

CHAPTER 25

STUDIES CONCERNING THE PSYCHOLOGY AND SYMPTOMATOLOGY OF GENERAL PARESIS ¹

By Paul Schilder

I. A GENERAL PSYCHOLOGICAL INTRODUCTION

(a) *Objects and Relationships*

HUMAN BEINGS exist and act in a real world. This world has an articulation which they perceive.² The concept of perception, however, needs scrutiny. When speaking of perception we generally think of sense perception; indeed, we usually mean sensation. But—as I once showed³—sensation is an abstraction. Koffka⁴ too has criticized the current concept of sensation, and rightly so. There is no constant correspondence between simple objects of the outside world, stimuli, and simplest experience.⁵ The expression “sensation” should be used only for the subjective aspect⁶ of the experience of perceiving. The experi-

1. Schilder (655).

2. Schilder's epistemological stand is indicated here. It is the articulation of the world which is given, not the “categories” of the “pure mind” (Kant). The point is of importance, since modern dynamic psychology has implications suggestive of solipsism. See, for example, Laforgue (441, pp. 57-59). The epistemological paradox of dynamic psychology is: how account for an adequate knowledge of reality when consciousness, the medium for gaining knowledge, is determined by intrapsychic laws? This paradox—implicit to the psychoanalytic concept of “reality-testing” and amenable to psychological solution—is rarely tackled. (See Freud, Chap. 15, note 6, and Hartmann on “fitting-in,” Chap. 19, II, above.)

3. For a discussion of this point, see Schilder (649, pp. 3-6 and 172); see also Schilder (648, pp. 23-28).

4. See Koffka (406, pp. 103-5), and (404, pp. 147-49).

5. Schilder means that the concept sensation implies a quest for a simple psychological “element” (sensation) which would be elicited by a simple enough stimulus (reality-segment), if found. Here Schilder takes the point of view of Gestalt-psychology, and condemns as an idle dream the hope of finding a correspondence between isolated elements of reality and isolated elements of the psyche.

6. The concept “subjective aspect” reverberates with the influence of Meinong (511) and Brentano (90), and of Husserl's (346, 171) phenomenology.

ence of primitive percepts is by no means simpler than the experience of percepts of great complexity. It is, therefore, incorrect to say that perceptions are built of sensations. Actually, we are forever searching for the interrelations of our body, of our subjective sense-impressions, and of discrete parts of our percepts. We do this by means of complicated abstractions and experiments of our everyday life. When in this search we happen to hit upon units of subjective experience which seem in close correspondence with objects of simple structure, we call them sensations. Thus, sensations are by no means the natural units of psychic life, particularly not in the sense that psychic life is built of such simple sensations. There is a widespread opinion, more or less tacitly held, that only sensations are realities and that they become perception by being displaced into the outside world through projection. But starting with the sensations red, hard, round, it is impossible to arrive at the object, red billiard ball. Furthermore, red, hard, round, are by no means genuine primitive sensations. It is likely that in primitive sensation a great abundance of "elements" is interwoven; or more correctly, in primitive sensation elements would be altogether indistinguish-

Schilder—like Buehler (106), to whom he often refers—has been deeply influenced by these thinkers. Their influence is seen in Schilder's conception of all psychic life as consisting of "acts." Acts imply for him, just as for phenomenological philosophy, an object, turning of consciousness toward the object (intentionality), and the specific form the object takes in the act. See Schilder (648, p. 5), and (652, particularly the Introduction). Such phenomenological description of psychological happening is in harmony with the exploration by dynamic psychologies of the forms of conscious experience, and emphasizes one of their neglected aspects. For a discussion of "acts" and "intentionality," see Gurwitsch, in Farber (171, p. 65).

Gurwitsch writes:

The intentionality of consciousness may be defined as a relation which all, or at least certain, acts bear to an object. In this manner, Brentano introduced the no-

tion into contemporary philosophy. Seeking to account for the difference between what he calls "physical phenomena" and what he calls "psychical phenomena," Brentano found, among other characteristics, that the latter are distinguished by a relation to, or a direction toward, an object. This directedness of psychical phenomena is interpreted by Brentano as their containing within themselves an "immanent" object-like entity. Although Husserl takes over Brentano's notion of intentionality, he raises some objections against this interpretation. His examination of Brentano's conception of intentionality finally leads him to abandon it completely; but he agrees with Brentano in acknowledging the existence of a highly important class of mental factors—for which Husserl reserves the title of acts—which have the peculiarity of presenting the subject with an object. Experiencing an act, the subject is aware of an object, so that the act may be characterized . . . as a *consciousness* of an object whether real or ideal, whether existent or imaginary.

able.⁷ Actually, "sensation" indicates merely that while we are perceiving, something is going on in our body. I repeat: perception does not come about by projection. Rather it seems that every perception implies (a) that which is perceived, (b) my sensation, and (c) my act of turning toward the world.⁸

The world is not derived from my body or from my ego, but is just as genuine as they are. We are accustomed to separate perceiving an object, imaging it, and thinking it. It is a matter of dispute in psychology whether, besides perception-contents and image-contents, there are not imageless-contents also, such as thoughts (Buehler)⁹ and awarenesses (Ach).¹⁰ I do not believe that the existence of such imageless thoughts can be doubted, though it is an open question whether they can appear in isolation or require always the support of perceptual material; it is probable that fragments of perceptions and images are always present. Buehler also holds this view now. See also Willwoll.^{11*} Fundamentally, perceptions, images, and thoughts always have a subjective and an objective aspect. What we call sensation is the subjective aspect of perception.¹² For the objective side of images and thoughts we have no term. Phenomenology has

7. The evidence for this assertion is the observed syncretic, global, diffuse, and undifferentiated character of primitive perception in infants, animals, the brain-injured, psychotics, etc. See in this respect, H. Werner (755, pp. 104 ff.).

8. In his sharp stand against attributing any role to projection in perception, Schilder leans on Brentano, Meinong, and Husserl. The assertion is directed against a frequent assumption of dynamic psychology: that the total mass of perceptual raw material obtained through the sense-organs becomes our "knowledge" of the outside world by being reorganized according to the principles of the individual's thought-organization, and then projected outward. It takes such a cumbersome explanation to account for our experiencing an *outside* world, when it is assumed that the organization of our percepts follows intrapsychic principles (note that

the latter is held even by Gestalt-psychology). Schilder suggests that only part of the organization is intrapsychic (see note 2, above), and that in perception we need not assume a projection-mechanism because the very act of perceiving implies a "*turning toward the world.*" While it is easy to go along with the first suggestion, the second (of phenomenological vintage) seems to beg the question; it gives a description only, not an explanation.

9. See Buehler, Chap. 2, above. "Thought" here translates *Gedanke*.

10. "Awareness" here translates *Bewusstheiten*; literal translation, "consciousnesses," meaning contents of consciousness which are neither percepts nor images. See Ach, Chap. 1, above.

11.* Willwoll (772).

12. Note the implication that the concept "perception" pertains to the "objective" aspect.

shown that a thought or an image always refers to an object, namely that one which is meant by the image or thought.¹³ What finally emerges in image or thought is wholly analogous with the percept.¹⁴ What is contained in the image or thought is closely related to what we call concept. But concepts are closely related to words; images and thoughts do not necessarily imply words. Our formulation is: concepts are the objective aspect of certain images and thoughts.

What is an object? . . .¹⁵

Talking about objects implies that the world is articulated into discrete parts. However, the expression "part" leaves it open whether or not there is an intrinsic relationship between the individual object and the world as the totality of objects. We shall take no stand on whether the world is the sum of individual objects or an organized whole.¹⁶ At any rate, the fundamental implication of the concept "object" is that we can never experience the world as a uniform continuum. It remains, however, quite indefinite what is to be considered a single object: the chair or its back.¹⁷ Wherever we may draw this dividing line, the fact remains that the world of our experience is discontinuous. I have shown elsewhere that we can hardly make the world as a whole the object of our actions.¹⁸

Only on very primitive levels of psychic life are there intentions¹⁹ which come close to the wish to master the whole world as a single object. Objects are the units upon which we act. To enable us to act, the object must appear an unchanging unit. Phenomenology has correctly shown that the rigidity²⁰ of

13. In the phenomenological literature "meant by" often stands for "intended by."

14. That is, their "objective aspect," the object they "mean" or "intend."

15. The omitted part touches briefly on the problem of values.

16. The "sum" versus the "whole" is here the same as in Wertheimer's (762) distinction between "and-sum" and "Gestalt." For a concise definition see Katona (374, p. 27).

17. This is the problem of the hierarchy of Gestalts and sub-Gestalts. See Koffka (406, p. 718), on "sub-systems."

18. This use of action as a *criterion* reflects its central role in Schilder's

theory. It is similar to the role Freud assigns to action. See Schilder (652) and Freud (223).

19. Intention is used here in the sense of "directed will-activity preparatory to action," and not in the sense of Brentano's (90, p. 115) "intentionality."

20. Apparently what is meant here is "constancy." See Piaget, Chap. 6, above. The issue of constancy (color, size, etc.) is a major field of psychophysical experimentation. (See Koffka, 406, pp. 211-64.) Recently the problem of constancies and their relationship to personality organization and psychological economics has been reopened. (See, for example, George Klein, 387.)

objects is in sharp contrast to the rich variety of their form of appearance in our experience. The internal constancy of ego and objects belongs to the fundamentals of life, and comes to expression in the logical proposition $a = a$, which can never be proven by experience.²¹ Apparently, stable objects are the prerequisite to action.

The world, however, does not consist of homogeneous isolated objects. The object shows as little uniformity as the Ego. It has propensities and parts. Thus, we have here two relationships: of the whole to its parts, and of the whole to its propensities. As I said, the partition of the world into objects is inevitable, but the limits of individual objects are set more or less arbitrarily. A part of an object could itself be considered an object. It is not always clear whether a thing is to be considered a whole or a sum of its parts.

Also there are relationships between wholes which are not necessarily summative.²²

[Passage omitted.]²³

There are static relationships, such as greater and smaller, surrounded, divided, inside, outside, near, far, harder, softer, lighter, darker. While our judgment of these may vary, the differences themselves belong to the essence of the world of objects. Then there are dynamic relationships: objects change, either their propensities are unstable or their spatial relations to other objects undergo a change.

It is in the nature of change that it occurs in time. Temporal relationships or changes are always of specific significance. Again, an object's change of propensities and change of place are frequently related to each other. Furthermore, there is a far-flung net of relationships between objects; it is evident that these too belong in the world of objects.²⁴ They belong to the world of perceptions

21. This assertion is an attempt at a psychological analysis of an axiom of logic. It is regrettable that no proof is offered. It is implied that, in spite of the protestations of logicians against what they call psychologism, all processes of thought, hence also logic, must be amenable to psychological analysis. This point is extensively discussed by Hermann (329, pp. 9-16). Neither Schilder's assertion, nor Hermann's derivation of the axiom of identity from the process of

identification (see Hermann, 327, pp. 24-29), gives a satisfactorily documented psychological-genetic analysis.

22. In the sense of Gestalt-psychology, they do not form aggregates but are tied to each other by integrative forces.

23. The omitted section deals with the question of whether or not the world can be conceived of as a single Gestalt.

24. Even though this may seem "evident," philosophy debated this issue for

as well. The larger and smaller, here and there, movement and rest, thunder after lightning, pain after a blow, are all material of immediate perception. All that we label dynamic is included in this network of relationships. For example: a balcony is so built that it can support no more than five people. There is an object-relationship here. Insight into object-relations is the prerequisite of action. The better the insight into object-relations, the more favorable the conditions for purposive action.

Object-relations can be perceived directly: the greater and smaller are seen; the more and less loud or tasty are also perceived. Simple thought-processes may play a role here. Clearly, such processes of thought and imagery are already involved in a perception like that of the red billiard ball.

(b) Speech and Thinking

Word and speech play a significant role in grasping object-relations, particularly when complex. Whether there exists a thinking that involves few or no words is not the subject-matter of our discussion. Hoenigswald^{25*} and Binswanger^{26*} maintain that thinking always needs the support of words. . . . The word-sound becomes a word by acquiring a signification-function. Words are more than mere signs, they are the carriers of communication.²⁷ The realm of the general concept "horse" includes all horses; the word "horse" is the sign of the concept; and the content of the concept consists of all the characteristics

millennia. It has been argued that relationships are created by the perceiver. The objection that "operations" prove the objective "validity" of relationships was countered by the argument that they prove only the usefulness of man-made relationships. The argument implied that the object-reality of relations cannot be proven, and that our concepts of relationships are only tools for encompassing nature. It was then replied that there is no need for argument if operational definitions and evidence are the accepted criteria of object- and relationship-reality. The counterargument was that magic, mythos, and the other forms of primitive thought, as well as all philos-

ophy and art, were and are forms of relationship-assessment; implying that utility as the final criterion of knowledge, and operationalism as the means-criterion, are unacceptable.

25.* Hoenigswald (333).

26.* Binswanger (64).

27. The distinction between a "sign" and its function of "communication" is not clear here. An hysterical or any other neurotic symptom also has a communication function. One would have to go to symptoms of neurologic disorder, or to manifestations of physiologic function, to be reasonably sure of dealing only with "signs" and not "communications."

included in the concept "horse." The concept may designate either the "type" or all horses; but the word "horse" may also mean one certain horse, and then it is an individual-concept. The sign of a concept, that is to say the word-sound, has always a multiple meaning. In final analysis, the concept is an artificial unit. Propositions have primacy over concepts.²⁸

Now, all this holds not only for concepts, but also for propositions. We speak of the realm of propositions, the content of propositions, and proposition-sounds.^{29*} The content of the proposition is expressed in the proposition-sound.

Binswanger^{30*} denies that a sound could be the image of an object; he attributes to it a mere signification-function. Buehler^{31*} sharply distinguishes between the announcing, eliciting, and representing function of speech. The speaker announces what goes on in him, this elicits psychological processes in the listener, and thereby object-relationships are represented.

[Passage omitted.]³²

It cannot be doubted that the primary forms of speech are expressions of strong needs. The most primitive words contain sounds like "pa," "ma," which are connected with the movements of biting, snapping, grabbing, and eating. The primitive speech-sounds are close relatives of expressive movements and expressive sounds. They are—to express it paradoxically—by-products of the function of feeding. Naturally, language must have other roots too. It can be surmised that each important biological function has a corresponding set of expressive movements and sounds,³³ and that the reaction³⁴ of the speech-

28. From the point of view of development, concepts as generic-abstract-conceptual terms are in a sense "artificial." Propositions, however, express or at least imply a belongingness and a subsumption, that is, conceptualization, even if not of an abstract order. Thus Schilder's thesis refers only to the highest levels of concept-development. See in this connection Reichard and Rapaport (605, particularly p. 99).

29.* I refer here to Gomperz's (286) treatment of the topic, and my own (652).

30.* Binswanger (64).

31.* Buehler (112).

32. The omitted section argues against Husserl's (346) and Klages's (382) dichotomy of "Natur" (nature) and "Geist" (spirit); the dichotomy refers to the clash of the "natural" and the "consciously human." This antithesis was one of the beloved hobbyhorses of metaphysical psychology.

33. This surmise implies Darwin's (136) theory of affect-expression, the evidence for which has been rather on the wane. For alternative views, see Vernon and Allport (26), and Federn (172).

34. Here "reaction" translates *Angriff*.

musculature yields as characteristic an expression of the function as the rest of the body. In final analysis, one must surmise that biologically every reaction has some relation to the function of feeding.³⁵ It is maintained that the biological function of sexuality also has a speech-expression. In this connection, the great variety of sounds of animals in the breeding season comes to mind. It is perhaps worth while to mention that all these primitive speech-functions have strong rhythmic tendencies, as well as tone and timbre of their own. The presence of rhythm and melody in the most primitive speech-products seems to be related to their expressive function. It could be objected that expressive movements do not mean anything, while words and sentences mean something, and it is the essence of language to be the carrier of meaning.³⁶ But it is incorrect to assert that expressive movements mean nothing. The red face and clenched fists of one in anger are at least a signal for other persons. Is the angry person unaware of this? When the hungry dog snaps, or drips saliva, he communicates, knowingly or not, that he wants his share of the bones. Sexual excitement, too, has a communication character. It is incorrect to maintain that no communication is intended: ³⁷ though the decision to communicate by expression is not always fully conscious, the tendency to do so is always present, even if only instinctively and with a low degree of awareness.³⁸

35. The argument seems to be that since all parts of the body have expressive reactions, there is no reason to assume that the reactions of the speech-musculature should not be expressive. The logical weaknesses of the argument are obvious. The assumed relationship between all reactions and feeding is lacking in evidence.

36. The implication of this rhetorical objection may be made clearer by adding that "therefore expressive sounds cannot be the primordial form of language."

37. "Intended" is again a term of the phenomenological school of philosophy. Here it means "implied."

38. It is not explained here how this tendency to communicate becomes ever-present in expression. The formulation resembles the one assigning a reality im-

plication to all percepts. See note 8, above. Both formulations convey that Schilder conceived of psychodynamics always in the context of an articulated object-world and of interpersonal relations implying communication. At present, this view has general acceptance. But there is some complacency in this acceptance: the theoretical framework is yet to be erected which would encompass human behavior as determined by drives, as determined by the perceiving of and adapting to a real world of objects, and as attuned to interpersonal relations and communication. To begin with, psychoanalysis centered mainly on drive-determined behavior; only in the last two decades, with the growth of ego-psychology, has it made strides towards the analysis of adaptation. The efforts of

It is true that people will carry out expressive movements, even when alone, but these, too, are aimed at an audience: an imaginary one. Whenever one has the opportunity to observe a major outbreak of desperation or violent affect, one cannot help noticing a communication tendency. In final analysis, every attack of affect is directed to an audience.³⁹ It is likely that our conception of instinct-manifestations exaggerates their instinctual character.⁴⁰ The expression of instincts does convey a message; expressive movements are not mere mechanical sequels of affects, but also real expressions and communications.⁴¹ Thus, the connection between language and expressive movement is clear, and language may even be described as a differentiated expressive movement. Expressive movements, then, are more than signals. Darwin⁴² saw it correctly: they are instrumental means and rudimentary forms of affect-directed actions. Expressive movements are a part of action, and so give some of that gratification which would be afforded by the action.⁴³ At primitive stages of develop-

Anna Freud (201), Hartmann (305), Bernfeld (55), and Sullivan (725) at encompassing interpersonal relationships and channels of communication, indicate the gaps that still exist in psychoanalytic theory in this respect. The solipsistic tendencies of dynamic psychology, and the concepts of transference, identification, and introjection as the only ones available for dealing with interpersonal relationships, indicate the difficulties facing us in this realm.

39. The developmental background and the theoretical implications of this state of affairs are not presented by Schilder. Clearly, a new genetic conception of affects is implied.

40. Schilder criticizes the inclination to conceive of instincts so mechanically (or biologically?) as to deny them any reference to an audience. Cf. Hartmann's similar view, Chap. 19, II and IV, particularly note 43, above.

In this paragraph "affect expression" is repeatedly equated with "expression of instinct." This equation, implying

probably both MacDougall's (493) theory and early psychoanalytic usage, is more than questionable; see, for example, Rapaport (591, pp. 28 ff.).

41. This is an insufficiently appreciated and explored point. Nonverbal communications between patient and therapist, and nonverbal communications involved in group contagion, have recently attracted the attention of investigators (Jurgen Ruesch, Fritz Redl).

42. Darwin (136).

43. For partially similar views, see MacCurdy (489, pp. 86-90) and Freud (234, p. 111). Freud conceives of affect as a discharge phenomenon: its energy-cathexis is the "charge of affect," that is, the quantitative aspect of the instinct-representation. This "charge of affect" is a small yet significant portion of the energy of the instinct which, when prevented from effecting action, gives rise to affect-discharge phenomena. See also Freud (209, p. 521). For a summary of various pertinent theories, see Rapaport (591, pp. 21-37).

ment, expressive movements are magic action effecting hallucinatory gratification.⁴⁴ Expressive movements may also be defined as action in the absence of an object, or as fundamentally incomplete action. Primitive language is, therefore, partly expressive movement and partly magic action. The onomatopoeic imitations in primitive language are magic passes: by making the sounds of an object I become that object and thereby obtain power over it.⁴⁵ The beginnings of language clearly bear the marks of its need-character. Language does not start with isolated words; C. and W. Stern^{46*} have shown that the words of children are one-word sentences. The one-word sentence, in turn, is the expression of a wanting-to-possess: of a need. Later this need-character is obscured and recedes into the background.⁴⁷ I therefore consider language a partial action which appears when the action proper cannot be consummated. In final analysis, action is more than a striving for an object; it is also of social significance by virtue of its claim to the object. In the same way, language has the character of communication, which becomes the more pronounced as direct goal-attainment becomes less feasible.⁴⁸

Thinking, too, has a direct relation to objects. We want to understand object-structures⁴⁹ in order to cope with them through action. Our thinking constantly creates new relationships with a view to their potential usefulness for action. It should be kept in mind that thinking and imagining do have an objective aspect,⁵⁰ even though the assumption that primordial thought and im-

44. Schilder refers here to the "omnipotence of thought." Cf. Freud (227, pp. 873-77), and (223, p. 14). In Freud's reconstruction (for which good though indirect evidence is available), delay of gratifying action results in the hallucinatory experience of the gratifying object and action, which in turn becomes the predecessor of thought. Cf. Chap. 15, notes 12, 14, and 29, above.

45. The concept describing this process is "participation," coined by Levy-Bruehl (455); compare H. Werner (755, p. 352).

46.* C. and W. Stern (712).

47. All facets of action and thought appear to share this fate. This need-relatedness, obvious in the beginning,

recedes in the course of development to a point of imperceptibility. As Freud (209, p. 535) has put it, "all thought is a detour on the path toward gratification." Cf. also Lewin, Chap. 5, pp. 129 ff. and 142 ff., and Hartmann, Chap. 19, VIII, above.

48. Note again the implied "intentionality." Cf. notes 6 and 8, above. The social significance of action arises because of its claim on objects socially shared.

49. "Object-structure" here translates *Sachstruktur*. Judging by the context, it stands for the organization of the world of objects, not merely that of individual objects.

50. See notes 8 and 44, above.

agery were hallucinatory forms is well-founded. Freud rightly asserts that thinking is experimental action using small quantities of energy.⁵¹ A definition of "concept" which I once gave characterized it as "readiness for action" directed at a definite segment of reality.⁵² This readiness for action is but incompletely consummated by words. Thus every verbal formulation contains in principle an unfulfilled residue. We always "intend" more than merely the word-sound, and I believe that the intended meaning-experience is closely related to the incomplete consummation which can be achieved by words. When the word and the sentence mean something, the force of the experience of this something is related to the fact that the word-sound as such can never bring complete consummation. It follows that there must exist thinking which needs no words or sentences.⁵³ There must also exist "readiness for action" which, in the absence of insight into object-relations, does not reach partial fulfillment.⁵⁴ Perception and visual imagery imply wordless thinking and "readiness for action." Primordial forms of action, such as the grasping action of the infant . . .⁵⁵ imply the percept or image directly. Where grasping is unfeasible, pointing develops. Where the object is not present, it is imagined. The presentation⁵⁶ of the object appears when the immediate intention towards it cannot

51. See Freud (209, pp. 533-34), and Chap. 15, above.

52. See Schilder (652, Chapter I). Compare the term "readiness for action" with those—"readiness to rhyme," "readiness to reverse," etc.—which Lewin (460) used to describe determiners of associations. These terms conceptualized his experimental results which disproved the contention of association psychology that associations are determined by spatial and temporal contiguity. His concepts of "readiness," and Ach's (Chap. 1, above) concept of "determining tendency," were the first dynamic ones in memory theory. Compare the concept of "readiness for action" with *Einstellung*, and with the concept of anticipation. See Rapaport, Schafer, and Gill (602, I, 385-89, and II, 22-24). Schilder implies (as do Rapaport, *et al.*) that all conceptual experi-

ences have an anticipation aspect. Cf. Buerger-Prinz and Kaila, Chap. 27, on attitudes and anticipations.

53. The logic of this argument is not clear. The point is actually a statement of the empirical findings of Ach and Buehler, to which Schilder subsequently refers.

54. See, for instance, Fenichel, Chap. 18, above.

55. The omitted section refers to the frequently simultaneous reemergence of grasping, snapping, and sucking reflexes as sequels to lesions of the frontal lobes, striatum, and pallidum.

56. "Presentation" here translates *Vorstellung*. In this monograph *Vorstellung* is generally translated as "image." Here, however, the context indicates that it may also refer to imageless memory or thought.

be realized. It seems that strong inhibition of intentions enhances imagery in thinking.^{57*} Abundance of images always indicates that the goal is still distant. On approaching the goal of action, the images progressively recede; at last, immediate preparation for action is given in the form of concepts.⁵⁸ In this sense, words are images which correspond to brakes put on thinking.⁵⁹ In comparison with other "presentations," words are close to consummated action. That part of action which is not consummated by words is experienced as meaning, which in turn becomes the immediate predecessor of action.⁶⁰ Words are aids to thinking. Some insights into object relations need not be cast in words. Words and sentences are aids⁶¹ to actions of a certain degree of complexity.

These considerations apply to the theory of aphasia. While early theories of aphasia assumed that speech and thought are identical, some more recent theories deny it. Pick^{62*} speaks of a path from thought to speech. Against this, Honigswald, Kronfeld, and Sternberg, and Binswanger^{63*} have recently asserted that, in final analysis, speechless-thought is no thought. . . .⁶⁴ While thought does have the tendency to manifest itself verbally, speechless-thought *is* thought, and speech is just an expressive movement. Some thoughts have more of a tendency to take verbal form than others. Moreover, the initial phases of a thought-process have a very different relationship to speech than the later

57.* Schilder (648, p. 245), and Martin (501).

58. This seems to imply that in the course of the thought-process, images indicating possible pathways to action crystallize into a unitary thought-form: the concept. Cf. Schilder Chap. 24, above, and Rapaport *et al.* (602, II, 22-24).

59. The phrase "correspond to" seems to imply a causal connection; "brakes put on" is a paraphrase for "inhibition" as used above. Whether, when images come about, the brakes are put on the impulse or on the thought, is a matter of relative emphasis. Image or thought arises when the impulse (drive) is inhibited. When in addition thought—that is, the motivational factor it implies—encounters diffi-

culty, we again fall back on images. Cf. pp. 508-9, above. For similar conceptions, see Muensterberg (532, pp. 193-94), Washburn (750), Spencer (699, pp. 452-59), Buehler (106, pp. 434 ff.).

60. Schilder has in mind a theory of meaning of his own, related to that of Husserl's philosophy of phenomenology. Compare also Ogden (549).

61. "Aid" translates *Stuetzpunkt*. The translation does not convey the "orientation-point" connotation of the German word.

62.* Pick (567) and (569).

63.* Honigswald (333), Kronfeld and Sternberg (435), Binswanger (64).

64. The omitted section gives some details of Binswanger's argument.

ones.⁶⁵ To distinguish these I have coined the terms word-near and word-distant thought. It is certain that disorders of verbalization alone do not exist. Such isolated disorders were thinkable only while psychic life was considered a serial emergence of presentation- and perception-elements, and while these and the corresponding innervation-complexes were considered static.⁶⁶ Nowadays we conceive of presentation and perception as resultants of many superordinate and coordinate processes. The verbal image is likewise built of such psychological processes. Of these, I consider with Lindworsky^{67*} the relationship-experiences to be the essentials of thinking. In the disorders of word-understanding, word-pronunciation, and word-finding, thinking is deprived of one of its essential supports, and thus finer differentiations in thinking are hampered.⁶⁸ Thus, speech-disorders and even perception-disorders in agnosia are to a certain extent disorders of thought. But we must not forget that while the aphasic disorder is word-near, that of dementia⁶⁹ is word- and perception-distant.

It will suffice to point out that the general behavior of motor-aphasics, even when their disorder is severe, shows considerable adaptation to reality. Goldstein and Gelb^{70*} strove to demonstrate that amnesic-aphasia is not so much a disorder of word-finding as one of categorical behavior. In sorting colored skeins the patients showed a lack of any grouping principle: their choices always followed concrete experiences of similarity and coherence.⁷¹ They manifested irrational, concrete-perceptual behavior, which may be called life-near and biologically primitive.⁷² Yet we must emphasize that the patient afflicted with amnesic-aphasia deals in general quite purposively with objects he cannot name. If a thought-disorder is present, it can afflict only that small segment of think-

65. It is implied that early phases of thought are image-like and of a feeling character, while thought-development tends toward verbalized forms. See Schilder, Chap. 24, above.

66. This refers to the classical associationist conception: for example, G. E. Mueller's.

67.* Lindworsky (475).

68. Here words are considered the means of finer differentiation. Cf. Freud (209, p. 546), (243, p. 21), and (234, pp. 133-34). Cf. also Chap. 15, note 32 and

Chap. 23, II, particularly notes 9 and 10, above.

69. For the definition of dementia, see note 84, below, and p. 568, above.

70.* See Gelb and Goldstein (264, 265).

71. For descriptions of the procedure see Weigl (753), Goldstein and Scheerer (284).

72. Concrete-perceptual is contrasted here with abstract-conceptual. Concreteness is characterized as primitive, abstractness as remote from life.

ing which is closely connected with naming and word usage. We must, therefore, distinguish thought-functions of naming from other vital functions. Thus, verbalization is merely a part of the thought-stream; yet the verbalized thought-experience may decisively influence the course of the mainstream of thought.

(c) Judgment, Thought, and Action

Judgment may be considered the basic form of thinking. According to Erdmann,^{73*} the core of judgment is a predicative relationship. This formulation may be greatly influenced by the consideration of language. Russell^{74*} had correctly pointed to the existence of many other relationships. To each fact corresponds a proposition [expressing a relationship]. . . .⁷⁵ The world consists of many things, each of which has many propensities and relationships.

Clearly, in this sense judgment is based on a cognition, whether false or correct, of various relationships. Now the question arises: how do we arrive at judgments?

In order to be able to arrive at a judgment, one must first of all be turned toward the world, and be interested in objects. Thus, already perception implies an affective element. . . .⁷⁶ The memory- and apperception-material which is the prerequisite of forming a percept becomes available only by means of the affective experience. Petzold's^{77*} formulation, emphasizing that every percept implies a concept, becomes plausible.⁷⁸ Let us for the moment not talk

73.* See Erdmann (155).

74.* See Russell (625, 624).

75. In the omitted section Schilder discusses examples of the symmetrical and asymmetrical relationships treated by Russell. Were Schilder's discussion of Russell systematic and extensive, I should not feel justified in omitting it. The relationships treated in Russell's *Introduction* are a non-metric form of mathematics which (in contrast to topology as applied by Lewin) have barely been put to use by psychology. It seems likely that in the psychology of interpersonal relationships and communications they will find exquisite usefulness. See, for example, Heider (317).

76. The omitted section deals with

movements connected with all perception (for example, eye-movements) as carriers of part of its affective element. The term affective is used here as a synonym of "intentional" and "motivational." Cf. note 79, below.

77.* See Petzold (533).

78. The term perception is used here synonymously with apperception. The latter obviously implies a conceptual integration of memory material. See p. 219, this volume; compare Rapaport, *et al.* (602, I, 385-89). The distinction here between memory-material and apperceptive material is unclear. For the role of affective factors, see Schilder (644), Chap. 24, this volume.

about the emotional factors in perception, but consider percepts as given and relatively static. In order to posit a relationship between two percepts, I must have an interest, a driving-force.⁷⁹ Positing a simple relationship between two objects is not a thought. Even relatively simple thought implies continuous movement, and its development requires the enrichment of its conceptual and propositional realm⁸⁰ by a continuous creation of new relationships. Observation of normal people shows that thought has a phasic development, that in its preparatory phases isolated and unrelated percepts, presentations, and thoughts⁸¹ can stand side by side, and that its final formulation is achieved only at the end of the process. One may assert, therefore, that it must be driving-forces which, first, shape the material of perceptions and presentations; next, put it into relationships; and lastly, give the thought its final form. But this does not complete the role of driving-forces in thinking. Thoughts do not remain isolated; they get embedded into experience as a whole and become related to the goals of the personality. These considerations indicate the significance of driving-forces in thinking. The pathology of thinking provides ample proof. The driving-force of schizophrenics is often insufficient for tying together the

79. Affect, interest, and driving-force are apparently equated here, or at least used interchangeably. This is not just the conceptual nonchalance that so often accompanies Schilder's ingenuity. We find a similar looseness in Silberer on precisely these concepts. That thought is motivated, like all other human activity, is no longer doubted. But the character and mode of operation of the motivating forces in various forms of thinking have never been clarified. The analysis of the empirical material and the conclusions which I presented in 591, pp. 264-72, I no longer find adequate. Freud showed that the driving-forces of dream-thoughts—and primary-process thinking in general—are wishes, and their mode of operation is "imaging" by means of condensations, displacements, etc. By coining the concept "hypercathexis" (209, pp. 534, 536) he opened the way to a systematic treatment of the driving-

forces of goal-directed, ordered, secondary-process thinking. Note Silberer's treatment of the driving-forces of hypnogogic phenomena (Chap. 9, above), and Varendonck's (Chap. 22, above) attempt to establish the driving-forces of daydreams. A synoptic treatment of all these phenomena in terms of hypercathexes, however, is lacking. Cf. also Chap. 24, note 11, above.

80. See p. 563, particularly note 219, below.

81. "Thoughts" here means "isolated thoughts." Schilder asserts that thought-development integrates completed yet isolated thoughts, as well as images and presentations. The relativity of "wholeness" in objects, discussed earlier, seems to hold here too: what from one point of view is the product of a process of thought-development, from another is its subject-matter.

preparatory-phases of thought. In melancholics,⁸² isolated thoughts may reach consummation, but the driving-force is insufficient for their further development.⁸³ In post-encephalitic cases, the thought-process is prone to get lost early because of a neurologically understandable insufficiency of driving-forces. In mania, completed individual thoughts do not undergo a higher integration because of an overabundance of driving-forces. In various forms of dementia,⁸⁴ the lack of driving-force prevents consummation of the thought-process.

An exact account of these problems requires a more detailed discussion of the thought-process. We shall again start with judgment. Judgment, as already stated, is either right or wrong. Psychologically, therefore, besides apperception of object-relations, judgments imply approval or negation.⁸⁵ The goal of judging is to achieve knowledge of a state of affairs. Since the goal of a thought-process is given in schematic form from its inception on, we reach it when our experience is that the schematic anticipation and the achieved thought match. This is easiest to demonstrate in thought-processes which reproduce experiences. G. E. Mueller investigated the factors which determine the occurrence and degree of experienced certainty^{86*} in recall. According to Buehler's^{87*} summary, the main determiners of certainty-experience are the clarity and wealth of recall-presentations. . . . Their manner of occurrence, such as their exclusiveness, rapidity, and stubbornness also plays an important role; so does recognition, that simple quality of familiarity of a presentation. . . . In recall-

82. At present "melancholia" is used as a synonym for "depressive psychosis," particularly in the sense of "manic-depressive, depressed."

83. Cf. note 81, above.

84. Hinsic and Shatsky (330):

Today dementia is defined as an absence or reduction of intellectual faculties, in consequence of known organic brain disease. . . . Many of the patients (for example, schizophrenic or dementia praecox) formerly described as demented are now described as regressed. . . .

Schilder more or less adhered to this definition.

85. See in this connection Freud, Chap. 15, p. 323, and Chap. 17, notes 12 and 18, above.

86.* G. E. Mueller (526).

["Experienced certainty" is the subject's confidence that his recall, knowledge, or recognition is "correct." Act-psychology of the Meinong-Brentano-Husserl vintage, as well as classical association psychology, paid considerable attention to such experiences; modern psychology, both behaviorist and dynamic, has neglected them, with the exception of Lewin and his collaborators. See Lewin (460) and Cartwright (124). A restudy of such experiences from the point of view of dynamic psychology should be rewarding. Cf. Chap. 17, note 18, above.]

87.* K. Buehler (106) [pp. 362 ff.].

ing a member of a learned series, recognition may refer either to its place-value or to its relation to another member.⁸⁸

It is noteworthy that a fluent mechanical recall of a learned series, even while fulfilling the criteria of exclusiveness and rapidity, may lack the experience of certainty, and even be attended by an experience of incorrectness. This is usually explained by reference to a lack of recall-intentions.⁸⁹ The experience of varying degrees of certainty is most pronounced when preceded by doubting, checking, and questioning of certainty.

Experimental subjects use various methods in the search for criteria of certainty. "Subject N.G., when she could not name the color, in recalling a series of vari-colored digits and consonants, used the following method. She proceeded to image the item in each of the five colors used. If she imaged it easily in blue, but not in the other four colors, she reported that blue was correct."^{90*} Critical thinking is replete with such "methods of search," which require the repeated intervention of thinking in the recall process. The search itself has characteristic intermediary and accompanying phases; for instance, ". . . but I doubted its correctness, went on searching, failed, and gave up this avenue as hopeless."^{91*} The criteria, however, are not identical with the experience of certainty itself. Certainty (according to Buehler)^{92*} is not an independent experience, but a contingent part of conscious events. An experience of certainty refers always to an object-relation which is conscious. I agree fully with Buehler's^{93*} statement: "Doubt and certainty, goal-directed search for causal relationships—in other words, consideration and insight—belong to that arrangement of our psyche which centers around the knowledge of objects and object-relations." I want to reemphasize that certainty is always an experience of matching: analysis of the nature of action will lead us to a similar formulation.

It was not without purpose that I stressed the close relationship between thought and action. Every percept and image is connected with a movement

88. Concerning recognition, familiarity, and certainty, cf. Claparède, Chap. 3, and Kris, Chap. 23, III, above.

89. When attempting to remember a word which we have noted as similar to, say, our own name, we use a recall-intention previously formed. In reeling off mechanically a series of words, no such

intentions are present to give an easy check on the correctness of recall. Cf. Hartmann, Chap. 19, VIII, above.

90.* G. E. Mueller (526) [III, 232].

91.* Buehler (106) [p. 366].

92.* Buehler (106) [pp. 371-72].

93.* Buehler (106) [p. 372].

and a change of tonus.⁹⁴ For infants, perceiving and grasping are fundamentally the same.^{95*} Metzger's^{96*} investigations show that even simple visual percepts involve a change of tonus. What is true for percepts is true in principle for imagery. I have repeatedly indicated that perception and imagery have the same psychological significance; Jaensch's well-known^{97*} investigations have shown that eidetic images, lying between imagery and perception, follow in many ways the laws of perception. Attempts to isolate images and thoughts from motor-reactions to them are always artificial. It is often said that thinking and willing are closely related, and that remembering and thinking are voluntary⁹⁸ acts. It must be added that on primitive levels of development, thinking and imaging always have an immediate purpose, even if mainly in the realm of signs and magics.

After these preliminaries, we are ready for the analysis of action.

The goal of an action is given at the start, as for instance in the simple process of grasping. This goal may not always be fully conscious. In a simple action such as grasping an object, the goal is not the object alone, but also that my hand grasp it. Thus the goal implies the presentation: my hand surrounding the object. Again, it is incorrect to assume that the goal of this movement must be fully conscious. Mostly it is present in a germinal form. Nor is it enough that the goal of the movement be given: knowledge of one's own body must also be present.^{99*} These considerations hold even if the goal of action is merely a change of body-position. The goal is reached when the germinal action-intention and the completed action match. This is the consummation experience. The parallel between judgment and action is obvious. If the goal of action is to be attained, the propensities of objects must be known; but as the theory of apraxia shows, not even then is attainment assured. Knowing has many varieties. A general intellectual knowing is not necessarily useful in action. Though the apraxia patient has a general knowledge of the object, he cannot use it in action. Evidence that cannot be discussed here makes it probable that

94. Compare, e.g., Washburn (750), Muensterberg (532), Jacobson (350).

95.* See Hoff and Schilder (334).

96.* Metzger (517).

97.* Jaensch (351). [See also 352, particularly p. 136.]

98. Dynamic psychology has no definition as yet for "will" and "voluntary."

See, however, Rank (588), and Knight (390); compare also Rapaport, *et al.* (602, I, 167-69). Remembering and thinking, though to some extent subservient to "will," are in the main involuntary automatic functions. Cf. Chap. 24, note 49, above.

99.* Schilder (646).

action-plans do not contain the details of methods of execution.¹⁰⁰ The purely kinetic melody of movement¹⁰¹ becomes apparent only after the decision to act has been made.

In such melodies of motion something organic, of which the individual is not necessarily aware, expresses itself. The significant role of driving-forces in the initiation and execution of actions, and the analogy with thought-processes, has already been stressed. The close formal relationship between action, in our sense, and the reproduction of a content^{102*} need not be further discussed.

(d) *More about Thinking*

ON KNOWLEDGE AND MEMORY. Stoerring^{103*} has demonstrated experimentally that the awareness of finality lies in the after-thought, "I must think so." Incidentally, he has also shown that in the process of inference we form general ideas from which, as from perceptions, issue new object-relationships.¹⁰⁴ Selz^{105*} presented to his experimental subjects stimulus-words with instructions on how to respond to them. He prevented thereby a response in keeping with a previous "Einstellung."¹⁰⁶ The instructions directed the subject to re-

100. The "action-plan" refers apparently to the "goal" and the "action-intention" given in the moment action begins. The interchangeability of means has since been studied, but it is possible that Schilder was among the first to point out that "means" are usually not included in action-plans.

101. See Schilder (648, pp. 79-85). This "kinetic melody" is, according to Schilder, the means of motor-action. While any of several "melodies" can be the means to achieve an end, an individual's choice is determined by his organic make and personality. Cf. Gerstmann and Schilder (268). With this conception, Schilder touches on the rarely treated problem of the psychology of motor-coordination and its control in action. Note, however, Freud's concept of the ego as controller of the sluices of motility; see Freud (223, p. 16); cf. also Rapaport, *et al.* (601, I, 249 ff.).

102.* G. E. Mueller (526) [pp. 230 ff.].

103.* Stoerring (714).

104. This is one of the almost countless instructive asides in Schilder's writing. Many were omitted here for lack of space or because they disrupted the argument. The present aside shows that certain object-relations can only be derived by inference. Where the process of inference is disturbed (as in paretics), knowledge and appraisal of object-relations are impaired.

105.* Selz (678, 679, 680).

106. Cf. Ach, Chap. I, above. The German term is often made to imply *anticipation*. Actually, what Schilder calls *Einstellung* was called by Selz "anticipation." Schilder uses the term very generally; he speaks of "orientations" of drives, of will, of the total personality, etc. More recent usage limits attitudes and orientations to the realm of the ego.

act with words which would be coordinate, subordinate, and so on, to the stimulus-words. In some cases, the reactions were instant solutions without intervening experiences; in others, a knowledge-complex developed progressively which contained the solution. Where the material was familiar, a first unsuccessful search after a concept was suddenly followed by the correct solution. A repetition of the process several months later would first bring back the original reaction-word without any comprehension of the task, and only later the realization that it was correct. The explanation is that whole-relationships (like those created by the original response) have a high retention value; furthermore, the instant-solutions also must be considered actualizations of knowledge.¹⁰⁷ Selz also posits a law of complex-completion. A given fragment of a complex has the tendency to reproduce the whole complex in consciousness. Since awareness of object-relations implies knowledge of both the objects and their relationships, awareness of the task indirectly determines the solution by indicating the object-relationship in which it partakes. The stimulus-word itself does not directly cause the reaction; the search for the solution begins only after both stimulus-word and task are understood. . . . Arriving at the solution is accompanied by an experience of satisfaction. The method by which problems are solved is partly a search for, partly a determined reproduction of, the means of solution.¹⁰⁸ If no means can be found by reproduction, a favorable chance must be awaited. . . . These experiments of Selz clearly

Cf. Chap. 27, note 31, and Chap. 20, note 17, above.

107. In Schilder's terminology, "memories" are recalled, while "knowledge" passes from a state of potentiality into one of actuality. Schilder does not further define the difference between knowledge and memory. One possible definition is this: (a) Knowledge comes to consciousness by the same channels and according to the same laws as memory. (b) Knowledge, though derived from actual memories, has lost the spatial, temporal, personal, etc., earmarks which characterize memories (cf. Gillespie, 275). In this respect, the transition between knowledge and memory is quite

fluid. (c) Knowledge includes potential awareness of the functions of the organism and of relationships between memories; this, in contrast to memories, is not learned material. (d) The relation of memory to knowledge may be described by the concept of automatization; see Hartmann, Chap. 19, VIII, above.

108. For the concept "determined reproduction," see Ach, Chap. 1, above. Schilder here implies that the search sets up "anticipations," or determining tendencies, which schematically forecast the means; the "determined reproductions" are defined by and fulfill the anticipations.

show that problems are not solved by a random or constellation-determined emergence of memory material.¹⁰⁹ Knowledge is organized into complexes and is brought to bear on problems by means of definite methods. Our knowledge is partly of object-relations, partly of pathways to them. In other words, the background of our experience¹¹⁰ consists not of unformed but organized material. Indeed, complexes can be actually defined as organized material of memory and knowledge. G. E. Mueller^{111*} also speaks of complexes, but these are merely associations of single elements. . . . The complexes of Selz are created by apperception in terms of knowledge, and by organization in terms of will.¹¹² I would add that this apperception in terms of [past] knowledge serves for insight into object-relations to be used in [future] action. This brings us to the fundamental problem of the relationship of knowledge and memory to intelligence. First, a few words concerning memory.

In pre-psychoanalytic times, it was believed that there is such a thing as using up memories or losing them. Everyday forgetting, the various forms of amnesia, forgetting in dementia and in the Korsakow syndrome, and finally in aphasia and agnosia, were all considered due to loss of memory pictures and were adduced as proofs thereof. Already Bergson^{113*} had shown that one cannot speak of loss of memory pictures, since once imprinted they are never lost. In the meanwhile, psychoanalysis brought forth rich empirical material which unequivocally showed that what is once experienced can never be lost.¹¹⁴ I have

109. This argument is directed in part against early, in part against later, association psychology. "Random emergence" refers to association due to contiguity. "Constellation" refers to the organization principle introduced by association psychology to account for associations contradicting the rule that the association which emerges is the one having the strongest bond to the idea in consciousness, and that the strength of the bond depends upon the frequency of contiguous occurrence. Later, association psychology assumed that all other existing bonds help determine which association will emerge. The aggregate of all pertinent bonds was termed "constellation." Note that a constellation is

distinguished from a complex in that the latter has an affect-core around which the ideas are grouped.

110. Experience comes about when percepts are assimilated into the apperceptive mass, here referred to as "background."

111.* G. E. Mueller (526) [I, 253 ff.].

112. "Will" here refers apparently to interests, strivings, intentions, motivations, affects, etc. The duality of experience (memory) organization in terms of "knowledge" and "will" corresponds to that in terms of "schemata" (Bartlett, 37) and motivations (Freud, 209).

113.* Bergson (53).

114. See Freud (254, pp. 15-20).

myself demonstrated that even the so-called organic amnesia of epileptics and of people revived after asphyxiation can be lifted by hypnosis.¹¹⁵ R. Stern^{116*} confirmed the experience of White^{117*} that alcoholic amnesias also can be lifted by means of hypnosis. Hartmann and I^{118*} have demonstrated that the apparently forgotten material is available even in skull-fracture cases.

Individual differences in regard to forgetting are not due to destruction of memory-material in one person and absence of destruction in another, but to their comparative ease of utilization of memory-material. Hence, memory-disturbances are disturbances in utilization of memory-material. In fact, Brodmann,^{119*} Gregor,^{120*} Betlheim and Hartmann,^{121*} have shown that residues of apparently forgotten experiences are demonstrable even in Korsakow patients. Hartmann^{122*} eliminated by hypnosis even an amnesia following carbon-monoxide poisoning. . . .

The psychoanalytic study of forgetting shows that it subserves definite purposes, that it is repression. More generally, we forget what does not fit the present situation. Or, in a positive formulation, we remember only what we can and will use in the present situation. I once defined memory as the reawakening of the past in the service of the present.¹²³ This conception of memory does not isolate knowledge and memory from the live thought-process and its biological goals and needs. Surely, much material is communicated to every individual that has very little direct relation to action; much of school-knowledge belongs to this category. To keep him aware of this useless knowledge, the individual is pressed by threats of punishment, or by reference to a future usefulness of this knowledge. A measure of such useless knowledge is also considered the hallmark of certain social classes. The amount of such knowledge is therefore often out of proportion to intellectual ability; from this fact the inference has been drawn that memory, knowledge, and intelligence are not intrinsically related. Such discrepancies are more striking in pathological cases than in normals.¹²⁴

115. For Schilder's pertinent work and reviews of earlier literature see Schilder (666 and 664). For his general view of the indestructibility of memory, see Schilder (659). For a further review of the literature, see Ruffin (623) and Rapaport (591, pp. 177-79).

116.* R. Stern (709).

117.* W. A. White and B. Sidis (769).

118.* Hartmann (308); Hartmann and Schilder (313).

119.* Brodmann (95).

120.* Gregor (289).

121.* Betlheim and Hartmann (58).

122.* Hartmann (308).

123. Schilder (659).

124. Note the high Vocabulary and Information scores on the intelligence

The literature contains many records of excellent memory achievements of imbeciles.¹²⁵ Their phenomenal achievements relate mostly to calendar dates. In these cases, having and reproducing memory-material is limited to one direction, and cannot be used for other purposes. Such unidirectional attitudes and memory are frequent among the poorly endowed. Memory implies not just a compulsory reproduction of series of items, but also the ability to break them down and put them to various uses. In this respect memory and intelligence are quite closely related.

Rueckle,^{126*} the memory-man, succeeded in his number-memory feats because he had penetrated deeply into the nature of numbers. One of the prerequisites for this kind of memory-feat is a continuous preoccupation with the object, which in turn is not possible without an object-directed interest.¹²⁷ Such phenomena cannot be understood if good and poor memory are treated merely from the point of view of [mechanical] retention and reproduction. Besides the ability to remember, good memory implies the ability to turn to use what is remembered. When the task is the memory-achievement itself, usefulness consists in correct reproduction. This obtains for knowledge too, since it is but one aspect of memory. Real knowledge is the appropriate use of memories; the one-sided hypernormal memory found in some imbeciles is incapable of this.

[Passage omitted.]¹²⁸

I have dealt in great detail with the relation of memory and knowledge to intelligence, for the reason that in my studies of parietic dementia the retelling of stories was the chief method of investigation.¹²⁹ Naturally I have used many other experimental methods, such as the routine procedures summarized by

tests of psychotic patients. See Rapaport, *et al.* (602, I, 79).

125. See Scheerer and Goldstein (637); and for a review of the material, Strohmayer (723).

126.* G. E. Mueller (526, I, 240-41).

127. The study of a master at playing chess blindfolded leads to similar conclusions. See K. A. Menninger (514). The continuous preoccupation with a subject-matter as the basis of phenomenal memory stresses the role of interest (intrapsychic need) in such achievements, but obscures their relation to gen-

eral intelligence. This chess-master's memory-achievement strikingly outdistanced his otherwise good general intelligence.

128. In the omitted section Schilder discusses the memory- and thought-disorder in Korsakow patients. For an extensive discussion of these, see Buerger-Prinz and Kaila, Chap. 27, below.

129. For other applications of this method, see Koeppen and Kutzinsky (402), Schilder (313), Bartlett (37), Despert (144).

Ziehen,^{130*} the Binet-Simon-Bobertag¹³¹ material, judgments of more and less complicated pictures and spatial structures, and tests involving the solving of more complex problems. Of all these, second only to free interviews, the retelling of stories proved most useful. The stories I used most frequently were:

Rabbi Moir, the great teacher, sat in the school on Sabbath instructing the people, while at his home his two sons died, struck by lightning.

The son of the minister Herbig, of Holzengel near Greussen, was swallowed by a shark. He was first officer of a Hamburg merchantman, and was washed overboard by a squall. Since rescue proved impossible, the unfortunate young man was caught, in front of the eyes of his terrified shipmates, by a shark which followed the steamer. He was dragged to the bottom of the ocean, leaving behind him a dark streak of blood.

II. THE PARETIC THOUGHT-DISORDER

(a) *The Material and the Basic Findings*

In summarizing their studies on the recall of brief stories by paretics, Koeppen and Kutzinski^{132*} state:

In no case of paresis we have studied did we find a lack of differentiation between the self and the story, or the story and external impressions. But in far-gone cases we observed other forms of lack of differentiation: the organization and meaning of the story were lost, and on asking for the patients' judgment of the story we found them unable to carry out a longer series of differentiations and integrations. A construction once made persevered extraordinarily, and the mental mobility to create new combinations and to fill in gaps was minimal. Repetition did not improve achievement. Recall was at times badly impaired by poor language, due mainly to articulation difficulties."¹³³

CASE NO. 1: M.S., 49 years. Hospitalized for the last two months; mentally changed, distracted, forgetful for 13 months; the year before, hospitalized at Steinhof; this time arrested on the street, running around naked. Spatial and temporal orientation only fair. After discharge from Steinhof, managed a factory of metal objects, with the help of a foreman. Doesn't know why she was hospitalized. Sings much and enjoys it. Is manicky yet composed, with moderate motor excitement. Calculates fairly well, making the common flighty mistakes of paretics.

^{130.*} Ziehen (785).

^{131.} The standard German version of the Simon-Binet. See Bobertag (79).

^{132.*} Koeppen and Kutzinski (402) [p. 225].

^{133.} Dysarthria is a common neurological symptom of general paresis.

Her reproduction of the Shark Story: "He went away and came back in a big river and went back again to where he came from. Did he get hurt?" After a second reading: "A shark has swallowed him long ago and then came Pope Herbert and everything floated away, and then he came back and brought everything. Brought me many things and the shark came and brought me everything, then he was gone again and Pope Herbert came. Then a great Shark came and swallowed me. Then a great casket came to the grave and I got sunk. Then I was dead. Then the fish came back again, shook my hand and gave me a kiss on the forehead."

After a third reading: ¹³⁴ "I have been swallowed by a big animal and the minister Hebisch came to me and consoled me. The officer fell in the war and went down to the end where the lake begins, he went back and has chosen a little package and went again to the end of the lake and has gone through much till the end of the war. Then he had to fall.¹³⁵ They had waited till he recovered. Then he came up to the end of the lake. Then the shark swam away and swallowed me and I had to go down into the grave and was dead."

A week later she remembers ¹³⁶ the story as follows: "About the shark, he was a shark, who swam in the water and got swallowed. (By whom?) ¹³⁷ By a man. He had him in his mouth and devoured him. Then came Pope Heredi and made a check-up and kissed my hand and gave me a kiss on my forehead and pressed me so. Then the officer entered the war and fell and I nursed him for six months and he got well again, then he got the hemorrhage, then I had to nurse him again six months, and he recovered again and was well again and thanked ten times because I nursed him so long. Then I was very desperate and they had to cut open the stomach of the shark because he swallowed me, so that I can come out again."

At this time the patient was already in malarial treatment. Two days later, when asked what story we had told her, she answered, "About the grasshopper," and continued in a poetic way:

The shark came and said then:
It is for you I am waiting, since I swallow things

¹³⁴. Apparently, after the recall Schilder reread the story to the patient, obtaining another.

¹³⁵. "Fall" translates *gefallen*, implying death, and should be so understood throughout.

¹³⁶. Apparently without repeated reading.

¹³⁷. The interjections which appear in parentheses are evidently Schilder's, made in the course of the experiment.

And carry away everything, as long as I have a voice
One more word to say,
But I saw it didn't take long
What I have yet to say
In the quiet night I brought him
But I saw him again,
The Officer sang his songs.

She continued in childish rhymes. After two more days, following her third chill, she recalled the story as follows: ¹³⁸ "The shark's stomach was again cut open, then I crawled out, he had me swallowed, then came the Pope Herbig and told me I should be real brave and then an officer fell in the war and I nursed him six months. He again helped me, I helped him, because he was so very sick. Then came the hemorrhage with blood. Then the officer recovered again and became well. Then he again once more got shot at. Then we nursed him again six months and he recovered again and they shot him dead twice and he had to die, now he reconsidered the matter again and he forgot himself, it was war and he had to enter again and he fell for the third time, he was in the army and he had the whole thing once more, then the third agony he had and he had to die. Now two went away already, the officer and the second officer, then the hemorrhage came again and he still recovered and the shark has still snuffled."

A day later she related the story about Rabbi Moir as follows: "There was a great teacher who was called Rabatz and had led the school, then he taught French and English and taught me gymnastics and singing and sang once more about the blue Danube and then he recovered again, he was once sick and had to enter the army and had to remain entered. Then the Pope Herbig came back again and put teachers again in the school and then two brothers were hit by lightning."

Nine days later, when the fever treatment had been discontinued, she recalled it thus: "There was a great teacher who taught French, English, Italian, Polish, Greek, etc., all languages, and we are in the morning in the school and in the afternoon in the gymnasium and they have made gymnastics on the bar and on the horse, and then the school was out and in the evening there was a great disaster and the lightning struck and killed the two Rabatt brothers."

¹³⁸. Recall without rereading.

The recall of the Shark Story on the same day: ¹³⁹ "The shark swam in the water, then he didn't come out for a long while, then the Pope Herbig came and told me a story, I should be brave, go to the church and confess at Eastertime, I should go and never on strange ways, rather to the theater and cinema. An officer fell, so we nursed him with the ladies and he became well again, a bullet hit him and the professor was so clever and tore it out again. Then a girl came and wanted to stop and then the shark came and swallowed me and they had to cut open his stomach and I crawled out like a rat."

The first recall of the Shark Story by this typical parietic patient shows that only a small part of the story was apperceived.¹⁴⁰ But even this small part reveals striking features.

The features of the recall-disorder may be summarized as follows:

- (a) Substitution of general concepts for concrete.¹⁴¹
- (b) Substitution of more familiar, coordinate concepts for those of the story.¹⁴²
- (c) Weakening and generalizing of affectively significant scenes into less significant ones.¹⁴³
- (d) Repetition of motifs.¹⁴⁴
- (e) Insufficient apprehension of the meaning of the whole, as well as of the details.¹⁴⁵

After a second reading many more details appear, and the essence of the meaning is apprehended. Characteristically, the patient at first leaves it open

139. Both stories recalled without re-reading.

140. "Apperceived" here translates *auffassen*. The immediate context does not clarify the hierarchic position of this concept. Theoretically, failure in apperception may be caused by: (a) perceptual disorder, (b) attention-disturbance or distraction, (c) selectiveness of apperception due to over-valent strivings, wishes, etc., (d) apperceptive disorder. Each of these shades imperceptibly into the others, and may be merely an aspect of them. Judging from the

broader context of the whole monograph, Schilder probably considered "auffassen" to refer to (b) and (c).

141. Substitution of "he" for "shark."

142. "Great river" for "sea"; "went away and came back" for "washed overboard."

143. A grisly death is minimized: "Did he get hurt?"

144. "Going away" and "coming back."

145. Nothing pertaining to the ship or officer is directly apprehended.

who was swallowed by the shark, and then has herself swallowed. This idea is instantly elaborated with many details; the most noteworthy is that the casket is made to come by itself to the grave. The unfamiliar setting of the sea is replaced by that of the land (the grave). The consequences of this change for the rest of the story are not drawn: the fish returns, shakes her hand, and gives her a kiss on the forehead. The inclination to a happy ending and the infantile-playful character of the narrative are obvious here. The replacement of minister Herbig by Pope Herbert is a matter partly of flighty apprehension, partly of the manic tendency to replace concepts by related ones of greater affective value. It is in accord with the wishes of our patient that the shark bring her something. The repetition of motifs plays a greater role in this second recall.

Thus the following features of the disordered recall are added to our list:

- (a) The substitutions by coordinate concepts follow affective needs.¹⁴⁶
- (b) The patient takes the role of the hero of the story.¹⁴⁷
- (c) A motif once chanced upon is arbitrarily elaborated.¹⁴⁸
- (d) Painful ideas are canceled by their objective opposites.¹⁴⁹
- (e) Without regard for meaningfulness, primitive wishes are represented as fulfilled.¹⁵⁰
- (f) The infantile character of the reproduction.¹⁵¹

The third recall retains, in spite of the rereading, the notion that she has been swallowed by a big animal. Nevertheless, the Pope is now correctly replaced by the minister. Suddenly a new motif—an officer's fall in war—not contained in the story appears, probably as a result of the apprehension of the word "officer."¹⁵² Again death is followed by new life. This motif, too, is thrice re-

146. "Pope Herbert" for "Minister Herbig."

147. It is she who is swallowed by the shark, comes to the officer's rescue, attends the school, etc.

148. First, Pope Herbert "brought everything"; then "the shark brought me everything," and later "shook my hand and gave me a kiss."

149. Being swallowed by the shark is

followed by "the fish came back again, shook my hand and gave me a kiss on the forehead."

150. The shark brings her "everything" in contradiction to its role in the actual story.

151. Repetitive use of "and" and "then" to link sentences.

152. This assertion may be questioned: the motif seems to be a symbol-

peated. While in the previous recall the shark brought her something, now the officer chooses a little package. It is noteworthy that the patient renders her reports in terse, action-rich sentences.

The patient's next recall, given without further reading, has the following noteworthy features. Though she remembers that the story is about a shark, she is undisturbed by the nonsense that the shark is swallowed by a man, and even elaborates it. The Pope and the officer motifs recur, the latter in rhythmic repetition. The blood of the damaged victim in the story is recalled as a hemorrhage, noteworthy because absent in the earlier recalls.¹⁵³ That the patient ends her recall with the shark's stomach being cut open indicates that somehow she knows the correct story. The false self-reference is again striking.

The following characteristics of recall are added to our list:

- (a) The original misapprehensions are retained in free recall.¹⁵⁴
 - (b) Amidst misapprehensions, traces of a correct apprehension transpire.¹⁵⁵
 - (c) Details absent in the immediate recall emerge several days later in free reproduction.¹⁵⁶
 - (d) General carelessness, leaving contradictions and nonsense uncorrected, is again striking.¹⁵⁷
- [Passage omitted.]¹⁵⁸

CASE NO. 2: A.M., age 54. Typical case of parietic dementia with retention disorder.

She retells the Shark Story on December 9, after three readings: "A steamer was swallowed by a shark of wood, a steamer of wood from the ship."

like restatement of the falling and death of the officer swept overboard by a squall.

153. This indicates that the disorder is not solely that of perception and/or retention, since the blood-motif had to be perceived and retained to be now recalled. It was not available, however, for use in the previous recall.

154. The Pope and the officer motifs.

155. Schilder's immediately preceding

evaluation of "the shark's stomach being cut open."

156. Hemorrhage.

157. Shark swallowed by man.

158. The omitted section further illustrates these recall features. Schilder adds rhyming and mixing the motifs of two different stories as features, and stresses the exaggeration of rhythmic motif-repetition.

On December 20, the story of Rabbi Moir is read to her. (In the interim she did not hear the Shark Story again.) "Rabbi Sabbat two sons with a teacher thrown into the sea. (Why thrown into the sea?) You are making fun of me, tell it to me again. Two sons have thrown the teacher into the sea. (What about the lightning?) The lightnings have struck him. (Whom?) The two teachers."

On January 2, she relates without repeated reading: "Two rabbis disappeared."

Now the story is reread to the patient by the repetition method.¹⁵⁹ Her recall: ¹⁶⁰ "Two rabbis sat at the sea, there came a ship and dragged the two sons away." (She encourages the other patients to help her.) After a second reading: ¹⁶⁰ "Two rabbis fell into the sea, in the meanwhile a storm came and both sons fell into the lake." When corrected, the patient says: "That's what I said."

On January 5, the patient reports: "Two teachers went to sea, there came a ship and swallowed the teachers. (Do ships swallow?) A fish."

On January 23, after one rereading: "Rabbi Moir, the great teacher, sat at the sea, there came a storm and dragged into it both sons." (Now she hears the story read six times to another patient, then recalls): "Rabbi Moir, the great teacher, fell into the water, in the meanwhile his sons struck by the storm fell into the water; (friendly, laughing) I have told this so often."

This very demented patient recalls the Shark Story, after three readings, incompletely and nonsensically: "A steamer was swallowed by a shark." In addition, she invents that the steamer is made of wood. Eleven days later the motifs of the Shark Story are woven into the incomplete recall of the Rabbi Moir Story. Words are interchanged: Rabbi Moir is called Rabbi Sabbat. The attributive phrase "the great teacher" is made into an independent figure, demonstrating piecemeal apprehension. When questioned, the patient varies the motif somewhat, mainly by replacing one of its elements by another: thus suddenly there are two ¹⁶¹ teachers who were thrown into the sea. Ten days later only two elements are left, namely "two" and "rabbi"; "died" is replaced by the more general concept "disappeared." It is noteworthy that in spite of rereading,

159. The repetition method apparently consists in reading the material phrase by phrase, having the patient repeat each. The method is used to minimize the effects of distraction on recall.

160. Apparently, these rereadings take place on January 2.

161. The change into "two teachers" apparently uses the element "two sons."

the misapprehensions are unerringly reproduced, a bit of the Shark Story originally not recalled now emerges,¹⁶² and the main motif is redoubled.¹⁶³ Three days later a part of the Shark Story originally not recalled emerges: the patient, unconcerned about the nonsense, replaces ship by fish.¹⁶⁴ Eighteen days later, after rereading, the first words of the Rabbi story are recalled correctly, but are followed by a transposed piece of the Shark Story,¹⁶⁵ then by a detail of the Rabbi Moir story previously not recalled.¹⁶⁶

Hearing the story six times over at this point results merely in new variations of interchanged elements. The stubborn clinging to misapprehensions and to certain parts of the stories is noteworthy. The memory material, as such, sticks surprisingly well, but its individual parts are treated quite arbitrarily. Similar verbal formations, like ship and fish, are substituted for each other without regard for meaning. The indications are abundant that the patient does not regard the story as a whole and picks out only individual parts of it. Though she is satisfied with her achievements, the tendency to correct and improve is not altogether absent, as when she says, "Say it again," protests that she is being made fun of, or asks the other patients to help her.

The characteristics of recall of these two patients are easily demonstrable in others. In my *Introduction to a Psychoanalytic Psychiatry*,^{167*} I reported a case dominated by false self-references. This patient always added to the stories a few details from her personal life. Her incomplete recall lacked strong conviction;¹⁶⁸ for instance, she would often say that the story is not really about her. Otherwise, however, she realized neither its meaning nor that it was a story: she considered it true, or at least tested it for historical truth. This, however, amounted to a fundamental misrecognition of the situation.

Our next example is a case of juvenile paresis¹⁶⁹ in which the technique of learning is particularly noteworthy.

162. The ship-element.

163. The duplication of the motif consists both in using *two* rabbis and *two* sons, and in having both rabbis and sons fall into the water.

164. Ship and fish in German: *Schiff* and *Fisch*. The reversibility may have facilitated the exchange.

165. "Fell into the water."

166. "Struck by storm."

167.* Schilder (647).

168. Cf. Betlheim and Hartmann, Chap. 13, p. 302, particularly note 56, above, and Buerger-Prinz and Kaila, Chap. 27, pp. 663-67, below, on the experience of "conviction" and its relation to the state of consciousness.

169. For material on juvenile paresis, see W. C. Menninger (515).

CASE NO. 3, V.M., age 16. Hospitalized December 19 to February 9. The paresis began with fits. After malaria treatment the dementia, which was of considerable degree, improved greatly. The patient calculated rather well, judged situations fairly critically, but showed no affect.

On February 2, she gave a recall of the Rabbi Moir Story. First reading: "Rabbi sat. (Where?) I forgot. (What else happened?) Lightning." Second reading (repetition method): "Sabbath at the table, while of the two sons . . . sat at the table—while the lightning." (Stutters painfully.) Third reading (repetition method): "Rabbi, the great teacher, sat in the school (?) and meanwhile (!) lightning struck (!) the house. (And!) ¹⁷⁰ Fourth reading: "Rabbi, teacher of the great teachings, sat in his room in the meanwhile." Fifth and sixth readings: "Rabbi Teacher sat in his room and taught the young, in the meanwhile the lightning struck (yes, and?) into the room and killed (what?) it (!)." Seventh reading: "Rabbi Teacher, the great teacher, sat in a room and taught the people. In the meanwhile died. (Who?)" Eighth reading: "Rabbi Moir, the great teacher, sat in his room and instructed the people, in the meanwhile lightning struck the room and killed the people." Ninth reading: "Rabbi Moir, the great teacher, stood in the school and instructed the people. In the meanwhile lightning struck the house. (And?)" Tenth reading: "Rabbi Moir, the teacher, sat in the room and taught the people, in the meanwhile . . ."

On February 6, the patient told the story rather readily: "Rabbi Moir, the great teacher, sat in the school on Sabbath and taught the people. In the meanwhile . . . (struck) ¹⁷¹ struck by lightning both his sons died." On February 9, she recalled the Shark Story as follows: "That the man travelled on the sea and that the shark dragged him to the sea-bottom, and a long streak of red blood visible."

The first notable thing here is that the patient learns piecemeal, picking up individual parts without surveying the whole. Registration is fairly faithful, yet words are interchanged: for example, Rabbi Teacher. Self-correction, though hampered, is feasible. In this case the intermission ¹⁷² facilitated learning. I have observed this type of learning in other juvenile paretics also, and even in pareses of grown-ups, though not in such clear form.

¹⁷⁰. Exclamation and question marks signify the examiner's promptings.

¹⁷¹. Prompting by experimenter.

¹⁷². Between February 2 and 6.

I shall mention briefly a few other examples. Recall of the Shark Story by M.T., first reading: "I don't know anything." Second reading (in a low voice, full of significance): "Caught! (Who?) I, by a lion." The Ebbinghaus Story¹⁷³ she also relates to herself, saying "I was in my 'change' then and fell. But the hair was quite in order then, and I wrote a fiction, too, at that time: 'The First Mountain Tour.'" Apparently the reading of the Ebbinghaus Story awakens some important memory, fitting parts of which are assimilated to the story and the rest eliminated. Self-correction is still feasible.

The following is a similar example from a case reported in my *Introduction to a Psychoanalytic Psychiatry*.^{174*} The patient's account ends with the words, "Frankly, there is not one true word in it." The recall of the Shark Story by the same patient: "You told me that he was something and that I was there, I was on that place, (?) that this man was on the ship and I was in the ship, I don't know the man at all." Second reading: "This son was caught by a ship and by the men, I don't know this story at all, you can summon this man for me, I never have been abroad, never have been in the countries." Here, too, the tendency to self-correction is apparent.

Now for another example of the improvement of memory-achievements following an intermission.

CASE NO. 4, M.M., age 27. Hospitalized from August 6 to October 6. General paresis with dementia. Shark Story, repetition method, first reading: "About a shark and a streak of blood, I don't know anything." Second reading: "About the shark which shipped itself overboard (?) dismembered itself (where?) the shark was dismembered because it fell into the water." Third reading: "About the whale, it fell into the water, sank into the sea-bottom and then came out again and was again gone." She believes she has told the story well. After a pause of a quarter of an hour without rereading: "A fish is swallowed in the sea-bottom and an officer is sunk too and I do not know any more." On August 13, she remembers that there was a story about a shark. "He was in the sea and spat (?) he has a bladder in his mouth." On August 15: "(?) About the whale, he was that big (indicates with her hands), he swam on the sea-bottom, he put out his tongue and splashed the water around." On October 3, the patient recalls without rereading: "About the whale, there was the son of the minister,

173. See (785).

174.* Schilder (647).

he sunk into the sea and the ship, it sunk too, and was down on the sea-bottom and as he was down on the sea-bottom then he left a streak of blood behind, (?) because the waves are moving in the water. (?) The blood was that young man's, (?) he thus, because he sunk, I have bled today too from my nose, it is a pity for the young man."

It is fairly frequent that, without giving specific details, the patient passes a general judgment: "This is nice," "That is terrible," and so on. In the following illustrations the patient considers the story as a piece of history, and explains that she is unable to retell it "because I wasn't there!"

CASE NO. 5, H.S., general paresis with dementia, recalls the Shark Story as follows: "A man became unhappy. (How come?) From the shipwreck. (Which one?) That I do not know, because I wasn't there." After the second reading she says nothing whatever. Two months later, she recalls the Shark Story: "About the water it was something . . . we went over the water, one fell in! I don't know any more." The extreme generality of this patient's recall is notable: "The man became unhappy." . . .

CASE NO. 6, T.L., age 54, general paresis with dementia. Recall of the Shark Story: "An officer embarked with to . . . Then he came again to the land and then a lion devoured him. (A lion?) He was just searching for freedom." Five minutes later, her recall is about lions and bears: "They have devoured up and torn apart the man. (Where did that happen?) In Hamburg." Three days later, after rereading the Shark Story: "I wasn't there. The Europeans went out too and caught a young girl." Second reading: "Two companions shot themselves dead." Third reading: "I am so distracted I can't remember it, I got it in my head, can't get it out, about Hungary, the minister got locked up." Fourth reading: "A young officer, the enlisted men had him and he had himself here in Vienna at the city council, they have caught him there." Fifth reading: "A man had himself caught by a steamer, he just got him (?) the man. (Who caught the man?) The boy and threw him into the sea and he died."

With Austrians, who do not know the sea, the substitution of "lion" for "shark" is a relatively frequent mistake. However, our patient elaborates on her mistake and includes bears, too. The apparently senseless subsequent recalls

are notable for several reasons. The catching of the young girl is reminiscent only generally of being caught by the shark; the phrase "two companions shot themselves dead" retains only the gruesome feeling-tone of the story. The re-reading derails the patient completely: though the "minister" motif reemerges, "caught" is later replaced by "locked up." The next rereading again results in an exchange of elements: "the boy threw him into the sea and he died." Active and passive roles are interchanged.¹⁷⁵

A comparison of the recall of this very demented parietic with that of Case No. 1 is instructive. First of all, there is less spontaneity here. The manic features of the first case may partly account for this, yet it is certain that spontaneity decreases in high-grade dementia. So does attentiveness. Therefore, less material is registered,¹⁷⁶ and in many far-gone cases the patient is obviously so preoccupied with some idea that the story is altogether missed.

CASE NO. 7, J.T., age 61. Very demented general parietic, tells spontaneously of her experiences as a child of three when the Prussians were here and she brought them water.¹⁷⁷ "It is very nice that I have gotten this far, onto the throne, I hope I will remain healthy, the good Lord help me, all children should get well and remain well. Syphilis? That I got from someone who wanted to marry me; that's cured now." She pays no attention to the story she is told. "Our Henry has things, the music he has, he wrote it all . . . that, then he learned to sell music." Second reading: "About the child (?) who was poor and his parents died (?) there I have to speculate some more (?) about Henry." Third reading: "That I do not know." After the reading of the Shark Story she says: "I can't do that now anymore, my head is full of my child."

The registration-ability of such patients is particularly limited. They pick out mere parts and immediately transform them to fit a certain sense. A coordinate idea replaces the original one: shark—lion. There is a tendency to be derailed and multiply ideas: lions and bears have torn the man up. The transpositions are more sweeping than in the first case: Hamburg—foreign country—Hungary. Finally, the story is taken here as a bit of history. Thus, in prin-

175. Cf. Schilder, Chap. 24, pp. 510-11, above.

176. "Register" here translates *aufnehmen*. The question is left open whether this is a perceptual or an apper-

ceptive disorder. The context suggests the former.

177. Apparently what follows is the first "recall" of the Rabbi Moir Story.

ciple the recall-disorder is the same as in less demented cases, only more exaggerated.

The dearth of driving-forces also ¹⁷⁸ can be seen in the following examples.

CASE NO. 8, P.S., age 53. Hospitalized November 16 to February 10. At the time of admission she retells the Shark Story, after two readings: "A man he scratched and then he made a streak of blood." On November 29, she recalls: "Something about a fish in the Danube who rubbed a man and scratched bloody streaks on him."

Where the driving-force is weak, the correction tendencies are also weak.¹⁷⁹ Thus, they were weak in Case No. 1 also, but the setting there was different. That patient's attitude was playful, and though she obviously had little conviction of the reality of the story, she was not interested in testing its correctness. In such cases, the awareness of correctness is superficial and easily upset. . . .

The following case further illustrates awareness of correctness, correction tendencies, and the degree of conviction:

CASE NO. 8a, T.K., age 45. Hospitalized October 1 to November 12. Very demented, plays with her feces. She recalls the Rabbi Moir story as follows: "You told that he was struck by lightning. (Who?) I don't know." After rereading, she says, with demented laughter: "I don't know anything." Third reading: "Well, yes, you told that both sons were struck by lightning." The patient is dull and affectless: "(Did you have syphilis?) (Laughs) Nothing. (Do you have syphilis?) Nothing." When shown a newspaper clipping, she says: "Quite nice." She cannot recall, however, the content of the clipping. But when she is told that Mrs. T.K. yesterday took a walk to the Prater,¹⁸⁰ went to an inn and there drank a stein of beer, she says, "That's not true. (What have I told you?) You have told me so many things." Then she is told that Mrs. T.K. went to the Prater, met there a young man, and let him kiss her. (Vivid affect play, laughter). . . . (Is that true?) "Yes." Now the sentence is repeated with the addition that she then became pregnant. She recalls: "That I was in the Prater

178. This "also" apparently refers to the discussion on p. 553, above of lack of spontaneity and attention, which Schilder

seems inclined to attribute to a dearth of driving-forces.

179. See note 168, above.

180. The amusement park of Vienna.

and met a man who kissed me. (What happened then?) Nothing." She omits the final passage, even after it is repeated to her: "That T.K. became pregnant? Oh no. (Have you been in the Prater?) All my life I haven't ever been in the Prater."

It is noteworthy that the patient accepts as reality the story made up about her as long as it does not clash with her interests. But her acceptance lacks real conviction.

(b) *The Thought-Disorder*

We will attempt now to give a general formulation of what we inferred from our patients' recall of brief stories. The first question is, does the disorder begin in apperception? ¹⁸¹ It is plausible to assume it does, since Gregor ^{182*} has unequivocally demonstrated the presence of apperception-disorder in paresis. This disorder of paretics is undoubtedly related to an inadequacy of the anticipations ¹⁸³ formed by them. To put it another way, apperception-disorder is related to attention-disorder. Attention refers here to an active attitude, not merely to a clear percept which is its result. Attention, therefore, implies here articulation of the material, apprehension of it in whole or part, that is to say, an entirely active attitude.¹⁸⁴ Let us see what happens when normal people

181. Cf. note 140, above.

182.* Gregor (288).

183. See Chap. 27, IV, below.

184. This passage is important, since it comes close to defining the concepts "attention" and "anticipation."

Schilder's view may be summarized as follows: (a) Attention is not "clarity of percepts," that is, not a *state*, as often defined in the past, but an active attitude, that is, a *function*. For a similar view, see Koffka (406, p. 358). (b) Attention-disorder and inadequacy of anticipations are two aspects of the same process. (c) Attention as an active attitude accounts for the articulation of material in whole and part.

Though these points are cardinal for the understanding of the pathology of

thought, each has loose ends: (a) Attention is defined as an active attitude, leaving no room for passive attention, an obvious and important psychological process. See, for example, the concept of "evenly hovering attention," Freud (226, p. 324); also Chap. 12, note 51, above. (b) The nature of the close relationship between attention and anticipation is not explicitly stated, nor is the difference between "Einstellung" (attitude) and "anticipation." Rapaport *et al.* (602, I, 385-89), consider attention, anticipation, and attitude all preparatory to the appearance of ideas in consciousness. (c) While articulation is a task of concentration (active, voluntary attention), percepts which are simple, or familiar, or of high inherent articulation,

listen to a story. At the beginning of each sentence they will make anticipations¹⁸⁵ as to how that sentence will end. These anticipations are probably quite general in the beginning, growing more definite and specific as the sentence progresses. In the meanwhile, a part of the anticipations is progressively rejected. After each sentence an anticipation is formed of the next sentence, or even of the whole story. In the absence of such anticipations, apprehension is piecemeal and without regard for the meaning of the whole. Case No. 3 is an example. Personal experience appears to play a crucial role even in the registration-process.¹⁸⁶ Jung^{187*} demonstrated in his association-experiments that complexes determine the misapprehension of stimuli that pertain to them. But by no means are the registration-disorders of our cases only complex-determined. When, for example, the patient (Case No. 1) recalls of the Shark Story only that "he went away," her lack of directedness¹⁸⁸ toward the material becomes obvious. This lack of directedness is closely related to a lack of interest.¹⁸⁹ Probably inadequate anticipations also have a share in the faulty and insufficient apperception.

are all apperceived even when passive attention prevails (602, I, 195-200). The transition between both forms of attention is fluid, much like that between objects of varying degrees of inherent articulation. Furthermore, where normal thought-organization finds inherent articulation, disordered thought-organization may not. Concerning attention, cf. Chap. 15, note 21, above; concerning anticipation, Chap. 27, notes 26 and 58, below.

185. Anticipations are at work in the process of both thought-production and perception. The anticipation is formed by the crosscurrents of those motivations (driving-forces) which are to find expression in the thought. To each motivation pertains a range of ideas which may represent it in consciousness. The interaction of simultaneous motivations narrows this range to ideas which can express at least the major motivations simultaneously. With the progression of

an idea, some motivations may be subdued or superseded, and new ones come into play. Hence the progressive discarding of some anticipations and the increasing specificity of the subsequent ones. Cf. Chap. 27, IV, below.

186. Here the concepts "apperception" and "registration" are apparently interchanged. The context suggests that Schilder meant "apperception." As the distinction is poorly defined, exact formulations can hardly be expected.

187.* Jung (365).

188. "Directedness" translates *Zuwendung*. Apparently Schilder means a lack of directedness in not recalling the rest of the story. In recalling "he went away" there seems to be an overdirectedness, a centering on, a spellboundness by, the idea of departure, death.

189. Cf. "lack of interest" with the point on "motivations," notes 79 and 112, above.

No doubt it is extremely difficult to distinguish insufficient apperception from insufficient reproduction. In cases No. 3 and 4, the patients' recall of the story improved considerably with a few days' intermission. . . .^{190*} In normal psychology this is a well-known phenomenon.^{191*} To understand it, we must keep in mind that registration is not immediately completed, and that perception is followed by elaboration. Registration and elaboration, however, are not distinguishable in principle. Once registered, the story is elaborated into a unified whole, of a definite feeling-tone. I have mentioned that many of our paretics register only a general impression of the story. After the whole has been grasped, intact thinking again and again falls back on detail. The course of the process of registration is: integration, anticipation, analysis.¹⁹²

I want to stress that registration is not a passive process; it always implies elaboration. While a normal subject registers a story, many personal experiences enter his consciousness; but in his final elaboration of the story, this material is again pushed into the background. The correct reproduction of a story thus presupposes that what we usually call associations must be brushed aside.¹⁹³ This brings us to elaboration and reproduction.

In final analysis, elaboration is but the completion of registration by interchanging processes of integration and analysis, concurrent with those of correction.¹⁹⁴ Each of these processes is determined by affectivity, by general "Einstellung."¹⁹⁵ In reproduction the processes of selection and integration

190.* For similar evidence see Schilder (640) and Koeppen and Kutzinsky (402).

191.* See Herrmann (325).

192. Schilder's description of the registration-process is somewhat cryptic, and of necessity overlaps that of apperception. Integration refers here to the production of unified wholes. Anticipation refers to the expectancy regarding subsequent material, as determined by the preceding whole and by new motivations mobilized. Analysis refers to the falling back from the whole to details, to review them in the light of newly registered material, and consequently to arrive at a unified whole which includes this material.

193. Schilder suggests that the correct understanding (registration, apperception, apprehension) of a story requires a variety of anticipations to serve as selective principles, which in turn imply the mobilization of a wide range of associations. He further suggests that correct reproduction requires auxiliary anticipations to be progressively cast away during apperception, and dispensable associations progressively suppressed. Cf. note 185, above.

194. Cf. notes 168 and 193, above. The correction-process consists in the exclusion of auxiliary and irrelevant anticipations and associations.

195. *Einstellung* is here equated with "affectivity." Schilder's loose usage of

are the same as in registration. In the course of these, every concept is driven through all related conceptual spheres.¹⁹⁶ General affectivity and special complexes enter at each step. The concept in the foreground is steadily compared with the total theme anticipated. New correction processes keep arising.

That the gruesome motives of the story disappear altogether in the first recall of Case No. 1 is probably due to an affective tendency toward a happy ending. It is easy to demonstrate that many distortions in recall are complex-determined: for example, they often simply replace the unfamiliar by the familiar. For example, the shark is often replaced, in our cases, by a lion or a bear (Case No. 6).¹⁹⁷

The summary of Case No. 1 describes the process of elaboration in detail. Only one point needs to be particularly stressed. Material of personal experience, more or less loosely related to the story, is considered and recalled as part of it. For instance, Case No. 2, drawing on knowledge, includes in the story that the steamer was made of wood. The tendency to merge two stories, even if presented on different days, also belongs here.^{198*}

In advanced dementia, the inadequacy of verbalization is striking. It is difficult to decide how much of this is referable to the dementia itself, and how much to an inadequacy of verbal apperception as in sensory or amnesic aphasia. The interchange of the words "ship" and "fish," for instance, may well be related to an aphasic disorder.

It is striking how unconcernedly these patients accept as correct every

the term "affectivity" for any more or less central motivation has been stressed (for example, note 79, above). For his use of the term *Einstellung* (set, attitude, anticipation) to denote motivational direction or orientation, see note 106, above. Schilder's contribution here is (a) the consistent reduction of clinical observations on thought-disorders to a group of concepts; (b) the choice of motivational concepts: *Einstellung*, attention, driving-force (interest, affectivity). Its shortcomings are (a) the lack of sharp definitions of his concepts, with consequent overlapping; (b) their lack of hierarchic differentiation in terms of centrality.

196. The related conceptual spheres—that range of associations discussed in note 193, above—yield the various connotations of the concept. The reproduction process seeks the fitting connotation. Cf. Schilder, Chap. 24, note 75, above.

197. These distortions appear to be determined not by specific complexes, but rather by what Schilder calls "general affectivity." This term parallels what in these comments I have referred to as the "state of consciousness" and its corresponding thought-organization. Cf. Chap. 9, notes 78 and 93, above.

198.* Cf. Koeppen and Kutzinsky (402); see also p. 542, above.

presentation, memory, or thought that comes to mind. Gregor and Foerster^{199*} have shown that the errors of paretics on the complicated questions of the Ebbinghaus test do not differ from intermediary steps which normals take in answering them. Normals transcend these steps, while paretics do not. . . .^{200*} Correction tendencies are absent. This makes it understandable that general affective needs become easily operant. Adequate recall presupposes that corrections are continuously applied in both registration and reproduction. Anticipated schemata²⁰¹ must be completed, and everything that comes to mind must be tested for correctness. Our patients, lacking such correction-processes, are quite helpless against their own ideas. Herein lies the root of what clinical parlance calls "poor judgment,"²⁰² an entity so hard to define. This lack of self-criticism is particularly striking in Case No. 1 who, disregarding logic and experience, revives the dead officer immediately. This example shows also the lack of a unifying tendency.

We do know²⁰³ that insufficiency of unification and correction is characteristic of incomplete thoughts. Dreams and all those formations which belong to Freud's Ucs system,²⁰⁴ to the sphere,²⁰⁵ have similar characteristics; and we assume that in them the thought-process has terminated before its comple-

199.* See Foerster and Gregor (191).

200.* Cf. Schilder, Chap. 24, particularly p. 511, above.

201. This concept of schema originates with Selz (679); it has nothing to do with that of Head (314) and Bartlett (37), referred to in these pages. Schilder's description of Selz's experimental procedure and concepts appears in Section I, d, above. Selz noted that the responses he obtained were determined not by the strength of associative bonds, but by "anticipations" created by the task set. These "anticipations" appeared to be formal patterns, molds into which the correct responses would fit. These formal patterns he called schemata. His method and concepts earned Selz a place among the pioneers of the non-associationist theory of thinking, Koffka's (403) vehement and often justified criticism notwithstanding.

202. "Poor judgment" translates

Kritiklosigkeit. It is a standard clinical term for certain early symptoms of organic psychoses (paresis, senile psychoses, etc.). Cf. Buerger-Prinz and Kaila, Chap. 27, III and IV, particularly notes 28, 43 and 76, below.

203. "We do know" is too positive a phrase; it tends to obscure the fact that the statement itself is an explanatory working hypothesis, and that the subsequent statements refer to the observational material from which, and to explain which, the working hypothesis is derived. Cf. Chap. 24, note 67, above.

204. Before the introduction of the topographic organization (id, ego, superego) of the psychic apparatus (Freud, 243, p. 90), Freud (235, pp. 255-58) distinguished the *systems* Ucs (Unconscious), Pcs (Preconscious), and Cs (Conscious). Cf. Chap. 23, II, above.

205. Compare Schilder, Appendix to Chap. 24, above.

tion.²⁰⁶ [We may assume, therefore, that] here [in parietic thought disorders], too, thought-processes come to a premature close.

All thought-processes end with awareness of the truth or falseness of the thought.²⁰⁷ G. E. Mueller has stressed that the degree of truth-awareness varies greatly. We must distinguish, however, not only the degree but also the intensity of truth-awareness, which depends upon the amount of new experiences mastered.²⁰⁸ Truth-awareness in our patients lacks intensity; their awareness of memory-certainty is weak: [consequently] they are quite suggestible.²⁰⁹ I refer particularly to Case No. 8. Yet, as I indicated in reporting the case material, it would be wrong to assume that all correction-processes are absent in these patients.

A few peculiarities of primitive experience are particularly apparent in our patients. First of all, we see a tendency to iterate motifs. I refer again to Case No. 1. The affective transformation of the motif gives each reiteration its specific character.²¹⁰ This kind of motif-variation and repetition is familiar from the Ucs system.²¹¹ [Secondly] we see a tendency to multiply figures in the story, and this too is reminiscent of the Ucs system. One is tempted to conclude that the regulations of the processes of the Unconscious are demonstrable in the parietic memory-disorder. [Thirdly] a striking feature of many parietics is their failure to see that they are dealing with stories whose historical reality is irrelevant. They excuse their inadequate reproduction by stating that they were not present. Often they will put themselves into the place of the hero and

206. See Freud (209, pp. 492 ff.).

207. This significant point is understated. Schilder succeeded here in conjoining the thinking of psychoanalysis (reality-testing), of associationism (G. E. Mueller: correctness), and of act-psychology (Brentano-Meinong: awareness).

208. Schilder seems to mean that, given a series of events, materials, and experiences, registration and apprehension proceed to mold them into a unified whole with past experiences. The success of this unification determines the degree of truth-awareness. The number of experiences so integrated determines the intensity (depth) of truth-awareness.

209. Cf. Buerger-Prinz and Kaila, Chap. 27, IV, below.

210. By "affective transformation" Schilder apparently means: (a) changes which retain the original affect (death, war, journey) but replace all verbal, situational, and meaning material; (b) changes which attenuate the original affect or substitute its opposite, and then assimilate the verbal, situational, and meaning material to the substitute affect—the motif so obtained may then again become subject to the transformations described under (a); (c) the "transformations" described in Chap. 24, pp. 500–501, above.

211. See Schilder, Chap. 24, above.

relate the events of the story as their own experiences.^{212*} This, too, is a familiar tendency of the Unconscious. Emphasizing of one's self is apparently closely related to affective needs that lie close to the surface. Finally, if this kind of patient has once made a mistake he will cling most stubbornly to his creation, and rereading will hardly make a dent in it.^{213*}

I believe I have covered the essential features of the [thought] disorder of our demented patients. I summarize: Inexpedient methods are applied in registration, elaboration, and reproduction. The necessary anticipations and the integration of parts into wholes do not take place. The whole-apperceptions that do come about are not sufficiently structured. In the process of apperception, concepts and situations are [freely] replaced by coordinate or superordinate concepts. The more far-gone the dementia, the more far-fetched the coordination. These misapperceptions are either complex-determined or related to the patient's personal life. The reproduction-processes meet the same obstacles. Since correction-processes are inadequate or absent, logically incompatible ideas remain juxtaposed. The driving-force to continue and complete the thought-process may be diminished, but an excess of driving-forces also may occur, resulting in overproduction dominated by rhythmic motif-repetition. Misapperceptions and misreproductions once created greatly resist change. Not only meaning is falsely apperceived and reproduced, but the situation is misunderstood in that the story is considered historical reality or even the patient's own experience. Truth-awareness is lacking in intensity, and does not initiate correction. The language is often extremely sloppy, with no tendency to correct it. . . .

The question is whether this description encompasses the essence of dementia. Obviously, none of the characteristics described above is specific to parietic dementia; they could well have been those of dream-processes or schizophrenic thought-disorders, and therefore must be somehow incomplete. Some characteristics have not yet been mentioned. The first of these is that the parietic's distortions in recall are altogether banal; the second, that in general the disorder is evenly distributed throughout the field of experience.²¹⁴ We may add that

212.* Koeppen and Kutzinsky (402) saw these phenomena in other organic psychoses. Chance selection of their comparatively small case material must be held responsible for their not having observed it in parietics.

213.* Koeppen and Kutzinsky (402) have also observed this.

214. That is, it occurs regardless of the thought-content, unlike repression phenomena. But this contrast is not strictly valid: repression, too, may gen-

in dreams and schizophrenia, just because of the selectivity of the "dementia," one gains the impression that the person could do better; but in paresis the disorder gives the impression of inevitability. . . . I have mentioned repeatedly that complex-material enters into the elaboration of these stories. Yet it is of a more or less superficial character. The wishes which come to expression are common, lacking in personal coloring. The salient feature of the disorder here described is the banality of its contents, which are those of the world of the bourgeois; the complexes are those of the superficialities. The childishness so patent in Case No. 1 seems to contradict this; however, it is in many respects only playing at childishness, and is not a true regression to early stages of development.

I believe that now we have encompassed the essence of dementia. The concept of "deficit" is replaced by the dynamic concepts "changed attitude" and "inadequate technique of thinking." As the thought-processes come to a premature close, there is a dearth of correction-processes, and a full truth-awareness is never achieved. We must assume a lack of driving-forces, but then must distinguish between "internal" and "external"²¹⁵ driving-forces of thought. The "external" driving-force may remain normal. In Case No. 1 it is even excessive, though in most cases of far-gone dementia it is considerably decreased.

(c) *On the Psychological Differential Diagnosis of Paretic Dementia*

Attempting to characterize the nature of the concepts of schizophrenics, I once concluded that their major characteristic is the tremendous enlargement of the concept basis,²¹⁶ which came to include all of the patient's essential experience. For instance, for Case No. 1 in my book *Seele und Leben*^{217*} the concept of death was far broader than its everyday meaning; along with it, the everyday concept also survived. In addition, in acute cases of schizophrenia the process of apprehension is not completed, and remains in steady flux.²¹⁸ A com-

eralize until it becomes an overriding characteristic of the state of consciousness.

^{215.} The distinction between "internal" and "external" driving-forces of thought is not clear. It seems to be an *ad hoc* assumption made to account for the occurrence of both decreased and increased driving-forces in dementia. As far as I can see, the distinction has no ex-

planatory and little descriptive potency. Cf. Chap. 27, note 10, below.

^{216.} See Schilder (652); cf. Rapaport, *et al.* (602, I, 254-57), and Kasanin (372).

^{217.*} Schilder (652).

^{218.} Schilder apparently refers to the fact that in acute schizophrenia a multitude of connotations of words tends to become simultaneously conscious, re-

parison of the concepts of our paretics with those of schizophrenics makes it obvious that the former do not differ very much from those of everyday. The meaning of officer, pope, shark, to the paretic is not very different from the normal. While the schizophrenic's concepts and propositions may be considered undeveloped, the paretic's concepts are those of everyday; only their application is disordered, in the manner described.

Naturally, the concepts of dementia patients are frequently incomplete and marked by a dearth of attributes. Yet we know that the concepts of imbeciles, for instance, are quite sharply defined by this very dearth. In studying imbeciles, one often gets the impression that the restructuring of the concept-basis,²¹⁹ which is continuous in normals, occurs most slowly or not at all. The all too literal learning of our juvenile paretic²²⁰ illustrates this point.

Thus, the schizophrenic thought-disorder implies a farther-reaching conceptual disorder. The schizophrenic's thought-disorder encroaches on the concept "in statu nascendi,"²²¹ while that of the paretic attacks a relatively developed concept. Each involves—so to speak—a different phase of the thought-process. In schizophrenia, affectivity and attitudes that bring about concepts are fundamentally altered; in dementia, the disorder affects the manner of utilization of relatively developed concepts. In other words: the schizophrenic's thought-disorder affects the core, the paretic's the periphery, of experience. Correspondingly, the schizophrenic's thought-disorder brings archaic,²²² the paretic's everyday, material to the fore. Schizophrenic thought-disorder pertains first of all to the basis of concepts and propositions,²²³ and to their apperception in registration; paretic thought-disorder to elaboration. Schizophrenic thought-disorder affects the development of concepts and propositions, the paretic affects the developed concepts and propositions. In the background of and side by side with the schizophrenic's concepts, there still exists usually a correctly built conceptual world;²²⁴ the two worlds stand not

sulting in doubt, perplexity, and confusion.

219. By "restructuring of the concept-basis" Schilder means apparently the process whereby the concept-basis and a new experience meet, the experience is assimilated to the concept-basis, and alters it. This process was observed and its paramount significance was cor-

rectly appraised by Head (314) and Bartlett (37).

220. Case No. 3, above.

221. In a nascent state.

222. For a characterization of archaic material, see Storch (716).

223. Cf. Kasanin (372).

224. Cf. Bleuler (71, pp. 4 ff.).

united. Within his disordered thought-organization the paretic still retains remnants of his pre-paretic system of relationships, only these cannot be brought to bear on experience as fully as those concepts of the schizophrenic which are adequate. This is why the dementia of the paretic seems irrevocable, while that of the schizophrenic reversible.

The formulation that the basic disorder of schizophrenia and paresis is essentially the same, but affects different subject-matter in each, is incomplete; the difference in subject-matter naturally changes the form of appearance of the basic disorder. Such comparisons are, moreover, always too general and schematic. Thus it is obvious that in paresis not only the layer of crystallized thought, but also the neighboring layers are disordered. This is well illustrated in far-gone paretics, in whom aphasic and agnosic disorders are hardly ever absent. Thorough studies of this aspect of other forms of dementia are not extant.^{225*}

It will be necessary for our purpose to make an attempt here to clarify the nature of aphasic and agnosic disorders. Classical theory has considered aphasia a disorder of word-presentations,²²⁶ that is, a disorder affecting verbalization. Recent theories of aphasia are inclined to consider it a thought-disorder. . . . It is certainly true that each of our presentations and words express something mental.²²⁷ This makes it difficult to conceive of a disorder which affects only verbalization. . . . However, Binswanger^{228*} is right: the thought which is put into words is not the same as the thought before it is verbalized; thus it would be incorrect to consider aphasia solely a thought-disorder. Nor is agnosia solely a thought-disorder, but also one of apperception.²²⁹ The conception that amnesic aphasia is a disorder of categorical thinking (Goldstein and Gelb)^{230*}

225.* The thorough study by Eliasberg and Feuchtwanger (1953) of an unusual case of acquired dementia is an exception.

226. An alternative translation: "verbal images."

227. "Mental" translates *geistiges*, literally "spiritual." The implication is that presentations and words express something which reaches beyond them—that is, a meaning.

228.* L. Binswanger (64).

229. Since Schilder has so far treated

apperception as a phase of the thought-process, the argument is somewhat hazy here. Verbalization also is such a phase. What is probably meant is that we must be specific, and distinguish between disorders of the thought-process in general and those of its specific phases. He also stresses that some general involvement of the thought-process is present in the disorder of any specific phase.

230.* Goldstein and Gelb (264).

[Compare also Goldstein's recent volume, 279.]

has its limitations. Verbal, visual, and acoustic presentations are not lost in aphasic disorders. The trouble in the so-called motor-aphasias lies rather in the inability to develop correct sequences of sounds. The sounds emerge in incorrect sequence. A sound, once found, will often not leave the aphasic: he keeps iterating it. A word available to the aphasic in one situation may not be at his disposal in another. That he can pronounce a certain letter may not mean that he can pronounce it in a word. A word available to him separately may not be at his disposal in a sentence. Contrariwise, a whole sentence successfully uttered does not mean success with its words and sounds taken separately. Moreover, the aphasic's achievements are subject to considerable fluctuation with the setting. This obtains for word-apprehension, too. Understanding the sentence as whole does not mean that its single words will be understood. Aphasic patients frequently replace sounds and words by others closely related. Single parts are often condensed or displaced. The patient clings to the misformations he creates. In final analysis, perseverations are closely related to such clinging to once-created forms. The problem of the speech-fragments of aphasics deserves reconsideration in this light. At any rate, aphasic and agnosic disorders affect a layer of the psyche which has little individual coloring and only a loose contact with personal experiences; it has a means²³¹ character, it is psychologically peripheral. Thus we encounter here the same basic disorder, again acting on a different material, and again taking on a new form of appearance.

A comparison of aphasic and paretic disorders shows that aphasia is psychologically even more peripheral than paretic disorder. Thinking may surely be regarded as a means of personality, yet it is undoubtedly a far more personal means than language. Still, it would be incorrect to assert that personal vicissitudes play no role in aphasia and agnosia. It is commonly observable that even in these disorders the selection of what will be retained and reproduced depends to a certain extent on personal inclinations and interests. This holds even though personal experience is far less decisive here than in the basic schizophrenic disorder. Consequently, these disorders are far more diffuse²³² than those of

231. "Means-character" here translates *werkzeugmaessig*. Schilder stresses that what is affected in aphasia is not motivation but the means by which it is carried out.

232. Here the antithesis of "diffuse"

is "selective." Thus, according to Schilder, in neuroses and schizophrenias personal motivation selectively determines the locus of the disorder, while in aphasias and agnosias this selectivity plays a lesser role: the disorder spreads

neuroses or schizophrenias. It is instructive to compare the slips of aphasics with the complex-determined slips of neurotics and normals. Aphasics, too, make slips more often when excited or when the topic touches on a complex; but in their slips, general factors like effort and fatigue rather than selectiveness are the major determiners. The overwhelming majority of the slips of neurotics and normals is complex-determined, even though the influence of such general factors as tiredness must not be underestimated.²³³ . . . I stress these common features to show that fundamentally communication always exists between the various psychological layers.

At this point I want to advance the formulation that the disorders of means-layers²³⁴ of the psyche are more diffuse than those of more central and personal layers. It needs no extensive proof that the asphasic-agnosic disorders are more peripheral and more diffuse than those of parietic dementia. By "diffuse" I do not mean, like Goldstein,^{235*} that every aphasic or agnosic disorder implies a fundamental disorder of all that belongs to the means-layer of perception and language. Thus we know^{236*} that optic agnosias pertain to a single, relatively isolated range of objects. For instance, in word-blindness other disturbances of optical apperception play only a minor role. Isakower and I^{237*} have even observed relatively isolated agnosic disorders, not one of which involved a speech disorder. Therefore, I do not believe Goldstein is right in assuming that aphasic or agnosic disorder always involves all the realms of the psychological means-layer. One may say only that a disorder of one optic realm will involve

diffusely over the realms of speech and understanding. Here we encounter again the distinction between an isolated thought-disturbance or -formation, and a generalized, normal or pathological, thought-organization. Symbols versus the thought-organization of dreams, slips of tongue versus schizophrenic thought-organization, are other examples. Affect- or drive-influences, and states of consciousness, respectively, underlie these. Cf. Silberer, Chap. 9, particularly notes 55, 78, and 93; also Chap. 13, note 62, above.

233. Freud, in discussing thoroughgoing psychological determinism, attrib-

uted to the general factor merely a precipitating and not a determining role (210, p. 50). Schilder renders the distinction between causation and precipitation relative, by showing that in certain settings a precipitating factor becomes the major causal one. Such relativization of determining factors is actually a further extension of thoroughgoing psychological determinism.

234. See note 231, above.

235.* Goldstein (283).

236.* Poetzl (572) clearly demonstrated this.

237.* Isakower and Schilder (348).

other optic realms. The involvement will affect neighboring realms . . . but even these only to a small degree. . . .²³⁸ In other words, the disordered psychic layer in aphasia and agnosia is articulated according to object realms, within any one of which the disorder is diffuse. . . .²³⁹

I should like to mention briefly that amentia²⁴⁰ is again the same fundamental disorder manifesting itself in yet another layer of experience. The psychological layers affected are concerned with the immediate elaboration of the material of perception and imagery. Apparently the perceptual raw material must be organized into broader units before it can be usefully integrated into the total experience of the person. The apprehension of a situation is not purely the task of the thought-process; nor is it a very personal task, though in this phase of elaboration, individual experience and affective factors do play a greater role than in raw-perception.²⁴¹ Thus, the psychological layer involved in amentia is one situated between the perceptual and the affective. It is more ego-close than the layer of thought-organization disordered in paresis; however, it does

238. The omitted section discusses the concept of "neighboring," with respect both to objects and to brain-localization.

239. In the omitted section Schilder concludes that the ubiquity of aphasic and agnosic disorders in dementia suggests a yet unknown relationship in the cortical localization of the centers responsible for speech and cognition on the one hand, and thought-organization on the other. The section is problematic for two reasons: (a) Even if we acknowledge the relative autonomy of speech in particular, it would seem still necessary to subsume speech and cognition under the heading "thought-organization." (b) One wonders whether localization in this sense is still a *bona fide* working hypothesis, and whether accepting Schilder's arguments against Goldstein's clinical contentions invalidates the latter's (281) conclusions against localization in the older sense.

240. According to Meynert (518),

amentia is a psychosis the essential symptom of which is hallucinatory confusion—a phenomenon of functional loss, due to cerebral exhaustion. See however Freud (209, pp. 487 and 533), and (237, pp. 145 and 149); also Hartmann and Schilder (312).

241. As I understand it, Schilder assumes that the psychological apparatus is so adapted to its environment that certain of its layers function in a more "impersonal" and homogeneous manner, guaranteeing the basic commonality of the relation of individuals to the world. This is consonant both with Freud's conception of the development of the secondary process (Chaps. 15 and 17, above), and with Hartmann's conceptions of the "inborn ego-apparatuses" and "conflict-free ego-sphere" (Chap. 19, above). Bruner's (97, 100), Murphy's (533), and Klein's (387) experiments suggest a fluid transition between the central and peripheral, "personal," and "impersonal" layers.

not derive directly from that of thought-organization, but rather that of perception.²⁴² Later I shall proffer evidence that the essence of amentia is also a disorder of integration and differentiation.

We have reached the point where we may attempt to define dementia. First of all, it may be described as a disorder of thought and action, not referable to a defect of the perceptual apparatus or the organs of action, or unwillingness, or distraction, or even affect, but rather to inability. Secondly, it is rooted in a disorder of differentiation and integration in a layer of the psychological organization which does not belong to the individual-affective core of the personality, and which serves the conceptual elaboration of the experience-material already organized by perception and apperception.

Let us now compare this with the definitions collected in Fleck's ^{243*} survey. Kraepelin ^{244*} and Wundt ^{245*} are of the opinion that the concepts intelligence and intellectual function do not refer to unitary and well-delineated sets of facts; dementia is therefore only a link in a chain of disease-manifestations, and cannot be separated from the conditions preceding it. We must object that a psychological condition like the dementia of paretics must be psychologically understandable in itself, even though we should not expect it to correspond to the dementia of the feeble-minded. To determine the exact differences between the two would require detailed investigations. A cursory examination yields the following. The feeble-minded does not perceive the abundance of relationships among and propensities of objects; therefore his concept basis, and consequently his judgments, are meager and inadequate. His picture of the world will be analogous with those produced by sense organs which function inadequately or not at all. Since the essence of thinking is to posit relationships, not only will his concepts and concept bases be inadequate, but the relationships between them will not be apperceived. Therefore, he will be able neither to generalize the singular nor to apply the general. . . . However, these general inferences must be substantiated by special investigations. In this comparison, the dementia of the parietic would show richer and less definite concepts; the disorder of relationship-apperception would be common to both.^{246*}

242. See Schilder (645). Note that his concept of thought-organization here is quite narrow, excluding such functions as perception, apperception, and verbalization.

243.* Fleck (190).

244.* Kraepelin (415, 417).

245.* Wundt (778).

246.* Compare Domarus (147a).

For Tuczek,^{247*} dementia is a pathological poverty or impoverishment of knowledge and ability, a deficit in registration, in reproduction and mental elaboration of experiential material, and in its transformation into productive activity. This definition is only an incomplete description.

Jaspers^{248*} distinguishes between store of knowledge and intelligence. This distinction is in agreement with the fact that reproduction of knowledge does not preclude the presence of dementia. Moreover, knowledge contains more than objects and object-relations, it contains judgments. If knowledge is not merely reproduction or reproducibility, but rather the utilization of what is reproduced, then loss of knowledge and dementia have just about the same meaning. Utilization of what is reproduced implies the ability to rearticulate latent or actual memory-material. For Jaspers, the force driving toward utilizing knowledge is part of intelligence. Fleck²⁴⁹ considers this an overextension of the concepts intelligence and dementia. I believe I have demonstrated that anticipations and correction-tendencies are manifestations of an internal driving-force of thought. The external driving-forces of thought must also be taken into consideration. Haste will check correction-tendencies, while lack of driving-force will at least delay the articulation of the whole-impression and thereby hamper the internal articulation of thinking. I agree with Jaspers and not with Fleck: both internal and external driving-forces of thought play an essential role in intelligence and in dementia. Stockert,^{250*} too, stresses the significance of driving-forces for intelligence (and dementia). Yet the possibility must be considered that insufficient insight into object-structure will bar appropriate interest and appropriate driving-force; therefore, besides a primary one, a secondary disorder of driving-forces must be expected in dementia. I believe that we should not conceive of psychological functions singly. Knowledge, thought-processes, memory, driving-forces, can hardly be conceived of in complete separation. All are various aspects of one fundamental process. The fact that we cannot think of these as absolutely distinct leads us to a new conception of intelligence and dementia. Eliasberg^{251*} was right: research in dementia must learn to consider the individual as a whole, and to regard the relation of the individual to the community.

247.* Tuczek (736).

248.* Jaspers (357) and (356).

249. See note 243, above.

250.* Stockert (713).

251.* W. Eliasberg (152).

S. Fischer ^{252*} defines intelligence as the ability to make abstractions and apprehend object-relations in a correct and task-appropriate fashion, and to set itself such tasks independently. The core of this definition is certainly correct. I would stress only that all such tasks ²⁵³ imply affectivity and driving-force. The distinction between various psychic layers is not that some are affectless and some affect-connected. Every psychological process implies both object-reference and affect; there are no affectless object-experiences.²⁵⁴ Affect and intellectual content are abstractions; ²⁵⁵ an affectless content can no more exist than redness without an object.²⁵⁶ [Passage omitted.] ²⁵⁷

Our discussion so far has traced the primary factors of dementia. It remains, however, fundamentally incomplete: the psychic layer of thought-organization described above communicates with other psychic layers. Pick,^{258*} Isserlin,^{259*} S. Fischer,^{260*} and Benedek and I ^{261*} have shown that speech- and cognition-disorders exert an inhibiting effect on thinking and memory. . . . Here I have demonstrated similar phenomena in paresis. Disorders in the layer of gnosis and praxia do exert an inhibitory effect upon the memory-thought layer.

Moreover, everything that takes place in the affective central layers has an essential influence on thought-functions. We have seen this in dementia praecox, in hysteria, and in dreams. The picture of parietic dementia is also continuously modified by processes in the central layers.^{262*} As I shall pursue this problem later on, here I point out only alterations of dementia due to the influence of other layers. I will not discuss here manic-depressive mood swings because they do not change the defects in dementia, but merely alter their course.

252.* S. Fischer (189).

253. Strictly speaking, it is not the task that implies affectivity and driving-force, but rather the setting of the task, apprehending it, and coping with it.

254. "Affect" throughout is meant as a motivational factor.

255. Cf. Rapaport (591, pp. 264 ff.); and Rapaport, *et al.* (602, I, 385 ff.).

256. Considering the varieties of color-experience other than object-colors, the comparison is none too fortunate. See D. Katz (375).

257. In the first part of the omitted section, Schilder takes issue with W.

Stern's (711) concepts of practical and theoretical intelligence, and stresses that dementia is an inability to utilize existing knowledge. The second part deals with the role of Gestalt in thought-disorders, with emphasis on the processes that produce Gestalt.

258.* Pick (567).

259.* Isserlin (349).

260.* S. Fischer (189).

261.* Benedek and Schilder (42).

262.* My recent discussion of the relationship between pseudo-dementia and dementia pertains to this point.

[See Schilder, 648, pp. 233-36]

(d) The General Behavior of Paretics

(a) Rhythmic Phenomena. [Passage omitted.] ²⁶³ The case to be discussed is definitely one of general paresis. It is noteworthy that psychogenic factors played an important precipitating role. The unfavorable results of a spinal fluid examination, and the affair of her husband with her sister-in-law, shook and excited the patient greatly. She developed a delusional system centering around her husband. Her attitude toward him was most ambivalent: he was at once the devil and Christ nailed to the cross, who through the love of women finally became the emperor of Vienna. Simultaneously, the patient felt changed, first in her heart and then sex organs: something "came out down below" and she became a man.

Clinically she became conspicuous by asserting that she had been hospitalized repeatedly because of mental illness: at four, at twelve, and at nineteen years of age. She spoke much of her brother-in-law having poked her with his finger, tearing something in her abdomen. It transpired that this brother-in-law had died four years previously of a liver cancer, and the patient was inclined to assume that she too had this disease. . . . The examination of the patient showed that she identified her brother-in-law with her husband, both being extremely sensual. It made clear that her idea of having been hospitalized at the ages of five and twelve, and of having had paresis, was related to important experiences. When she was five years old, her father infected his finger and died of sepsis. This explains her assertion that the man who tried to seduce her at twelve had pricked his finger: she apparently identified him with her father. Her assertion that at nineteen she was hospitalized for paresis refers to an abortion she had at that time. Thus the patient seems to equate, (a) father, husband, and brother-in-law; (b) the liver cancer of her brother-in-law, . . . sexual infection, hurt finger, and the fatal finger-infection of the father. Moreover, any and all sickness is equated with paresis, as are venereal infection and change of sex. The patient's idea that she had repeatedly had paresis and been hospitalized were reduplications of her present experience, and proved to be fully determined by important erotic "Einstellungen." The patient's tendency to repress sexuality is expressed in her rejection of the sensuality of her brother-in-law and her

263. The omitted section contains the description of a case illustrative of the rhythmic phenomena to be discussed.

Since the important features of the case are restated in the discussion, the description is omitted here.

husband; the repeated pareses and hospitalizations are punishments for sexual activities, even though these were not consummated. Thus the material yielded a nearly complete understanding of the psychological determination of this reduplicating paramnesia.

Pick ^{264*} was the first to describe this symptom. When the continuity of their everyday life was interrupted by an unusual event (for example, by a change of room), his patients began to have double-experiences; the [events] before and after [the interruption] appeared as independent, yet identical, experiences.²⁶⁵ Westphal,^{266*} in his review of the studies of reduplicating paramnesia by Rosenberg,^{267*} Coriat,^{268*} and Sittig,^{269*} reported two additional cases and called attention to the psychogenic factors which probably underlay them. In one of Pick's cases, the reduplicating paramnesia led the patient to the assumption that there was not one hospital but several, two professors Pick, and three brothers instead of one. In one of Westphal's cases, the patient's husband and children were doubled. Another case, a paretic, experienced himself double. In a third case, the patient fabricated another person, endowing him with venereal disease and his own name.

In our case, we see a triplication of the torturing experience of paresis and hospitalization. It is not the experiences of the hospital which are doubled, but only that of hospitalization. Past and present experiences that imply the same complex become identical; this multiplies the experience in question, creating a rhythmic motif-formation. We can speak about this as the molding of past experiences according to their complex-content. Our patient had three catastrophic experiences, which now become identical. Thus, from the point of view of the Unconscious, it does make sense to assert that she had thrice been hospitalized for paresis. This is a misjudgment of the memory-material under the influence of certain "Einstellungen." . . . Mayer-Gross ^{270*} doubts whether this is a memory-disorder in the strict sense. He hypothesizes a primary inclination for reduplication and cites iteration-phenomena,²⁷¹ mentioning the psycho-motor system as their possible source but without giving his reasons. I

264.* Pick (568).

265. An event that took place *after* the interruption was experienced by the patient as having already occurred *before* the interruption.

266.* Westphal (766).

267.* Rosenberg (619).

268.* Coriat (134).

269.* Sittig (697).

270.* Mayer-Gross (508).

271. See Chapter 2, above.

find it easier to explain such phenomena in terms of the playful reduplications we have seen in the recall of the Shark Story in Case No. 1. It is noteworthy that the patient ascribes part of these experiences to herself.²⁷² The fundamental principle appears to be the same: a rhythmic function of memory, an iteration-principle. There seems to be no reason to separate it from memory-phenomena in general. The relationship of reduplicating paramnesia to *déjà vu*²⁷³ has been pointed out by Rosenberg. *Déjà vu* is actually the experience of two matching events, one of which belongs to the sphere²⁷⁴ and is thus undeveloped, while the other is completely developed.^{275*} Thus Rosenberg is right when he considers it an abbreviated reduplicating paramnesia. . . .

A few general comments on the rhythmic principle. In the thought-formation of the parietic psychosis, as well as in the story recall of our patients, a motif is repeated over and over, with variations according to the situation and the affect-“Einstellung.”²⁷⁶ Examples like those in Case No. 1 are abundant. The tendency to multiply experiences appears often in the form of the substitution of several story-figures for one. The elaborations of these substituted figures may differ from each other, but the [affective] core of the motif remains the same. This is not an isolated phenomenon in psychopathology: in the delusional formations of schizophrenics the same principle obtains.^{277*} . . . This repetition of motives is comparable to motif-variations in music. Often two versions of the delusional system are encountered in a patient, one very primitive and archaic, the other adapted to reality and rationalized. Yet, while each of these versions encompasses different aspects of the environment, the repetitive handling of the motif seems to be related to the same fundamental biological

272. We may consider this the re-evaluation of a past experience whose complex- or affect-content was identical with that of the story. This leads then to the story being experienced as a part of the patient's own past. See Chap. 27, 46, below.

273. Cf. Poetzl (574), Freud (230); and Claparède, Chap. 3, particularly note 9, above.

274. The sphere corresponds grossly to the “Unconscious” or the “primary process” (209, pp. 525 ff.). For their differences, see Chap. 24, Appendix, above.

The experience that belongs to the sphere is one of which only the affect-, mood-, or impulse-core is available to consciousness, but not its specific memory. The *déjà vu*, according to Schilder, is initiated by the fully developed experience, whose affect-, mood-, or impulse-content is identical with that of the undeveloped one; thus the two are experienced as identical, that is, matching.

275.* Compare Schilder (666) and (664).

276. See note 106, above.

277.* See Schilder (647) and (652).

tendencies, which are present—as we saw—in various psychological layers.²⁷⁸ The same tendency is encountered in the play of children, in the motif repetitions of music, and in ornamenting [of architecture]. To use Lewin's ²⁷⁹ term, it is as though one performance cannot bring psychological satiation. It seems that the number of repetitions necessary for satiation decreases with age.

Freud spoke of repetition-compulsion ²⁸⁰ as a basic propensity of the psyche. He pointed to the return of traumata in dreams occurring in traumatic neuroses, to the repetitiveness of the play of young children, and to the return in transference ²⁸¹ of infantile situations. In his view, [the driving-forces of] these phenomena are beyond the pleasure-principle, mainly in the ego-instincts,²⁸² but also in the sexual instincts. However, the manifestations of this rhythmic principle are still more widespread; we see them in the rhythmic character of primitive speech-sounds and repetitiousness of the infant's babbling, which has left its trace in the reduplications of our language. We encounter further instances of this rhythmic principle in the pathology of speech: in clonic stuttering, in the speech of post-encephalitics,^{283*} and in the reduplications of motor-aphasia. The latter examples are important: they suggest that insufficient satiation may be one of the motivating agents of rhythmic repetition. The study of the motif-repetitions of our paretics and schizophrenics supports this suggestion. Studying the palilalia ²⁸⁴ of patients with lesions of the striatum, one gains the impression that in addition there is another, biologically deeper-rooted, rhythmic principle which is a propensity of the organic structure and the life process itself. . . .²⁸⁵

278. See Chap. 13, above.

279. See K. Lewin (467, pp. 254–57, 264 ff.) and Chap. 5, II, 1.c.1, above; see also A. Karsten (370). Lewin's psychology uses the explanatory construct "tension-system" to account for the dynamics of "needs." These "tension-systems" are hypothesized as the source of motivational energy of thought and action. When single action satisfies the need, the explanatory formulation is that the tension-system is *discharged*. When the action is continuous (for example, stringing beads), and the need satisfied, the explanatory formulation is that the tension system is *satiated*.

280. Freud (241, p. 19).

281. For the concept of transference, see Freud (235 and 224a).

282. For the concept "ego-instinct" see Freud (231). The concept became dated with the introduction of the topographic concepts of ego, id, and super-ego (Freud, 243). The assumption of a death-instinct corresponding to a repetition-compulsion has been rejected by many psychoanalysts. See, for example, Fenichel (176, pp. 59–61).

283.* See Leyser (472) and (473); Pollak and Schilder (576).

284. Pathological repetition of words.

285. In the omitted section, Schilder

(β) The Break-through of Affects [Section omitted] ²⁸⁶

III. THE RELATIONSHIP OF SOME FORM-VARIANTS OF PARESIS TO DEMENTIA
[Sections omitted.] ²⁸⁷

(d) *Confabulations*

This is an important group of phenomena. We saw in the recall of stories that paretics interweave their narratives with motives from their own lives. These motives, closely related to their immediate wishes and needs, correspond to the daydreams of adolescents and to the play of late childhood. All these memories, inventions, and fantasies emerge in our patients with a claim to reality-value; the conviction of correctness attached to them is, however, very shallow.^{288*} Acts of asserting have little conviction-value in this kind of patient. This problem is encountered in confabulations and *pseudologia fantastica*.

We can assume that every play of fantasy, indeed every idea that comes to consciousness, has the tendency to be asserted as true.²⁸⁹ Meinong ^{290*} maintained that this also holds for assumptions, only that they are "put into brackets"

makes an attempt to substantiate his assumption of this fundamental biological rhythmic principle. For this purpose he amasses examples of rhythmic organic processes, and then proceeds to relate all these to (a) their purposiveness in mastering reality, in that each repetition brings into play a new segment of reality in the new motif-variation; and (b) the lack of satiation by single performance. Finally, he dwells on perseveration as an example of motif-repetition, explaining it partly by Freud's stimulus-barrier concept (241, pp. 30-34), and partly by Lewin's satiation concept.

286. The omitted section contains a case history in which Schilder demonstrates that the parietic thought-disorder makes for an easy penetration of wishes into consciousness. He uses the case also to illustrate (a) the inability of the parietic patient to get away from ideas once formed; (b) the parietic patient's tend-

ency to be interrupted in his thought by any word conducive to serial verbigeration.

287. Since this chapter is not concerned with thought-organization, it is omitted here, except for the passage on confabulations. It deals with (a) the role of megalomaniac ideas and numbers in manicky forms of paresis, (b) depressive form-variants of the parietic psychosis, (c) motor excitement and incoherence in paresis, (d) confabulations, (e) the defect-cured parietic, and (f) catatonic and hallucinatory form-variants of paresis.

288.* G. E. Mueller studied the degrees of this conviction of correctness. [See Section Ic, above.]

289. This is an implication of the concept "omnipotence of thought," which Schilder here suggests is present in germinal form in all normal thought.

290.* Meinong (513).

—as it were—and so kept pending. This bracketing is a specific psychological act. In fantasies and daydreams too, such acts of bracketing indicate that what is asserted is not reality.²⁹¹ In other words, the psychological acts of judging reality form a whole spectrum, ranging from those the truth of which is asserted, through those which are bracketed, to those accompanied by correction-tendencies.²⁹²

All these considerations are of fundamental significance for the Korsakow syndrome. Confabulations are closely related to a loss of correction-processes. . . . Now it is quite clear that “memory loss” and dementia, without driving-forces, are not sufficient to explain confabulation. Such driving-forces play a role even in the fantasies of normal people. It is noteworthy that the frequent memory-and orientation-disorders of brain-tumor cases, according to Pfeifer,^{293*} are completely free of confabulations. It is difficult to give an exact psychological definition of driving-forces. One comes closest to it by tracing the psychological conditions of “daydreams.” It is crucial to realize that the absence of bracketing and correcting may be due to various reasons. In pseudologia it is due to a strong affective need, in daydreams to a temporary recession of correction processes, in paresis and Korsakow to an inadequacy of the psychological systems responsible for bracketing and correcting.

[Passage omitted.]²⁹⁴

IV. CONCERNING THE VARIETIES OF PARETIC CONDITIONS DURING AND AFTER MALARIA-TREATMENT

[Chapter omitted.]²⁹⁵

V. CONTENTS AND RELATIONSHIPS IN THE EXPERIENCE OF PARETICS

[Chapter omitted.]²⁹⁶

291. Cf. Sartre (631).

292. Cf. Buerger-Prinz and Kaila, Chap. 27, IV, below.

293.* B. Pfeifer (554).

294. In the rest of the section, omitted here, Schilder demonstrates that confabulations represent early pre-psychotic interests, and that confabulating patients have had inclinations to daydreaming and fantasizing before becoming paretic.

295. Though the material of this chapter much deserves translation, it is not directly related to the problem of thought-disorder and thought-organization.

296. This chapter deals with thought-organization and pathology of thought only peripherally. We shall briefly summarize it. Clinical psychiatry (for example, Jaspers, 356, and Bumke, 114) has not been interested in the personality of

VI. THE BASIC PLAN OF THE PSYCHE

[Section omitted.] ²⁹⁷

We must realize that the primary processes of the Unconscious system are not limited to dreams. They are the basis of neurotic symptom-formation, and are manifest in the fully conscious thoughts of schizophrenics. Formations

the paretic. Its interest centered on the impaired achievements, and the personality of the paretic was regarded as an incoherent rudiment of a destroyed psyche. Schilder asserts that the psyche always remains a cohesive organization. He points out that the prodromal neurasthenic phase of general paresis is a reaction to the experience of incipient disability; that the depressive features and sad mood so frequent in paresis is a mourning over the experienced loss of functions; and finally, that the excuses so typical of paretics are but veiled admissions of inadequacy. Schilder expresses this state of affairs in psychoanalytic terms: dementia encroaches upon the ego (or what Schilder chooses to call the "perception- and thought-ego"), dealing severe blows at the ego-ideal, which still adheres to its usual criteria of objective thinking. Thereupon, the ego-ideal takes the role of a severe taskmaster, meting out punishment in the form of depression and hypochondriasis. Paretic mania and ideas of grandeur are, in turn, reaction-formations negating both insufficiency and super-ego accusations. In agreement with Ferenczi and Hollos (336), Schilder asserts that underneath the dementia, the mania, the grandiose ideas, the excuses, and the incoherence, the paretic remains aware of his syphilitic infection. Syphilis is experienced by the paretic as a punishment for sinful sexuality, mutual masturbation, incest, etc.,

297. In the omitted part, Schilder cites a dream of an anxiety-neurotic patient, to demonstrate the mechanisms of the Unconscious—that is, of the primary process—described by Freud. At the end of the preceding chapter, Schilder had summarized these mechanisms as follows: "(1) Distinction between internal and external reality is absent. (2) Experiences are timeless. (3) Displacements, condensations, and symbolizations take place. (4) The law of contradiction is suspended. (5) The cathexes are mobile and affect-quantities can be transferred completely from one idea to another."

and is symbolically equated by him with castration, dismemberment, and any and all diseases and catastrophes.

Schilder suggests that the form-varieties of the paretic psychosis depend upon the physiology of the syphilitic damage to the brain. For instance, he assumes that there is such a thing as a "manic-depressive brain-system" which, when affected by the syphilitic meningo-encephalitis, brings about manic-depressive forms of paresis. These suggestions remain vague and do not vitiate Schilder's argument as to the psychodynamics of the paretic psychosis, which he considers to be the superstructure of the physiological damage wrought by syphilitic meningo-encephalitis. [Cf. Kenyon, Rapaport and Lozoff, 381.]

clearly analogous to these primary processes are demonstrable, however, in aphasias and agnosias also. Optic agnosias are especially instructive in this respect. I quote from my *Medizinische Psychologie*:^{298*}

(a) In optic agnosia there is a delay of apperception. (b) This delay makes the immaturity of thought apparent: what emerges in its course is not the percept but rather the general category [to which it belongs]. (c) Within these general categories what emerges is not the concept or percept sought, but one related to it; when the concept or percept sought does appear, it fails to take hold and is even rejected. (d) Delayed after-deliveries of the concept or percept sought will emerge, fused with objectively irrelevant impressions. (e) The placement within the spatial continuum is not correct. (f) Training makes it possible to veil this disorder. Patients are more prone to fail when faced with a task, than when allowed spontaneous activity.

We might add that memories and imagery often replace perception, and are then experienced as realities.

I have demonstrated that essentially the same process takes place in dementia. Paretics, for instance, are prone to put their wishes in the place of reality. Case No. 1 in retelling the Shark Story, reports that she was present, the officer was rescued, and so on. Contradictions do not exist for her: the officer is dead, but she continues as though he were alive. The affect pertaining to her own fate is transferred to the story. Concepts are replaced by coordinate and superordinate

Schilder takes issue with the contention of Ferenczi and Hollos that the parietic psychosis brings about a regression to archaic psychological material. He asserts that parietic dementia damages primarily the defense against preconscious rather than unconscious material; thus the content of the parietic psychosis is similar to adolescent fantasies and daydreams, rather than to the archaic unconscious material seen in schizophrenics. He quotes case-material to demonstrate that, in contrast to usual parietic psychoses, the hallucinatory psychoses of paretics which develop in the course of malarial fever-treatment do contain archaic material of the kind described by

Ferenczi and Hollos. He argues that something else (for example, fever-delinium) must be added to parietic dementia in order to obtain regression to archaic material. The layer of thought-organization damaged by dementia normally performs the task of consummating drive-processes by asserting relationships and thereby controlling preconscious strivings. Dementia eliminates this controlling function and leads to suggestibility, distractibility, and gullibility. Hostility as a rule remains in abeyance, presumably because it is not simply preconscious; thus the whole demeanor usually has a friendly and kindly surface.
298.* Schilder (648, p. 44).

ones. One could even say that in paretics the mechanisms of the Unconscious system appear in the thought-material.²⁹⁹

I once attempted to show that a similar disorder is present in amentia, though the material affected is different. There the disordered layer of experience is the one which integrates the perceptual material into higher units. The apperception-disorder of amentia-patients varies from agnosia-like forms to those resembling complex-determined misapprehensions. The thought-contents of amentia-patients also are focused on the damage to the [psychological] apparatus; their ideational content is not so ego-distant as that of aphasias and agnosias, nor so ego-close as the material of schizophrenias. Those layers of perceiving and remembering which are disordered in amentia are mostly of an impersonal kind; at any rate, never as personal as the layers affected by the perception- and thought-disorders of schizophrenia.

Hartmann and I^{300*} have described the apperception-disturbances of a case of amentia:

1. The part replaces the whole, the vague-general replaces the specific, and the dividing line between conceptually coordinate ideas is vague or nonexistent. 2. The disorder is not one of perception, like that in agnosia, but rather one of apperceptions of higher-order object-relations.

We encounter also similar disorders of imagery and thinking. It is noteworthy that here too, as in illusions and agnosias,^{301*} there is a fading of the boundaries between subject and object.

We arrive at the following formulation: the raw material of perception is integrated by an unconscious synthetic function. This is the function whose disorder in aphasias and agnosias results in the agnosic parapraes described, and often in similar disturbances of the process of imagery. [In the next phase of thought-development] the raw material of perception and imagery is integrated on a higher level, and implicit object-relationships are apperceived. This is the process which is disordered in amentia, leaving perceptions isolated. [In

299. Here we have an apparent contradiction. Earlier Schilder asserted that the material which comes to consciousness in the paretic is of "preconscious" origin; here he demonstrates mechanisms of the "Unconscious" in it. This contra-

diction is resolved if the arguments of Hartmann and Kris on the various degrees of neutralization of drives are considered. See Chap. 19 and 23, above.

300.* Hartmann and Schilder (312).

301.* See Stauffenberg (702).

the subsequent phase of thought-development] perceptions and presentations are integrated into higher units corresponding to objects, and are then conceptually evaluated. It is this process of elaboration, in terms of concepts and memories, which is disordered in dementia. Finally [in the completing phase of thought-development] all this perceptual raw material and organized perceptual material is put into relationship with the personality, with the personal wish directing the experience, with the attitudes of the person, that is to say, with the [central] drive-layer of the psyche. This is the process which is disordered in neurosis, schizophrenia, and the dream.

In all these layers, disorders lead to the same basic difficulties: the whole cannot be differentiated into its parts, the parts cannot be integrated into a whole. However, in each of the various disorders in question, this fundamental disturbance occurs in a different realm of the psyche. . . .³⁰²

302. The rest of this chapter deals with Schilder's conception of the psychological apparatus. For a presentation of these ideas, see Schilder (645) and (660). Schilder's summarizing chapter is omitted here.