner mechanism of mental disturbances, and hence we may say that we are engaged in the elucidation of the psychosis when we endeavour to clear up the mystery of the dream.

I shall have to justify myself for not extending my summary of the literature of the dream problems over the period between the first appearance of this book and its second edition. If this justification may not seem very satisfactory to the reader, I was nevertheless influenced by it. The motives which mainly induced me to summarise

the treatment of the dream in the literature have been exhausted with the foregoing introduction; to have continued with this work would have cost me extraordinary effort and would have afforded little advantage or knowledge. For the period of nine years referred to has yielded nothing new or valuable either for the conception of the dream in actual material or in points of view. In most of the publications that have since appeared my work has remained unmentioned and unregarded; naturally least attention has been bestowed upon it by the so-called "investigators of dreams," who have thus afforded a splendid example of the aversion characteristic of scientific men to learning something new. "Les savants ne sont pas curieux," said the scoffer Anatole France. If there were such a thing in science as right to revenge, I in turn should be justified in ignoring the literature since the appearance of this book. The few accounts that have appeared in scientific journals are so full of folly and misconception that my only possible answer to my critics would be to request them to read this book over again. Perhaps also the request should be that they read it as a whole.

In the works of those physicians who make use of the psychoanalytic method of treatment (Jung, Abraham, Riklin, Muthmann, Stekel, Rank, and others), an abundance of dreams have been reported and interpreted in accordance with my instructions. In so far as these works go beyond the confirmation of my assertions I have noted their results in the context of my discussion. A supplement to the literary index at the end of this book brings together the most important of these new publications. The voluminous book on the dream by Sante de Sanctis, of which a German translation appeared soon after its publication, has, so to speak, crossed with mine, so that I could take as little notice of him as the Italian author could of me. Unfortunately, I am further obliged to declare that this laborious work is exceedingly poor in ideas, so poor that one could never divine from it the existence of the problems treated by me.

I have finally to mention two publications which show a near relation to my treatment of the dream problems. A younger philosopher,

H. Swoboda, who has undertaken to extend W. Fliesse's discovery of biological periodicity (in groups of twenty-three and twenty-eight days) to the psychic field, has produced an imaginative work,[13] in which, among other things, he has used this key to solve the riddle of the dream. The interpretation of dreams would herein have fared badly; the material contained in dreams would be explained through the coincidence of all those memories which during the night complete one of the biological periods for the first or the n-th time. A personal statement from the author led me to assume that he himself no longer wished to advocate this theory earnestly. But it seems I was mistaken in this conclusion; I shall report in another place some observations in reference to Swoboda's assertion, concerning the conclusions of which I am, however, not convinced. It gave me far greater pleasure to find accidentally, in an unexpected place, a conception of the dream in essentials fully agreeing with my own. The circumstances of time preclude the possibility that this conception was influenced by a reading of my book; I must therefore greet this as the only demonstrable concurrence in the literature with the essence of my dream theory. The book which contains the passage concerning the dream which I have in mind was published as a second edition in 1900 by Lynkus under the title *Phantasien eines Realisten*.

NOTES

1 To the first publication of this book, 1900.

2 [2.0] [2.1] Compare, on the other hand, O. Gruppe, *Griechische Mythologie und Religionsgeschichte*, p. 390. "Dreams were divided into two classes; the first were influenced only by the present (or past), and were unimportant for the future: they embraced the *ἐνύπνια*, insomnia, which immediately produces the given idea or its opposite, *e.g.* hunger or its satiation, and the φαντάσματα, which elaborates the given idea phantastically, as *e.g.* the nightmare, ephialtes. The second class was, on the other hand,

determinant for the future. To this belong: (1) direct prophecies received in the dream (*χρηματωμδς*, oraculum); (2) the foretelling of a future event (*ὅραμα*); (3) the symbolic or the dream requiring interpretation (*ὄνειρος*, somnium). This theory has been preserved for many centuries."

3 From subsequent experience I am able to state that it is not at all rare to find in dreams repetitions of harmless or unimportant occupations of the waking state, such as packing trunks, preparing food, work in the kitchen, &c., but in such dreams the dreamer himself emphasizes not the character but the reality of the memory, "I have really done all this in the day time."

4 *Chauffeurs* were bands of robbers in the Vendée who resorted to this form of torture.

5 Gigantic persons in a dream justify the assumption that it deals with a scene from the dreamer's childhood.

6 The first volume of this Norwegian author, containing a complete description of dreams, has recently appeared in German. See Index of Literature, No. 74 a.

7 Periodically recurrent dreams have been observed repeatedly. *Cf.* the collection of Chabaneix.[11]

8 Silberer has shown by nice examples how in the state of sleepiness even abstract thoughts may be changed into illustrative plastic pictures which express the same thing (*Jahrbuch* von Bleuler-Freud, vol. i. 1900).

9 Haffner[32] made an attempt similar to Delbœuf's to explain the dream activity on the basis of an alteration which must result in an introduction of an abnormal condition in the otherwise correct function of the intact psychic apparatus, but he described this condition in somewhat different words. He states that the first distinguishing mark of the dream is the absence of time and space, *i.e.* the emancipation of the presentation from the position in the order of time and space which is common to the individual. Allied to this is the second fundamental character of the dream, the mistaking of the hallucinations, imaginations, and

phantasy-combinations for objective perceptions. "The sum total of the higher psychic forces, especially formation of ideas, judgment, and argumentation on the one hand, and the free self-determination on the other hand, connect themselves with the sensory phantasy pictures and at all times have them as a substratum. These activities too, therefore, participate in the irregularity of the dream presentation. We say they participate, for our faculties of judgment and will power are in themselves in no way altered during sleep. In reference to activity, we are just as keen and just as free as in the waking state. A man cannot act contrary to the laws of thought, even in the dream, *i.e.* he is unable to harmonise with that which represents itself as contrary to him, &c.; he can only desire in the dream that which he presents to himself as good (*sub ratione boni*). But in this application of the laws of thinking and willing the human mind is led astray in the dream through mistaking one presentation for another. It thus happens that we form and commit in the dream the greatest contradictions, while, on the other hand, we display the keenest judgments and the most consequential chains of reasoning, and can make the most virtuous and sacred resolutions. Lack of orientation is the whole secret of the flight by which our phantasy moves in the dream, and lack of critical reflection and mutual understanding with others is the main source of the reckless extravagances of our judgments, hopes, and wishes in the dream" (p. 18).

10 *Cf.* Haffner[32] and Spitta[64].

11 *Grundzüge des Systems der Anthropologie.* Erlangen, 1850 (quoted by Spitta).

12 *Das Traumleben und seine Deutung*, 1868 (cited by Spitta, p. 192).

13 H. Swoboda, *Die Perioden des Menschlichen Organismus*, 1904.