

Concentration Versus Relaxation in Relation to Telepathy

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In all the years of search for the psychological foundations of telepathy, the investigator has found himself caught between opposing counsels: shall he seek to develop in his cooperating subjects the attitude of concentration—tense and strenuous prosecution of a task—or of relaxed, dissolved, sleep-like passivity? There is a large amount of good evidence that the state of *concentration* is favorable to positive results; there is an equally formidable mass of evidence that positive results spring from *relaxation*. This is no formal academic question. Every step taken in research depends upon the psychological condition one is striving to induce; and what one should strive to induce is dictated chiefly by one's interpretation of the large body of existing data. Scientific work is seldom advanced by beginning each investigation as if all that went before were merely so much history; it is the nature of science to build cooperatively upon foundations laid before.

It may therefore prove valuable for immediate telepathic research if we can bring into sharper focus the critical studies dealing with concentration and relaxation, showing what sort of results have arisen from each condition. Indeed, we may hope, as in the case of most questions which we put to Nature, that the paradox will prove to lie in our conceptions and phraseology, and that behind the apparent contradiction a fairly coherent situation may be discovered.

We will first review some of the evidence that *concentration* is favorable. Just as the Oriental who seeks esoteric wisdom learns by arduous disciplines to concentrate, shutting out the affairs of the world in order to give himself wholly to single-minded contemplation, so the Occidental scholar, executive, physician, or school-child learns to work in a state of concentrated attention to a single absorbing task.

Concentration Versus Relaxation

[3

Modern science and technology, and the Occidental mind which has shaped and been shaped by them, are the products of focalized, realistic thinking about a series of sharply defined problems. Archimedes was so concentrated on the problem of ascertaining the amount of gold in Hiero's crown that, when the solution came to him as he was stepping into his bath, he ran home unclothed shouting, "I have found it, I have found it!" And when he was drawing geometrical figures in the sand one day he was set upon by Roman soldiers and fatally stabbed, saying to the soldiers as he fell, "Don't spoil my circle." It is said that a few hours after the midday meal Newton could not remember whether he had dined or not, and Gauss would not come down from his attic for forty-eight hours at a stretch when he was completing his mathematical computations. Such concentration was what Dryden had in mind when he wrote that "great wits are sure to madness near allied." Johannes Müller, the German physiologist, comes from his laboratory like a gunner from his turret, saying, "The work draws blood."

Our American intelligence, whetted by three centuries of conquering the soil and exploiting the new technology, has in fact tended to despise every psychological process which is *not* concentrated upon a practical task. "Wake up"; "Put your mind to it"; "Genius is 99 percent perspiration." The familiar phrase, "Nonsense, you're dreaming," illustrates the contemporary attitude as to the utter worthlessness of less concentrated mental states.

At first sight, then, we should expect to find our American parapsychological laboratories concerning themselves almost wholly with problems of the tense, attentive organism, and emphasizing the virtues of concentrated voluntary effort. In Rhine's *Extra-Sensory Perception* (1) we find that most of the experimental subjects are clearly concentrated upon their task; when upset by discordant emotion or by distraction, they fail. Whether voluntarily or by force of habit, they fall into states of intense focalization upon their task.

4] *Journal of the American Society for Psychical Research*

One thing introduced experimentally to *damage* good performance is a hypnotic drug, sodium amytal, which behaves as expected both in injuring concentration and in depressing the scores; and the thing that brings the subject back to his high scoring level is the stimulant caffeine; he "pulls himself together," frees himself of disorientation. And we find subjects deliberately undertaking to make a specially high score, achieving the result by herculean efforts of concentration—almost like the superhuman concentration reported by the celebrated clairvoyant Ossowiecki in his reading of concealed materials (2).

In the *Journal of Parapsychology* we learn that Riess's high-scoring subject (3) was a hyperthyroid patient, and we know that the thyroid, up to a point at least, is a facilitator, activator, rather than a depressant or relaxing agent. We learn, moreover, that Stuart's subjects scored poorly when the tempo of work "distracted" them, and that the flashing of light in their eyes was markedly inhibitory (4 and 5). The good results of children, as in Mrs. Rhine's experiments (6), appear to be attributable in some measure to freedom from self-consciousness, and perhaps to their capacity for undivided attention to the task.

The case is certainly well-documented, broadly founded, and inherently consistent and rational. Why, then, do we find in the history of our subject at least as large a volume of evidence that the task of achieving telepathic contact is the function of a deep, unfocalized unconscious or subliminal self, whose chief enemy and represser is the concentrated conscious self of waking life? We are perennially warned that the practical conscious mind will have no traffic with those processes which seek to slip from the tight hold of our workaday sense of reality, with its sharply defined time and space, its logical rejection of every intimation of a process working by means which transcend the senses; the concentrated conscious mind must be dissolved, drugged, disarmed, obliterated—anything to get it out of the way so that another kind of process may be set free!

Concentration Versus Relaxation

[5]

Thus, in the first great study of spontaneous telepathy, the classic *Phantasms of the Living*, Gurney, Myers, and Podmore report an extraordinary number of cases in which the percipient is drowsy, delirious, hypnotized, or dreaming; the dream cases are so numerous, indeed, that they require special treatment. In a later analysis of this and other spontaneous material, Warcollier (7) shows that in general the sleeping and near-sleeping states (including the process of going to sleep and that of waking up, along with states of suffocation, coma, and the like) contribute a large proportion of the evidential cases—indeed that the sleep-like condition of agent, or percipient, and especially of both, is a cardinal asset. This hardly looks like "concentration."

Some striking examples of apparent telepathic communication between two sleeping persons may be found in Dr. G. B. Ermacora's paper, "Telepathic Dreams Experimentally Induced." (*Proc. S.P.R.*, Vol. XI, 1895, pp. 235-308.) This long and rather complicated series of experiments should be studied in full; briefly, the paper is concerned with the dreams of a four and a half year old child who lived with a cousin possessing unusual mediumistic abilities. The medium's control, "Elvira," with whom Dr. Ermacora was in rapport, professed to produce in the child dreams the subject matter of which was suggested by Dr. Ermacora himself. Stringent precautions were taken to prevent any normal communication between the child and her cousin. For instance, on November 9, 1892, Dr. Ermacora, speaking to "Elvira" when the medium was in trance, proposed that the child should have the following dream that night:

Angelina [the child percipient], with Signorina Maria [the medium], would be at the window of her own room, and would look towards the river. A lamb would be grazing on the bank. A boat loaded with apples would pass, conducted by one boatman. He would stop close to the iron bridge, and get out to drink at the inn. While the boat was unguarded the lamb would jump in and begin to eat the apples, which would make Angelina laugh very much.

How well "Elvira" succeeded may be gathered from Dr. Ermacora's statement of November 10th:

6] *Journal of the American Society for Psychical Research*

About 4 P.M. I called to discover the results. I saw Signora Annetta [the medium's mother] first, and she was convinced that no communication had been possible between the child and Signorina Maria till the morning. Angelina told her the dream before Signorina Maria was awake. It is useless to repeat it, as it corresponds almost exactly to the programme. I say almost, because there are two points of difference which are precisely what render the results most interesting. One is that Angelina called the animal which ate the apples a "light-coloured dog," instead of a "lamb." Now the child, being a Venetian, had not seen any lambs, and when she saw one [in the dream], she naturally baptised it in her own fashion. The other point of difference is that she did not say where the boatman had gone, and, when questioned on the point on my arrival, she could not explain it, though she remembered the dream perfectly. According to what was said above [that is, if the medium suggests the dream verbally to the child, it is improbable that she will omit the particular about the inn and even less likely that she will call the lamb a "light-coloured dog"], these two particulars favour the hypothesis that the child sees the scene, instead of simply hearing it described.

The Groningen investigators found that their highly gifted subject fell naturally into a passive and relaxed state, which was evidently a powerful aid to him; they demonstrated by the galvanic skin reflex (electrical changes in the skin) that the subject could, in fact, report rather accurately when he achieved this state of relaxation (8). Estabrooks, after a year of hypnotic work with Harvard students, determined to use a *waking*, but *casual* state; not only was there to be no concentration, the subjects were first shown card-tricks and then told simply to *guess* cards (9).

In view of all this, we naturally turn to see what can be learned from the hypnotic state. As usually induced, it is a relaxed, sleep-like state, far indeed from waking, concentrated activity, and seeming to lend itself well to laboratory use in psychical research. There appear to be a number of major pieces of evidence suggesting that the hypnotic state is highly favorable.

Among these, we may refer to the series of hypnotic experiments known as the "Brighton Experiments." These are reported on at length in a paper published in 1889 by

Concentration Versus Relaxation

[7

Professor and Mrs. Sidgwick and Mr. G. A. Smith (*Proc. S.P.R.*, Vol. VI, pp. 128-170) and in a later one (1892) by Mrs. Sidgwick and Miss Alice Johnson (*Proc. S.P.R.*, Vol. VIII, pp. 536-596). The series should be studied in its entirety; we will quote here one typical experiment, as summarized and commented upon by Mrs. Sidgwick in her paper, "On Hindrances and Complications in Telepathic Communication" (*Proc. S.P.R.*, Vol. XXXIV, pp. 51-52):

In the one to be now quoted, the elements of the picture* emerged in a piecemeal manner, but each was definite when it came. The subject was *A sandwichman with advertisement of a play*. The percipient—P.—said, "Something like letter A—stroke there, then there." I [Mrs. Sidgwick] said, "Well, perhaps it will become clearer." P. continued, "Something like a head on the top of it; a V upside down—two legs and then a head. A man with two boards—looks like a man that goes about the streets with two boards. I can see a head at the top and the body and legs between the boards. I couldn't see what was written on the boards, because the edges were turned towards me." This case is interesting, because notwithstanding the gradual emergence and tardy understanding of the hallucinatory picture there is strong reason to think that it was the *idea* of a sandwich man, and not a copy of the agent's mental image, that reached the subliminal stratum of the percipient's mind. For the agent—Mr. Smith—stated afterwards that he had pictured to himself the man and one board facing him. And this was the natural way to think of it, since the subject set included the advertisement of a play, which of course would only be seen if the board faced the spectator. The percipient's impression was incomplete.

Moreover, there is the somewhat more spontaneous activity of the hypnotized subject in "traveling clairvoyance"; the subject, upon instruction, imagines himself traveling to a distant point, and reports what he sees, the report being later checked against the distant reality. As an example of traveling clairvoyance, we condense from a paper

* The percipient was hypnotized by the agent, Mr. G. A. Smith, and was then given a blank card to look at. He was told that he would presently see a picture thereon which he would describe. Mr. Smith concentrated his mind on an imaginary picture, the subject matter of which had been chosen by Mrs. Sidgwick or Miss Johnson and communicated to Mr. Smith in writing. After hypnosis was achieved, Mrs. Sidgwick talked to the percipient when necessary, Mr. Smith remaining silent.

8] *Journal of the American Society for Psychical Research*

by Dr. Alfred Backman, of Kalmar, Sweden (*Proc. S.P.R.*, Vol. VII, 1891-92, pp. 207-210):

Dr. Backman's subject, Alma, was a fourteen year old girl whom he was treating (in hypnosis) for heart disease. He had made some experiments in thought-transference with her and was encouraged by a number of successes. In April of 1890, he received a letter from a Dr. Kjellman, of Stockholm, suggesting that on the following day Dr. Backman would request Alma, when in hypnotic trance, to "find" a certain Dr. von B., whom she knew, and to describe the room in which he would be sitting, the other persons present, the arrangement of the furniture, and so forth. Dr. Kjellman further added that something not usually there would be hung from the chandelier in order to make the experiment more crucial. Dr. Kjellman's appearance, as well as his apartment, was unknown to both Dr. Backman and his subject. Alma, in trance, "went" to the apartment and, when questioned, gave a description of the room. She said, when asked to look at the chandelier, that there was no "chandelier," but something more like a lamp with something hanging from it. She described it as being long and narrow, of white metal, with some red stuff around it. She did not know what it was, but after being awakened said she thought it probably was a pair of scissors or a paper knife fixed to the chandelier with a handkerchief. She also mentioned many details concerning the furnishings of the room, the people present, and so forth. Dr. Backman sent his notes to Dr. Kjellman, who replied that though in some respects Alma's description of the interior of his apartment had been accurate, it was in other respects incorrect and could only be regarded as inconclusive. "But," he added, "her statement that the object was hanging in a lamp, not a chandelier, was right. It was both a lamp and a chandelier, and the lamp was drawn down a long way under the chandelier . . . There was really hanging in the chandelier a large pair of paper-scissors, fixed by an india-rubber otoscope, and with a tea-rose and some forget-me-nots in one of the handles of the scissors . . . It seems clear to me that she saw something, but she must have been confused by a number of ideas arising from the operation of her own brain."

Lastly, we want to refer to the beautiful series of telepathic experiments, using four experimental subjects, by Dr. Carl Bruck. A report on these experiments was published in German in 1925, and, not being available in English, merits a fuller description here. Bruck systematically compared the achievements of his subjects while awake and

Concentration Versus Relaxation

[9]

while in hypnosis. The material consisted of drawings and photographs made ready in a room adjoining the experimental room and in many instances placed within a portfolio before being brought into the experimental room. Thus sensory cues as sources of error seem well excluded. Examples* of simple direct hits are the following:

. . . These experiments were done simultaneously with R. and Z., using the drawing of a ladder as original. The two subjects were placed about ten feet apart and it was not possible that they could have seen each other's drawings. They were hypnotized simultaneously and were instructed to aim at the original (unknown to both of them, and to the witnesses of the experiment) which had been placed in the portfolio. These simultaneous attempts succeeded extremely well under conditions which forestall all objections. Fig. 7—Original, Fig. 7a—R.'s copy, Fig. 7b—Z.'s copy.

In the results it is to be noted that R. draws well and is better endowed telepathically than Z. He not only reproduces the original in remote details of form and relation to its surroundings—he also occupies himself as somnambulistic "medium," composing a supplementary still-life picture with a bucket in the background. In contrast, Z. got the solution, but was limited to the elementary concept "ladder." Nevertheless, a visual approximation cannot be denied even by one who has not the original for comparison.

Especially instructive is the evidence that real veridical flashes come in the hypnotic state, but that they are often either elaborated by supplementary associations and by efforts to attribute meaning to the impression received, or over-simplified to the point where little but a formal resemblance to the original remains. For example:

This sitting took place on September 4, 1922, at my [Dr. Bruck's] residence. It was a simultaneous experiment with R. and Z. both aiming at the same original, the drawing of a cup and saucer. R. was hypnotized by me and Z., sitting at a distance, by Dr. von Rutkowski. Dr. Rutkowski had not seen the drawing, which was kept in the portfolio throughout the experiment. I gave only the brief suggestion that the material would gradually emerge from a dark bank of clouds in such a way as to be copied by both subjects. R. and Z. were so

* The passages in small type have been freely translated and paraphrased from Bruck's original work, *Experimentelle Telepathie*, Julius Püttmann, Stuttgart, 1925.

10] *Journal of the American Society for Psychical Research*

placed that they could not have influenced each other's drawings. Fig. 3—Original, Fig. 3a—R.'s copy, Fig. 3b—Z.'s copy.

Both these successful results show the possibilities of variation in the telepathic process with respect to numerous details. R.'s drawing shows the familiar auto-suggested motor supplement, namely, a teaspoon. The cup agrees with the original in narrowing towards the top, with the handle on the right side. In addition, however, there is the following, which one might be inclined to apply in developing a general theory of the parapsychic processes: the original is a drawing of one of the cups from my own coffee service (unknown to both R. and Z.). I drew the original rather badly, for the cup is really more delicate and slender. R. has apparently not perceived my rather plump rendering, holding instead to the original form of the cup. It is thus not impossible (although beyond capability of proof) to suppose that "over my head" a direct clairvoyance of the cup occurred. The indistinct line of demarcation between telepathy and clairvoyance, which is frequently pointed out, justifies the raising of this question. No certainty can be reached, however, since one might attribute the result to R.'s superior artistic skill. His sense for style may also have been responsible for the addition of the spoon. In this connection, compare R.'s drawing in the [above] experiment, in which the original was a drawing of a ladder.

On the other hand, there is too little detail in Z.'s simultaneous drawing. It does show a crudely drawn cup that narrows towards the top, with a handle to the right, but the saucer is lacking altogether. As we found in later experiments, especially with R., this omission of complete elements of form, even to the point of leaving out as much as half of the picture, is due to a tendency towards simplification which may permit us to refer to a systematic conception of "partial telepathy."

In some instances, the subject draws what the experimenter has prepared for use in the *next* experiment—material previously drawn and lying concealed in the portfolio. An interesting example is as follows:

At the start of the experiment [taking place on September 11, 1922, with R. in hypnosis], one drawing was lying on top of the portfolio and the others [three of them] were contained within it. I had no special methodological purpose in doing this, but to this procedure a surprising and theoretically significant result is due. The picture lying on the portfolio represented a medicine bottle with a stopper, and I looked at it fixedly from time to time during the experiment. Fig. 4—first Original, Fig. 4a—copy, Fig. 4b—second Original.

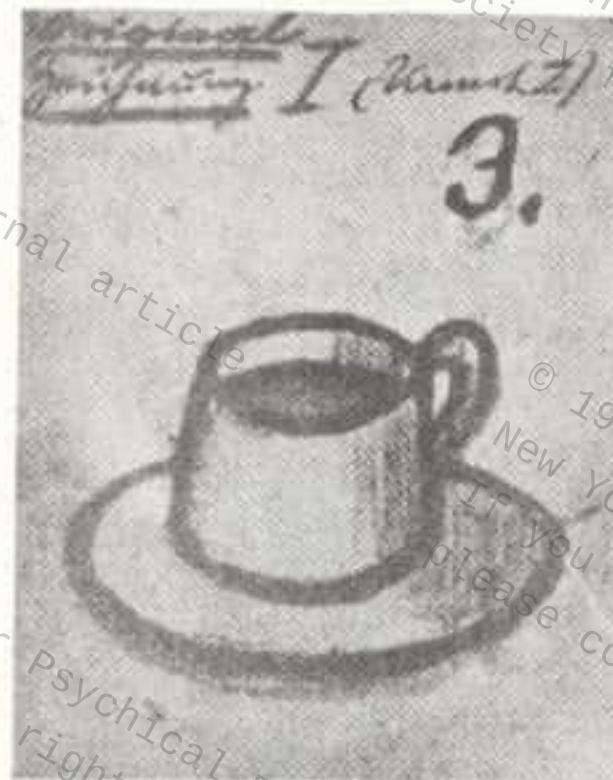
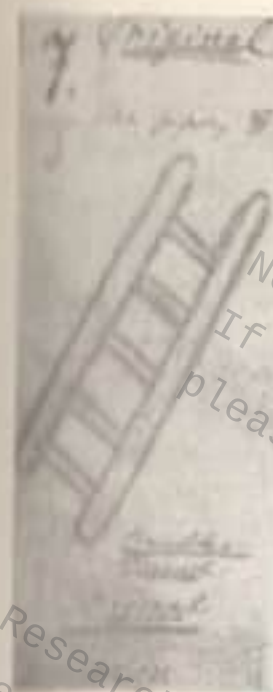




FIG. 4

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Concentration Versus Relaxation

[11]

R. now proceeded to draw what was, for me at least, knowing the original, a completely correct response, namely, the upper rim of the bottle neck with the stopper in place; as can be seen in the reproductions of the original and the copy, he even sketched in the shading that appears on the right side of the stopper. Then he ceased drawing and let the pencil drop from his hand as an indication that he had done all he could. Since I, however, had to regard the experiment as incomplete, I insisted that R. should continue to draw if anything further came to him. I admit this is a questionable procedure which, since the bottle had failed to appear in complete form, might end in a suggestive misleading of the subject into a spurious result. To my surprise, however, R. did not follow this lead; he left the first picture unfinished and beneath the neck of the bottle drew a completely new picture. With energetic strokes, indicating a new attitude to the task, he drew, beginning at the top, a sketch of a street lamp. A drawing of a street lamp was in fact the second of the three other drawings which lay in the portfolio. They were entirely out of sight of all those present, including several medical men who had come to witness the experiments.

This new telepathic drawing reveals the exact details of the original. Note that the two enlargements or bulges in the lamp post appear in the correct places relative to each other and to the lamp itself. At the same time, the decorative beams of light which the subject added in his drawing indicate his free creative artistic fantasy.

The experiment yields, so far as we know, a novel result. Instead of the postponing of a correct telepathic impression, it presents, under the guise of an apparent partial failure, the solution of a task which has been arranged for a later experiment.

In other instances the subject draws the material which had served as experimental material in the preceding experiment, the subject, of course, not having been told what the material was:

The sitting of November 17, 1922, took place at my residence and included experiments 38-45. R. alone was present . . . Experiments 40 and 41 were Portfolio* experiments using the same original (snapshots of two neckties—one a four-in-hand, the other a bow tie). Two failures resulted; nevertheless, the bow tie manifested itself in the next experiment but one (number 43 in the same sitting)—a typical telepathic latency, the more common form of temporal displacement . . .

* Portfolio experiment: original concealed within the portfolio.

12] *Journal of the American Society for Psychical Research*

Experiment 43 is the one which continues the theme of experiments 40 and 41 (same sitting). A snapshot of a pair of socks was used in an Open* hypnotic experiment. The result, negative from a formal viewpoint, displays, to the last detail, an exact reproduction of the bow tie which had been used as original in experiments 40-41. Fig. 14—Original, Fig. 14a—copy, Fig. 15—Original for experiments 40 and 41, bow tie.

Naturally, R. had not been informed of his failure in experiments 40-41. The picture of the bow tie had been carefully put aside and was thus unknown to him.

In spite of all this evidence, however, Bruck will not allow himself to formulate any generalizations regarding the value of the hypnotic state versus the waking state in telepathic experimentation. He compares the whole series of hypnotic results with the whole series of waking results with the same percipient, and indicates that the marked successes are about as frequent in the one state as in the other.

The real value of the hypnotic state may lie, not in the hypnosis *as such*, but in the tendency of hypnosis to simplify consciousness, free it from *self-consciousness*, fixate it upon the experimenter, and hence upon the task which the experimenter assigns. The success of waking telepathic experiments, such as those reported by Bruck, is very possibly due to basic favorable attitudes previously developed in hypnosis. These attitudes appear to be highly focalized, yet occurring in a relaxed state.

If this be so, we may begin to see here the resolution of the paradox which we have discussed. The hypnotic subject is not really less "concentrated," if by concentration one means the unitary motivated orientation towards a task; the very fact that he is relaxed may mean that he is free of practical preoccupations; it is the experimental task alone that is real to him. So in experiments in normal psychology. Ruger (10) found long ago that a *lack of self-awareness*, or, as he says, the development of a pure "problem attitude," was immeasurably superior, in so far as the learning process is concerned, to a competitive, self-conscious, or self-defensive attitude.

* Open Experiment: original lying on top of the portfolio

Concentration Versus Relaxation

[13]

In a paper on recent hypnotic experiments, Leuba (11) has offered evidence which suggests that hypnosis is not principally a question of suggestibility as such, but of *simplification* of consciousness, freedom from interference through over-complex stimulation, or freedom from free association; and, we might add, freedom from the conflict which *volition*, as a directive and repressive process, usually involves. Leuba's hypothesis seems so relevant to our present problem that we quote from his paper:

It is possible, however, that the most fundamental characteristic of the hypnotic state is not suggestibility, though undoubtedly that is usually present, but the limitation of the spontaneous mental life of the subject and the consequent limitation of attention to the stimuli provided by the experimenter . . .

The conditions favorable to the induction of hypnosis—quiet surroundings, muscular relaxation, concentration on some monotonous stimulus—are all conducive to the dissipation of muscular sets and to the narrowing of attention. I venture to suggest the hypothesis that the fundamental characteristic of the hypnotic state is this limitation of a self-initiated mental life, and that suggestibility flows from this limitation as a secondary phenomenon.

In the light of such observations, the state of mind of some of Rhine's subjects, in which there is a slight dissociation, a slight disorientation, a loss of contact with the surroundings, makes sense; and it should be added that as the experimental material becomes more complex, as in the case of the free drawings of Bruck, the dissociation, the freedom from interference, must perforce be longer and more profound than when the task simply consists in guessing one out of five possible symbols (as in Rhine's, or Tyrrell's, procedure). This more profound and more complete dissociation is what Mrs. Sinclair reports (12), and what Warcollier appears to have found in his subjects. Indeed, some of the best telepathic cases seem to involve dissociation, and the limitation of consciousness to a single slowly developing idea, in both agent and percipient. Examples that illustrate this point may be found in Warcollier's book, *Experimental Telepathy*.

The apparent inconsistency, then, between the value of

concentration and the value of relaxation appears to stem from failure to specify *what* is concentrated, *what* is relaxed. The fact seems to be that the everyday attitude of perceiving is directed towards the *immediate world of time and space* to which we are normally adjusted, and unless one learns how to break this attitude, more concentration does nothing but focus the *normal* perception. *Unconsciously*, however, and without effort, one may be oriented towards events with which our normal perception is unable to make contact, and if this orientation is strongly motivated, contact may be established in another way—subconsciously—provided only that the conscious processes do not *interfere*. Some individuals can consciously train themselves to hold their conscious processes in leash, or even to give the deeper processes the “go” signal; in other individuals the training process proceeds unwittingly, perhaps through the deeper satisfaction and self-fulfillment which subconscious processes release.

We are perforce reminded here of Freud's basic distinction between the two ways of thinking: one may think within the framework of practical necessity, or through free, autonomous self-realizing processes which have nothing to do with “reality.” We should, of course, have to add to Freud's theory, since it is not *denial* of reality, but contact with *another aspect* of reality that is involved. Basically, however, we have Freud to thank for the conception of genuine thought which is not directed towards a goal defined in terms of our immediate direct relation to the space and time in which we are immersed; and, even more important, we have him to thank for tools which we may use in attempting an explanation of this little-understood capacity of the unconscious. Perhaps we shall find that the effective drive to paranormal processes—the real orientation to the task which makes paranormal processes possible—stems from some deep personal concern with a means of breaking through the “prison walls” of immediate space and time, and that the ability to succeed in relation to *specific* material (while failing with other material) arises from

the immediate or the symbolic value of the person or thing with which contact must be made. Veridical dreams of events occurring to loved ones would, then, be based on two important factors: a need to make contact, and freedom from conscious interference.

Volition and concentration would thus prove to be utterly irrelevant except in so far as experimenters, psychoanalysts, or educators can guide the individual to voluntary use of his conscious energies in such fashion as to *set free*, and, perhaps in some slight measure, to stimulate the deeper wishes for paranormal contact which lie in the depths of the personality.

This hypothesis, incapable of being verified at present, may none the less be of some immediate use in research since it focusses upon three needs: (1) The need to study the ways in which conscious concentration acts upon deeper processes, (2) the need to study the *general* unconscious attitudes of the experimental subject, and (3) the need to understand the *specific* unconscious attitudes which account for the short-term variations of scoring ability in one experimental subject.

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