

The illustrative basis of our study must now be broadened. In the previous five chapters, precision was our primary objective, and so our examples were taken from the fields of mathematics and physics. Still the occurrence of insight is not restricted to the minds of mathematicians, when doing mathematics, and to the minds of physicists, when engaged in that department of science. On the contrary, one meets intelligence in every walk of life. There are intelligent farmers and craftsmen, intelligent employers and workers, intelligent technicians and mechanics, intelligent doctors and lawyers., intelligent politicians and diplomats. There is intelligence in industry and commerce, in finance and taxation, in journalism and public relations. There is intelligence in the home and in friendship, in conversation and in sport, in the arts and in entertainment. In every case the man or woman of intelligence is marked by a greater readiness in catching on, in getting the point, in seeing the issue, in grasping implications, in acquiring know-how. In their speech and action the same characteristics can be discerned, as were set forth in describing the act that released Archimedes' Eureka. For insight is ever the same, and even its most modest achievements are rendered conspicuous by the contrasting, if reassuring, occurrence of examples of obtuseness and stupidity.

The present chapter falls into three main sections. In the first the parallel between empirical science and common sense is examined. In the second and third, attention is drawn to fundamental differences. While empirical science seeks the relations of things to one another, common sense is content to know the relations of things to us. Despite its deceptive simplicity, this undertaking is ambiguous. Not only is the development of common sense a change in us, but also common sense is practical and devotes itself to changing the things related to us. While empirical science endeavours to

grasp the relations between the fixed natures of things, common sense seeks to relate two variables and, by that very effort, brings about their variation. Accordingly, the second main section of this chapter examines the subjective aspect of common sense, and the third section turns to the effects of common sense practicality.

1. Common Sense as Intellectual.

The light and drive of intelligent inquiry unfolds methodically in mathematics and empirical science. In the human child it is a secret wonder that, once the mystery of language has been unravelled, rushes forth in a cascade of questions. Far too soon, the questions get out of hand, and weary adults are driven to ever more frequent use of the blanket answer, "My dear, you cannot understand that yet". The child would understand everything at once. It does not suspect that there is a strategy in the accumulation of insights, that the answers to many questions depend on answers to still other questions, that, often enough, advertence to these other questions arises only from the insight that to meet interesting questions one has to begin from quite uninteresting ones. There is, then, common to all men, the very spirit of inquiry that constitutes the scientific attitude. But in its native state it is untutored. Our intellectual careers begin to bud in the incessant "What?" and "Why?" of childhood. They flower only if we are willing, or constrained, to learn how to learn. They bring forth fruit only after the discovery that, if we really would master the answers, we somehow have to find them out for ourselves.

Just as there is spontaneous inquiry, so too there is a spontaneous accumulation of related insights. For questions are not an aggregate of isolated monads. In so far as any question is followed by an insight, one

has only to act, or to talk, or perhaps merely to think on the basis of that insight, for its incompleteness to come to light and thereby generate a further question. In so far as the further question is in turn met by the gratifying response of a further insight, once more the same process will reveal another aspect of incompleteness to give rise to still further questions and still further insights. Such is the spontaneous process of learning. It is an accumulation of insights in which each successive act complements the accuracy and covers over the deficiency of those that went before. Just as the mathematician advances from images through insights and formulations to symbols that stimulate further insights, just as the scientist advances from data through insights and formulations to experiments that stimulate further insights, so too the spontaneous and self-correcting process of learning is a circuit in which insights reveal their short-comings by putting forth deeds or words or thoughts and, through that revelation, prompt the further questions that lead to complementary insights.

Such learning is not without teaching. For teaching is the communication of insight. It throws out the clues, the pointed hints, that lead to insight. It cajoles attention to drive away the distracting images that stand in insight's way. It puts the further questions, that reveal the need of further insights to modify and complement the acquired store. It has grasped the strategy of developing intelligence, and so begins from the simple to advance to the more complex. Deliberately and explicitly, all this is done by professional teachers that know their job. But the point we would make is that it also is done, though unconsciously and implicitly, by parents with their offspring and by equals among themselves. Talking is a basic human art. By it each communicates to others what he knows and, at the same time, provokes the contradictions that direct his attention to what he has overlooked. Again, far more impressive than talking is doing. Deeds excite our admiration and

stir us to emulation. We watch to see how things are done. We experiment to see if we can do them ourselves. We watch again to discover the oversights that led to our failures. In this fashion the discoveries and inventions of individuals pass into the possession of many, to be checked against their experience, to undergo the scrutiny of their further questions, to be modified by their improvements. By the same token, the spontaneous collaboration of individuals is also the communal development of intelligence in the family, the tribe, the nation, the race. Not only are men born with a native drive to inquire and understand; they are born into a community that possesses a common fund of tested answers, and from that fund each may draw his variable share, measured by his capacity, his interests, and his energy. Not only does the self-correcting process of learning unfold within the private consciousness of the individual; for by speech and, still more, by example, there is effected a sustained communication that at once disseminates and tests and improves every advance to make the achievement of each successive generation the starting-point of the next.

From a spontaneous inquiry, the spontaneous accumulation of related insights, and the spontaneous collaboration of communication, we have worked towards the notion of common sense as an intellectual development. Naturally enough, there will arise the question of the precise inventory of this public store. How does it define its terms? What are its postulates? What are the conclusions it infers from these premises? But if the question is obvious enough, the answer is more difficult. For the answer rests on one of those queer insights that merely grasps the false supposition of the question. Definitions, postulates, and inferences are the formulation of general knowledge. They regard, not the particular but the universal, not the concrete but the abstract. Common sense, unlike the sciences, is a specialization of intelligence in the particular and the concrete. It is common without being general,

for it consists in a set of insights that remains incomplete, until there is added at least one further insight into the situation in hand; and, once that situation has passed, the added insight is no longer relevant, so that common sense at once reverts to its normal state of incompleteness. Thus, common sense may seem to argue from analogy, but its analogies defy logical formulation. The analogy that the logician can examine is merely an instance of the heuristic premise that similars are similarly understood. It can yield a valid argument, only if the two concrete situations exhibit no significant dissimilarity. But common sense, because it does not have to be articulate, can operate directly from its accumulated insights. In correspondence with the similarities of situations, it can appeal to an incomplete set of insights. In correspondence with the significant difference of situations, it can add the different insights relevant to each. Again, common sense may seem to generalize. But a generalization proposed by common sense has quite a different meaning from a generalization proposed by science. The scientific generalization aims to offer a premise from which correct deductions can be drawn. But the generalizations issued by common sense are not meant to be premises for deductions. Rather they would communicate pointers that ordinarily it is well to bear in mind. Proverbs are older far than principles and, like rules of grammar, they do not lose their validity because of their numerous exceptions. For they aim to express, not the scientist's rounded set of insights that either holds in every instance or in none at all, but the incomplete set of insights which is called upon in every concrete instance but becomes proximately relevant only after a good look around has resulted in the needed additional insights. Look before you leap!

Not only does common sense differ from logic and from science in the meaning it attaches to analogies and generalizations. In all its utterances it operates from a distinctive viewpoint and pursues an ideal of its

own. The heuristic assumptions of science anticipate the determination of natures that always act in the same fashion under similar circumstances and, as well, the determination of ideal norms of probability from which events diverge only in a non-systematic manner. Though the scientist is aware that he will reach these determinations only through a series of approximations, still he also knows that even approximate determinations must have the logical properties of abstract truth. Terms, then, must be defined unambiguously and they must always be employed exactly in that unambiguous meaning. Postulates must be stated; their presuppositions must be examined; their implications must be explored. Automatically there results a technical language and a formal mode of speech. Not only is one compelled to say what one means and to mean what one says, but the correspondence that obtains between saying and meaning has the exact simplicity of such primitive utterances as, This is a cat. Common sense, on the other hand, never aspires to, universally valid knowledge and it never attempts exhaustive communication. Its concern is the concrete and particular. Its function is to master each situation as it arises. Its procedure is to reach an incomplete set of insights that is to be completed only by adding on each occasion the further insights that scrutiny of the occasion reveal. It would be an error for common sense to attempt to formulate its incomplete set of insights in definitions and postulates and to work out their presuppositions and implications. For the incomplete set is not the understanding either of any concrete situation or of any general truth. Equally, it would be an error for common sense to attempt a systematic formulation of its completed set of insights in some particular case; for every systematic formulation envisages the universal; and every concrete situation is particular. It follows that common sense has no use for a technical language and no tendency towards a formal mode of speech. It agrees that one must say what one means and mean what one says. But its correspondence between saying and meaning is

at once subtle and fluid. As the proverb has it, a wink is as good as a nod. For common sense not merely says what it means; it says it to some one; it begins by exploring the other fellow's intelligence; it advances by determining what further insights have to be communicated to him; it undertakes the communication, not as an exercise in formal logic, but as a work of art; and it has at its disposal not merely all the resources of language but also the support of modulated tone and changing volume, the eloquence of facial expression, the emphasis of gestures, the effectiveness of pauses, the suggestiveness of questions, the significance of omissions. It follows that the only interpreter of common sense utterances is common sense. For the relation between saying and meaning is the relation between sensible presentations and intellectual grasp, and if that relation can be as simple and exact as in the statement, This is a cat, it can also take on all the delicacy and subtlety, all the rapidity and effectiveness, with which one incarnate intelligence can communicate its grasp to another by grasping what the other has yet to grasp and what act or sound or sign would make him grasp it. Such a procedure, clearly, is logical, if by "logical" you mean "intelligent and reasonable". With equal clearness, such a procedure is not logical, if by "logical" you mean conformity to a set of general rules valid in every instance of a defined range; for no set of general rules can keep pace with the resourcefulness of intelligence in its adaptations to the possibilities and exigencies of concrete tasks of self-communication.

Just as the elliptical utterances of common sense have a deeper ground than many logicians and practically all controversialists have managed to reach, so too the plane of reality envisaged by common sense meaning is quite distinct from the plane that the sciences explore. It has been said that the advance of science is from description to explanation, from things as related to our senses through measurements to things as related to one another. It is clear that common sense is not concerned with the relations of things to one

another, and that it does not employ the technical terms that scientists invent to express those relations. Still, this obvious difference provides no premise for the inference that the object of scientific description is the same as the object of common sense communication. It is true enough that both types of utterance deal with things as related to our senses. But also it is true that they do so from different viewpoints and with different ends. Scientific description is the work of a trained scientific observer. It satisfies the logician's demand for complete articulateness and exhaustive statement. It reveals the imprint of the scientist's anticipation or attainment of the pure conjugates that express the relations of things to one another. For, though scientific description deals with things as related to our senses, it does so with an ulterior purpose and under the guidance of a method that strains towards its realization. Common sense, on the other hand, has no theoretical inclinations. It remains completely in the familiar world of things for us. The further questions, by which it accumulates insights, are bounded by the interests and concerns of human living, by the successful performance of daily tasks, by the discovery of immediate solutions that will work. Indeed, the supreme canon of common sense is the restriction of further questions to the realm of the concrete and particular, the immediate and practical. To advance in common sense is to restrain the omnivorous drive of inquiring intelligence and to brush aside as irrelevant, if not silly, any question whose answer would not make an immediately palpable difference. Just as the scientist rises in stern protest against the introduction into his field of metaphysical questions that do not satisfy his canon of selection, so the man of common sense (and nothing else) is ever on his guard against all theory, ever blandly asking the proponent of ideas what difference they would make and, if the answer is less vivid and less rapid than an advertisement, then solely concerned with thinking up an excuse for getting rid of the fellow. After all, men of common sense are busy.

They have the world's work to do.

Still, how can the world's work be done either intelligently or efficiently, if it is done by men of common sense that never bother their heads a minute about scientific method? That question can be answered, I think, if we begin from another. Why is it that scientists need scientific method? Why must such intelligent men be encumbered with the paraphernalia of laboratories and the dull books of specialized libraries? Why should they be trained in observation and in logic? Why should they be tied down by abstruse technical terms and abstract reasoning? Clearly it is because their inquiry moves off from the familiar to the unfamiliar, from the obvious to the recondite. They have to attend to things as related to us in the manner that leads to things as related to one another. When they reach the universal relations of things to one another, they are straining beyond the native range of insight into sensible presentations and they need the crutches of method to fix their gaze on things as neither sensibly given nor concrete nor particular. Common sense, on the other hand, has no such aspirations. It clings to the immediate and practical, the concrete and particular. It remains within the familiar world of things for us. Rockets and space platforms are superfluous, if you intend to remain on this earth. So also is scientific method superfluous in the performance of the tasks of common sense. Like the sciences, it is an accumulation of related insights into the data of experience. Like the sciences, it is the fruit of a vast collaboration. Like the sciences, it has been tested by its practical results. Still there is a profound difference. For the sciences have theoretical aspirations, and common sense has none. The sciences would speak precisely and with universal validity, but common sense would speak only to persons and only about the concrete and particular. The sciences need methods to reach their abstract and universal objects; but scientists need common sense to apply methods properly in executing the concrete

tasks of particular investigations, just as logicians need common sense if they are to grasp what is meant in each concrete act of human utterance. It has been argued that there exists a complementarity between classical and statistical investigations; perhaps it now is evident that the whole of science, with logic thrown in, is a development of intelligence that is complementary to the development named common sense. Rational choice is not between science and common sense; it is a choice of both, of science to master the universal, and of common sense to deal with the particular.

There remains to be mentioned the differentiations of common sense. Far more than the sciences, common sense is divided into specialized departments. For every difference of geography, for every difference of occupation, for every difference of social arrangements, there is an appropriate variation of common sense. At a given place, in a given job, among a given group of people, a man can be at intelligent ease in every situation in which he is called upon to speak or act. He always knows just what is up, just the right thing to say, just what needs to be done, just how to go about it. His experience has taken him through the cycle of eventualities that occur in his milieu. His intelligence has been ever alert. He has made his mistakes and from them he has learnt not to make them twice. He has developed the acumen that notices shifts away from the familiar routine, the poise that sizes them up before embarking on a course of action, the resourcefulness that hits upon the response that meets the new issue. He is an embodiment of the ideal of common sense, yet his achievement is relevant only to its environment. Put him among others in another place or at another job and, until they become familiar, until he has accumulated a fresh set of insights, he cannot avoid hesitancy and awkwardness. Once more he must learn his way about, catch on to the tricks of a new trade, discern in little signs the changing moods of those with whom he deals. Such, then, is the specialization of common sense. At once, it adapts individuals in every walk of life to the work they have chosen or the lot that

has befallen them and, no less, it generates all those minute differences of viewpoint and mentality that separate men and women, old and young, town and country until, in the limit, one reaches the cumulative differences and mutual incomprehension of different strata of society, different nations, different civilizations, and different epochs of human history.

We have been endeavoring to conceive the intellectual component in common sense. Our effort began from spontaneous questions, spontaneous accumulations of insights, spontaneous collaboration in testing and improving them. Next, there was formulated the central notion of a habitual but incomplete set of insights that was completed with appropriate variations in each concrete set of circumstances that called for speech or action. It was shown that such an intellectual development not only aimed at mastering the concrete and particular but also achieved its aim in a concrete and particular manner that contrasted with the general rules of logic and the general methods of science yet provided a necessary complement both for the concrete use of general techniques and the concrete application of general conclusions. Finally, attention was drawn to the differentiations of common sense which multiply, not by theoretical differences as do the departments of sciences, but by the empirical differences of place and time, circumstance and environment.

2. The Subjective Field of Common Sense.

If there is a parallel between a scientific and a common sense accumulation of insights, there also exists a difference. Where the scientist seeks the relations of things to one another, common sense is concerned with the relations of things to us. Where the scientist's correlations serve to define the things that he relates to one another, common sense not merely relates objects to a subject but also constitutes relations of the subject to objects. Where the scientist is primarily engaged in knowing, common sense cannot develop without changing the subjective term in the object-to-subject relations that it knows.

There is, then, a subtle ambiguity in the apparently evident statement that common sense relates things to us. For who are we? Do we not change? Is not the acquisition of common sense itself a change in us? Clearly, an account of common sense cannot be adequate without an investigation of its subjective field. To this end we propose in the present section to introduce the notion of patterns of experience, to distinguish biological, aesthetic, intellectual, and dramatic patterns, to contrast the patterns of consciousness with the unconscious patterns of neural process and, finally, to indicate the connection between a flight from insight and, on the other hand, repression, inhibition, slips of the tongue, dreams, screening memories, abnormality and psychotherapy.

2.1 Patterns of Experience.

The notion of the pattern of experience may best be approached by remarking how abstract it is to speak of a sensation. No doubt, we are all familiar with acts of seeing, hearing, touching, tasting, smelling. Still, such acts never occur by themselves, in isolation from one other another, and quite apart from all other events. On the contrary, they have a bodily basis;

they are functionally related to bodily movements; and they occur in some dynamic context that somehow unifies a manifold of sensed contents and of acts of sensing.

Thus, without eyes, there is no seeing; and when I would see with my eyes, I open them, turn my head, approach, focus my gaze. Without ears, there is no hearing; and to escape noise, I must move beyond its range or else build myself sound-proof walls. Without a palate, there is no tasting; and when I would taste, there are involved movements of the body and arms, of hands and fingers, of lips and tongue and jaws. Sensation has a bodily basis and functionally it is linked to bodily movements.

Nor is this all. Both the sensations and the bodily movements are subject to an organizing control. Besides the systematic links between senses and sense organs, there is, immanent in experience, a factor variously named conation, interest, attention, purpose. We speak of consciousness as a stream, but the stream involves not only the temporal succession of different contents but also direction, striving, effort. Moreover, this direction of the stream is variable. Thales was so intent upon the stars that he did not see the well into which he tumbled. The milkmaid was so indifferent to the stars that she could not overlook the well. Still, Thales could have seen the well, for he was not blind and, perhaps, the milkmaid could have been interested in the stars, for she was human.

There are, then, different dynamic patterns of experience, nor is it difficult for us to say just what we mean by such a pattern. As conceived, it is the formulation of an insight; but all insight arises from sensitive or imaginative presentations; and in the present case the relevant presentations are simply the various elements in the experience that is organized by the pattern.

2.2 The Biological Pattern of Experience.

A plant draws its sustenance from its environment by remaining in a single place and by performing a slowly varying set of routines in interaction with a slowly varying set of things. In contrast, the effective environment of a carnivorous animal is a floating population of other animals that move over a range of places and are more or less well equipped to deceive or elude their pursuers. Both plant and animal are alive, for in both aggregates of events insight discerns an intelligible unity that commonly is formulated in terms of biological drive or purpose. But plants adapt slowly, animals rapidly, to changing situations; and if we endeavor to understand the sudden twists and turns both of fleeing quarry and pursuing beast of prey, we ascribe to them a flow of experience not unlike our own. Outer senses are the heralds of biological opportunities and dangers. Memory is the file of supplementary information. Imagination is the projection of courses of action. Conation and emotion are the pent-up pressure of elemental purposiveness. Finally, the complex sequence of delicately co-ordinated bodily movements is at once the consequence of striving and a cause of the continuous shift of sensible presentations.

In such an illustration insight grasps the biological pattern of experience. By such a pattern is not meant the visible or imaginative focus of attention offered by the characteristic shape and appearance of an animal. Nor, again, is the pattern reached by grasping that spatially and temporally distinct data all belong to a single living thing, for plants no less than animals are alive and, as yet, we have not satisfied ourselves upon the validity of the notion of the thing. Rather, the pattern is a set of intelligible relations that link together sequences of sensations, memories, images, conations, emotions, and bodily movements; and to name the pattern biological is simply to affirm that the sequences converge upon terminal activities of intussusception or reproduction or, when negative in scope, self-preservation. Accordingly,

the notion of the pattern takes us beyond behaviorism, inasmuch as attention is not confined to external data; it takes us beyond positivism, inasmuch as the canon of relevance leads us to acknowledge that there is a content to insights, but it observes the canon of parsimony by adding no more than a set of intelligible relations to elements of experience.

A more informative characterization of the biological pattern of experience is to be obtained by comparing animals and plants. For conscious living is only a part of the animal's total living. As in the plant, so in the animal there go forward immanent vital processes without the benefit of any conscious control. The formation and nutrition of organic structures and of their skeletal supports, the distribution and neural control of muscles, the physics of the vascular system, the chemistry of digestion, the metabolism of the cell, all are sequences of events that fit into intelligible patterns of biological significance. Yet it is only when their functioning is disturbed, that they enter into consciousness. Indeed, not only is a large part of animal living non-conscious, but the conscious part itself is intermittent. Animals sleep. It is as though the full-time business of living called forth consciousness as a part-time employee, occasionally to meet problems of malfunctioning, but regularly to deal rapidly, effectively, and economically with the external situations in which sustenance is to be won and into which offspring are to be born.

Thus extroversion is a basic characteristic of the biological pattern of experience. The bodily basis of the senses in sense organs, the functional correlation of sensations with the positions and movements of the organs, the mnemonic, imaginative, conative, emotive consequences of sensible presentations, and the resulting local movements of the body, all indicate that elementary experience is concerned, not with the immanent aspects of living, but with its external conditions and opportunities. Within the full pattern of living, there is a partial, intermittent, extroverted pattern of conscious living.

It is this extroversion of function that underpins the confrontational element of consciousness itself. Cognition, emotion, and bodily movement are a response to stimulus; but the stimulus is over against the response; it is a presentation through sense and memory and imagination of what is responded to, of what is to be dealt with. The stimulating elements are the elementary object; the responding elements are the elementary subject. When the object fails to stimulate, the subject is indifferent; and when non-conscious vital process has no need of outer objects, the subject dozes and falls asleep.

2.3 The Aesthetic Pattern of Experience.

There exists in man an exuberance above and beyond the biological account-books of purposeful pleasure and pain. Conscious living is itself a joy that reveals its spontaneous authenticity in the untiring play of children, in the strenuous games of youth, in the exhilaration of sun-lit morning air, in the sweep of a broad perspective, in the swing of a melody. Such delight is not, perhaps, exclusively human, for kittens play and snakes are charmed. But neither is it merely biological. One can well suspect that health and exercise are not the dominant notice in the world of sport; and it seems a little narrow to claim that good meals and fair women are the only instances of the aesthetic. Rather, one is led to acknowledge that experience can occur for the sake of experiencing, that it can slip beyond the confines of serious-minded biological purpose, and that this very liberation is a spontaneous, self-justifying joy.

Moreover, just as the mathematician grasps intelligible forms in schematic images, just as the scientist seeks intelligible systems that cover the data of his field, so too the artist exercises his intelligence in discovering ever novel forms that unify and relate the contents and acts of aesthetic experience. Still, sense does not escape one master merely to fall

into the clutches of another. Art is a two-fold freedom. As it liberates experience from the drag of biological purposiveness, so it liberates intelligence from the wearying constraints of mathematical proofs, scientific verifications, and common sense factualness. For the validation of the artistic idea is the artistic deed. The artist establishes his insights, not by proof or verification, but by skilfully embodying them in colors and shapes, in sounds and movements, in the unfolding situations and actions of fiction. To the spontaneous joy of conscious living there is added the spontaneous joy of free intellectual creation.

The aesthetic and artistic also are symbolic. Free experience and free creation are prone to justify themselves by an ulterior purpose or significance. Art then becomes symbolic, but what is symbolized is obscure. It is an expression of the human subject outside the limits of adequate intellectual formulation or appraisal. It seeks to mean, to convey, to impart some that is to be reached, not through science or philosophy, but through a participation and, in some fashion, a re-enactment of the artist's inspiration and intention. Pre-scientific and pre-philosophic, it may strain for truth and value without defining them. Post-biological, it may reflect the psychological depths yet, by that very fact, it will go beyond them.

Indeed, the very obscurity of art is in a sense its most generic meaning. Prior to the neatly formulated questions of systematizing intelligence, there is the deep-set wonder in which all questions have their source and ground. As an expression of the subject, art would show forth that wonder in its elemental sweep. Again, as a two-fold liberation of sense and of intelligence, art would exhibit the reality of the primary object for that wonder. For the animals, safely sheathed in biological routines, are not questions to themselves. But man's artistry testifies to his freedom. As he can do, so he can be what he pleases. What is he to be? Why? Art may

offer attractive or repellent answers to these questions but, in its subtler forms, it is content to communicate any of the moods in which such questions arise, to convey any of the tones in which they may be answered or ignored.

2.4 The Intellectual Pattern of Experience.

The aesthetic liberation and the free artistic control of the flow of sensations and images, of emotions and bodily movements, not merely break the bonds of biological drive but also generate in experience a flexibility that makes it a ready tool for the spirit of inquiry. To the liveliness of youth, study is hard. But in the seasoned mathematician, sensitive process easily contracts to an unruffled sequence of symbolic notations and schematic images. In the trained observer, outer sense forgets its primitive biological functions to take on a selective alertness that keeps pace with the refinements of elaborate and subtle classifications. In the theorist, intent upon a problem, even the sub-conscious goes to work to yield at unexpected moments the suggestive images of clues and missing links, of patterns and perspectives, that evoke the desiderated insight and the delighted cry, Eureka. In reflection, there arises a passionless calm. Memory ferrets out instances that would run counter to the prospective judgment. Imagination anticipates the shape of possibilities that would prove the judgment wrong. So deep is the penetration, so firm the dominance, so strange the transformation of sensitive spontaneity, that memories and anticipations rise above the threshold of consciousness only if they possess at least a plausible relevance to the decision to be made. For the stream of sensitive experience is a chameleon; and as its pattern can be biological or artistic, so too it can become the automatic instrument or, rather, the vitally adaptive collaborator of the spirit of inquiry.

No doubt, the frequency, intensity, duration, and purity of

the intellectual pattern of experience are subject to great variation. For they depend upon native aptitude, upon training, upon age and development, upon external circumstance, upon the chance that confronts one with problems and that supplies at least the intermittent opportunity to work towards their solution. To be talented is to find that one's experience slips easily into the intellectual pattern, that one's sensitive spontaneity responds quickly and precisely to the exigencies of mind. Insights come readily. Exact formulation follows promptly. Outer sense pounces upon significant detail. Memory tosses out immediately the contrary instance. Imagination devises at once the contrary possibility. Still, even with talent, knowledge makes a slow, if not a bloody, entrance. To learn thoroughly is a vast undertaking that calls for relentless perseverance. To strike out on a new line and become more than a week-end celebrity calls for years in which one's living is more or less constantly absorbed in the effort to understand, in which one's understanding gradually works round and up a spiral of viewpoints with each complementing its predecessor and only the last embracing the whole field to be mastered.

2.5 The Dramatic Pattern of Experience.

If now we turn to ordinary, human living, it is plain that we have to do with neither the biological, nor the artistic, nor the intellectual pattern of experience. Still, there is a stream of consciousness, and the stream involves not only succession but also direction. Conspicuous in this direction is a concern to get things done. But behind palpable activities, there are motives and purposes; and in them it is not difficult to discern an artistic or, more precisely, a dramatic component.

For human desires are not simply the biological impulses of hunger for eating and of sex for mating. Indeed, man is an animal for whom

more animality is indecent. It is true enough that eating and drinking are biological performances. But in man they are dignified by their spatial and psychological separation from the farm, the abattoir, the kitchen; they are ornamented by the elaborate equipment of the dining room, by the table manners imposed upon children, by the deportment of adult convention. Again, clothes are not a simple-minded matter of keeping warm. They are the colored plumes of birds as well as the furs of animals. They disguise as well as cover and adorn, for man's sensible and sensing body must not appear to be merely a biological unit. Sex, finally, is manifestly biological yet not merely so. On this point man can be so insistent that, within the context of human living, sex becomes a great mystery, shrouded in the delicacy of indirect speech, enveloped in an aura of romantic idealism, enshrined in the sanctity of the home.

No only, then, is man capable of aesthetic liberation and artistic creativity, but his first work of art is his own living. The fair, the beautiful, the admirable is embodied by man in his own body and actions before it is given a still freer realization in painting and sculpture, in music and poetry. Style is the man before it appears in the artistic product. Still, if the style of living is more fundamental, it also is more constrained. For man's own body and actions cannot be treated as the painter treats his uncomplaining oils and the poet his verbal materials. As in the animal, so also in man there exist the exigencies of underlying materials, and the pattern of experience has to meet those exigencies by granting them psychic representation and conscious integration. The biological cannot be ignored and yet, in man, it can be transformed. The transformation varies with the locality, the period, the social milieu; but the occurrence of the variations only serves to reveal the existence of the variable. Men will claim that they work because they must live; but it is plain that they work so hard because they must make their living dignified. To lack that dignity is to suffer embarrassment, shame, degradation; it is to invite amusement,

laughter, ridicule. Inversely, to grant free rein to man's impulse for artistically manifested dignity is to set so-called hard-headed industrialists and financiers to the task of stimulating artistic imagination with advertisements and of meeting its demands with the raw materials of the earth and with the technology of an age of science.

Such artistry is dramatic. It is in the presence of others, and the others too are also actors in the primordial drama that the theatre only imitates. If aesthetic values, realized in one's own living, yield one the satisfaction of good performance, still it is well to have the objectivity of that satisfaction confirmed by the admiration of others; it is better to be united with others by winning their approval; it is best to be bound to them by deserving and obtaining their respect and even their affection. For man is a social animal. He is born in one family only to found another of his own. His artistry and his knowledge accumulate over the centuries because he imitates and learns from others. The execution of his practical schemes requires the collaboration of others. Still, the net-work of man's social relationships has not the fixity of organization of the hive or the ant-hill; nor, again, is it primarily the product of pure intelligence devising blue-prints for human behavior. Its ground is aesthetic liberation and artistic creativity, where the artistry is limited by biological exigence, inspired by example and emulation, confirmed by admiration and approval, sustained by respect and affection.

The characters in this drama of living are moulded by the drama itself. As other insights emerge and accumulate, so too do the insights that govern the imaginative projects of dramatic living. As other insights are corrected through the trial and error that give rise to further questions and yield still further complementary insights, so too does each individual discover and develop the possible roles he might play and, under the pressure of artistic and affective criteria, work out his own selection and adaptation. Out of the plasticity and exuberance of childhood through the discipline and the play of

education there gradually is formed the character of the man. It is a process in which rational consciousness with its reflection and criticism, its deliberation and choice, exerts a decisive influence. Still there is no deliberation or choice about becoming stamped with some character; there is no deliberation or choice about the fact that our past behavior determines our present habitual attitudes; nor is there any appreciable effect from our present good resolutions upon our future spontaneity. Before there can be reflection or criticism, evaluation or deliberation, our imaginations and intelligence must collaborate in representing the projected course of action that is to be submitted to reflection and criticism, to evaluation and decision. Already in the prior collaboration of imagination and intelligence, the dramatic pattern is operative, outlining how we might behave before others and charging the outline with an artistic transformation of a more elementary aggressivity and affectivity. Ordinary living is not ordinary drama. It is not learning a role and developing in oneself the feelings appropriate to its performance. It is not the prior task of assembling materials and through insight imposing upon them an artistic pattern. For in ordinary living there are not first the materials and then the pattern, nor first the role and then the feelings. On the contrary, the materials that emerge in consciousness are already patterned, and the pattern is already charged emotionally and conatively.

2.6 Elements in the Dramatic Subject.

The first condition of drama is the possibility of acting it out, of the subordination of neural process to psychic determinations. Now in the animals this subordination can reach a high degree of complexity to ensure large differentiations of response to nuanced differences of stimuli. None the less, this complexity, so far from being an optional acquisition, seems rather to be a natural endowment and to leave the animal with a relatively small capac-

ity for learning new ways and for mastering other than native skills. In contrast, man's bodily movements are, as it were, initially detached from the conative, sensitive, and emotive elements that direct and release them. To learn to walk is to learn to correlate psychic elements with bodily movements, and the human child takes a notable time to do so; yet precisely because walking is such a laborious acquisition, other acquisitions are equally possible. The initial plasticity and indeterminacy ground the later variety. Were the pianist's arms, hands, and fingers locked from birth in natural routines of biological stimulus and response, they never could learn to respond quickly and accurately to the sight of a musical score. To take another illustration, the production of sound is a complicated set of correlated oscillations and movements; but the wailing and gurgling of infants develop through the prattle of children into articulate speech, and this vocal activity can be complemented with the visual and manual activities of reading and writing; the whole structure rests upon conventional signs, yet the endlessly complex correlations that are involved between the psychic and the neural have become automatic and spontaneous in a language that one knows.

Inverse to the control of the psychic over the neural, are the demands of neural patterns and processes for psychic representation and conscious integration. Just as an appropriate, schematic image specifies and leads to a corresponding insight, so patterns of change in the optic nerve and the cerebrum specify and lead to corresponding acts of seeing. What is true of sight, is also true of the other outer senses and, though the matter is far from fully explored, one may presume that memory and imagination, cognition and emotion, pleasure and pain, all have their counterparts in corresponding neural processes and originate from their specific demands.

It would be a mistake, however, to suppose that such de-

mands are unconditional. Perceiving is a function not only of position relative to an object, the intensity of the light, the healthiness of eyes, but also of interest, anticipation, and activity. Besides the demands of neural processes, there also is the pattern of experience in which their demands are met; and as the elements that enter consciousness are already within a pattern, there must be exercised some preconscious selection and arrangement. Already we have noticed, in treating the intellectual pattern of experience, how the detached spirit of enquiry cuts off the interference of emotion and conation, how it penetrates observation with the abstruse classifications of science, how it puts the unconscious to work to have it bring forth the suggestions, the clues, the perspectives that emerge at unexpected moments to release insight and call forth a delighted Eureka. In similar fashion, the dramatic pattern of experience penetrates below the surface of consciousness to exercise its own domination and control and to effect, prior to conscious discrimination, its own selections and arrangements. Nor is this aspect of the dramatic pattern either surprising or novel; there cannot be selection and arrangement without rejection and exclusion; and the function that excludes elements from emerging in consciousness is now familiar as Freud's censor.

Since, then, the demands of neural patterns and processes are subject to control and selection, they are better named demand functions. They call for some psychic representation and some conscious integration, but their specific requirements can be met in a variety of different manners. In the biological pattern of experience, where both unconscious vital process and conscious striving pursue the same end, there is, indeed, little room for diversification of psychic contents. But aesthetic liberation, artistic creativity, and the constant shifting of the dramatic setting open up vast potentialities. All the world's a stage and not only does each in his time play many parts but also the many parts vary with changes of locality, period and social milieu. Still,

there are limits to this versatility and flexibility. The demand functions of neural patterns and processes constitute the exigence of the organism for its conscious complement; and to violate that exigence is to invite the anguish of abnormality.

2.7 Dramatic Bias.

Just as insight can be desired, so too it can be unwanted. Besides the love of light, there can be a love of darkness. If prepossessions and prejudices notoriously vitiate theoretical investigations, much more easily can elementary passions bias understanding in practical and personal matters. Nor has such a bias merely some single and isolated effect. To exclude an insight is also to exclude the further questions that would arise from it and the complementary insights that would carry it towards a rounded and balanced viewpoint. To lack that fuller view results in behavior that generates misunderstanding both in ourselves and in others. To suffer such incomprehension favors a withdrawal from the outer drama of human living into the inner drama of phantasy. This introversion which overcomes the extroversion, native to the biological pattern of experience, generates a differentiation of the persona that appears before others and the more intimate ego in the day-dream is at once the main actor and the sole spectator. Finally, the incomprehension, isolation, and duality rob the development of one's common sense of some part, greater or less, of the corrections and the assurance that result from learning accurately the tested insights of others and from submitting one's own insights to the criticism based on others' experience and development.

2.7-1 Scotosis. Let us name such an aberration of understanding a scotosis, and let us call the resultant blind spot a scotoma. Funda-

mentally, the scotosis is an unconscious process. It arises, not in conscious acts, but in the censorship that governs the emergence of psychic contents. None the less, the whole process is not hidden from us, for the merely spontaneous exclusion of unwanted insights is not equal to the total range of eventualities. Contrary insights do emerge. But they may be accepted as correct, only to suffer the eclipse that the bias brings about by excluding the relevant further questions. Again, they may be rejected as incorrect, as mere bright ideas without a solid foundation in fact; and this rejection tends to be connected with a rationalization of the scotosis and with an effort to accumulate evidence in its favor. Again, consideration of the contrary insight may not reach the level of reflective and critical consciousness; it may occur only to be brushed aside in an emotional reaction of distaste, pride, dread, horror, revulsion. Again, there are the inverse phenomena. Insights that expand the scotosis can appear to lack plausibility; they will be subjected to scrutiny; and as the subject shifts to and from his sounder viewpoint, they will oscillate wildly between an appearance of nonsense and an appearance of truth. Thus, in a variety of manners, the scotosis can remain fundamentally unconscious yet suffer the attacks and crises that generate in the mind a mist of obscurity and bewilderment, of suspicion and reassurance, of doubt and rationalization, of insecurity and disquiet.

2.7-2 Repression. Nor is it only the mind that is troubled. The scotosis is an aberration, not only of the understanding, but also of the censorship. Just as wanting an insight penetrates below the surface to bring forth schematic images that give rise to the insight, so not wanting an insight has the opposite effect of repressing from consciousness a scheme that would suggest the insight. Now this aberration of the censorship is inverse to it. Primarily, the censorship is

is constructive; it selects and arranges materials that emerge in consciousness in a perspective that gives rise to an insight; this positive activity has by implication a negative aspect, for other materials are left behind and other perspectives are not brought to light; still, this negative aspect of positive activity does not introduce any arrangement or perspective into the unconscious demand functions of neural patterns and processes. In contrast, the aberration of the censorship is primarily repressive; its positive activity is to prevent the emergence into consciousness of perspectives that would give rise to unwanted insights; it introduces, so to speak, the exclusion of arrangements into the field of the unconscious; it dictates the manner in which neural demand functions are not to be met; and the negative aspect of its positive activity is the admission to consciousness of any materials in any other arrangement or perspective. Finally, both the censorship and its aberration differ from conscious advertence to a possible mode of behavior and conscious refusal to behave in that fashion. For the censorship and its aberration are operative prior to conscious advertence and they regard directly not how we are to behave but what we are to understand. A refusal to behave in a given manner is not a refusal to understand; so far from preventing conscious advertence, the refusal intensifies it and makes its recurrence more likely; and, finally, while it is true that conscious refusal is connected with a cessation of the conscious advertence, still this connection rests, not on an obnubilation of intelligence, but on a shift of effort, interest, preoccupation. Accordingly, we are led to restrict the name, repression, to the exercise of the aberrant censorship that is engaged in preventing insight.

2.7-3 Inhibition. The effect of the repression is an inhibition imposed upon neural demand functions. However, if we distinguish be-

tween demands for images and demands for affects, it becomes clear that the inhibition will not block both in the same fashion. For insights arise, not from the experience of affects, but rather from imaginative presentations. Hence, to prevent insights, repression will have to inhibit demands for images. On the other hand, it need inhibit demands for affects only if they are coupled with the undesired images. Accordingly, the repression will not inhibit a demand for affects, if that demand becomes detached from its apprehensive component, slips along some association path, and attaches itself to some other apprehensive component. Inversely, when there emerges into consciousness an affect coupled with an incongruous object, then one can investigate association paths, argue from the incongruous to the initial object of the affect, and conclude that this combination of initial object and affect had been inhibited by a repression. Nor is this conclusion to be rejected as preposterous because the discovered combination of image and affect is utterly alien to conscious behavior. For the combination was inhibited, precisely because it was alien. Insights are unwanted, not because they confirm our current viewpoints and behavior, but because they lead to their correction and revision. Inasmuch as the scotosis grounds the conscious, affective attitudes of the persona performing before others, it also involves the repression of opposite combinations of neural demand functions; and these demands will emerge into consciousness with the affect detached from its initial object and attached to some associated and more or less incongruous object. Again, inasmuch as the scotosis grounds the conscious, affective attitudes of the ego performing in his own private theatre, it also involves the repression of opposite combinations of neural demand functions; and in like manner these demands make their way into consciousness with the

affect detached from its initial object and attached to some other more or less incongruous object. In Jung's terminology, the conscious ego is matched with an inverse non-conscious shadow, and the conscious persona is matched with an inverse non-conscious anima. Thus, the persona of the dispassionate intellectual is coupled with a sentimental anima, and an ego with a message for mankind is linked to a diffident shadow. It would seem to be ultimately the same phenomena that are named ambivalence by the Freudians, bipolarity by Stekel, and an alternation of opposites by Adler.

2.7-4 Performance. Apprehension and affect are for operations but, as one would expect, the complex consequences of the scotosis tend to defeat the efforts of the dramatic actor to offer a smooth performance. To speak fluently or to play a musical instrument, one has to be able to confine attention to higher-level controls and to leave the infinite details of the execution to acquired habit. But the division of conscious living between the two patterns of the ego and the persona can hamper attention to the higher-level controls and allow the sentiments of the ego or shadow to slip into the performance of the persona. Thus, a friend of mine, who had been out of town, asked me how my work was getting on. I answered with a dreaded didactic monologue on the connection between insight and depth psychology. His laudatory comment ended with the remark, "Certainly, while I have been away, you have not been wasting my time".

Besides the waking performance of the dramatic actor, there is also the strange succession of fragmentary scenes that emerge in sleep. Then experience is not dominated by a pattern. Not only are there lacking the critical reflection and deliberate choosing that make waking consciousness reasonable, but also the preconscious activity of the censor, selecting and arranging neural demands, is carried

out in a half-hearted and perfunctory manner. This relaxation of the censorship, however, not only accounts for the defective pattern of experience in dream-land but also explains the preponderant influence of the other determinant of conscious contents, namely, the neural demand functions. Claims ignored during the day become effective in sleep. The objects and affects of the persona and of the ego make an overt appearance and with them mingle the covert affects of the shadow and the anima attached to their incongruous objects.

The basic meaning of the dream is its function. In the animal, consciousness functions as a higher technique for the effective prosecution of biological ends. In man, not only does it fulfill this purpose but also provides the center for the operations of self-constituting dramatic actor. Sleep is the negation of consciousness. It is the opportunity needed by unconscious vital process to offset without interference the wear and tear suffered by nerves during the busy day. Within this function of sleep lies the function of the dream. Not only have nerves their physical and chemical basis but also they contain dynamic patterns that can be restored to an easy equilibrium only through the offices of psychic representation and inter-play. Besides restoring the organism, sleep has to knit up the unravelled sleeve of care, and it does so by adding dreams in which are met ignored claims of neural demand functions.

Functionally, then, the dream is a psychic flexibility that matches and complements the flexibility of neural demands. If consciousness is to yield to the preoccupations of the intellectual or of the dramatic actor, it cannot be simply a function of neural patterns and processes. Inversely, if neural demands, ignored by consciousness, are to be met without violating the liberation of the artistic, intellectual, or dramatic pattern of experience, then they find their

opportunity in the dream.

There is a further aspect to this twofold flexibility. The liberation of consciousness is founded on a control of apprehensions; as has been seen, the censorship selects and arranges materials for insight or, in its aberration, excludes the arrangements that would yield insight. Inversely, the imperious neural demands are not for apprehensive psychic contents but for the conations and emotions that are far more closely linked with activity; thus, while we imagine much as we please, our feelings are quite another matter. Accordingly, since the dream is the psychic safety-valve for ignored neural demands, and since the imperious neural demands are affective rather than apprehensive, the dream will appear as a wish fulfilment. This statement, of course, must not be taken in the sense that the unconscious has wishes which are fulfilled in dreams, for wishing is a conscious activity. Nor again does it mean that the wishes fulfilled in dreams are those of the conscious subject, for inverse to the ego is the shadow and inverse to the persona is the anima. The accurate statement is that dreams are determined by neural demands for conscious affects, and that the affects in question may be characteristic not only of the ego or the persona but also of the shadow or the anima. However, as has been seen, if the affects emergent in the dream are characteristic of the shadow or the anima, they emerge disassociated from their initial objects and attached to some incongruous object; and in this fact there now may easily be discerned its functional significance. The affects of the shadow and anima are alien to the conscious performer; were they to emerge into consciousness with their proper objects, not only would they interfere with his sleep but also would violate his aesthetic liberation. The disguise of the dream is essential to its function of

securing a balance between neural demands and psychic events while preserving the integrity of the conscious stream of experience.

Hence, to penetrate to the latent content of the dream is to bring to light a secret that, so to speak, has purposely been hidden. To equip an animal with intelligence constitutes not only the possibility of culture and of science but also the possibility of every abomination that has occurred in the course of human history. To affirm the latter human potentiality in abstract terms is somewhat unpleasant. To proceed syllogistically from the universal to the particular is distasteful. To assert that potentialities inherent in human nature exist in one's acquaintances, one's relatives, one's parents, oneself, is logical enough yet outrageous. Yet far more vivid than the utterance of such truths is their apprehension through insights into images that are affectively charged. In his waking hours man may preclude the occurrence of such insights. Even if his neural patterns and processes have been so stimulated as to demand them, the demand can be met in a dream in which the disassociation of the affect from its proper object respects the immanent direction of the stream of consciousness.

A similar functional significance may be found in the formation of screening memories. Of our childhood we are apt to remember only a few vivid scenes and, when these are submitted to scrutiny and investigation, they are likely to prove mere fictions. Freud has divined such false memories to be screens. Behind them are actions which later understanding would view in a fashion unsuspected by the child that performed them. If the memory of such actions is not to enter consciousness, it has to be repressed; if it is repressed, it undergoes the disassociation and recombination that result from inhibi-

tion. In this fashion there is formed the false and screening memory that enables the dramatic actor to play his present role with all the more conviction because he does not believe his past to differ too strikingly from his present.

2.7-5 The Main Problem. Our study of the dramatic bias has worked from a refusal to understand through the series of its consequences. There result in the mind a scotosis, a weakening of the development of common sense, a differentiation of the persona and the ego, an alternation of suspicion and reassurance, of doubt and rationalization. There follow an aberration of the censorship, the inhibition of unwanted imaginative schemes, the disassociation of affects from their initial objects and their attachment to incongruous yet related materials, the release of affective neural demands in dreams, and the functionally similar formation of screening memories. However, if the account has made no explicit mention of sex, this must not be taken to imply that the depthpsychologists have been on the wrong track. On the contrary, the peculiarities of sexual development make it the ordinary source of materials for the scotosis. Because hunger and sex are vital, they constitute the areas in which experience can be contracted from its dramatic to its biological pattern. But hunger is present from birth and its manifestations do not greatly change. Sexual development, on the contrary, is prolonged and, indeed, both organic and psychological. From birth to puberty there occur successive specializations of the neural demand functions; and their term is not some free combination of movements, like playing the piano, but a naturally determined sequence of apprehensions, affects, and movements, that admit only superficial modifications from the inventive dramatist. Inter-dependent with this change, there is a psychological transforma-

tion in which the affective and submissive attitudes of the child within the family give place to the man self-reliantly orientating himself in the universe and determining to found a family of his own. During the course of this long and intricate process, there is room not only for waywardness motivated by strange pleasure but also for accidents, incomprehension, blunders, secretiveness. If adverse situations and mistakes occur at random, they can be offset by the excretory function of the dream, by the pressures and attractions of a healthy environment, by suitable and opportune instruction, by some form of inner acceptance of the drive to understanding and truth with its aesthetic and moral implications. If thy eye be simple, thy whole body will be lightsome. On the other hand, one adverse situation can follow another; the error and waywardness of each previous occasion can make still more probable the mishandling of the next. A scotosis becomes established. As an aberration of the understanding, it stands in the way of the proper development of affective attitudes. As an aberration of the censorship, it loads the neural demand functions with inhibitions. Affective demands are shifted to incongruous dream objects. The incongruous objects may chance to function as do normal stimuli for affects, and waywardness may solidify the connection. The shadow and the anima can become organized as demands for integrated attitudes of love or hatred. Eventually, a point is reached where the immanently determined direction of the misled stream of consciousness is no longer capable of providing psychic representation and conscious integration for the distorted neural demand functions. Then neural demands assert themselves in waking consciousness through the inadequacies, compulsions, pains and anxieties of the psychoneuroses. Dramatic living has for-

feited its autonomy and only through delusions can it pretend to its old mastery.

Still, before this point is reached, there can occur the intermediate phenomenon studied by Freud in his Totem and Tabou. It was remarked above that the dream provides release from the random repressions that are more or less inevitable and that the development of scotosis results from the cumulative effect of successive adverse situations. Now, when adverse situations become the rule for most members of a society, then the society can survive only by providing a regular public equivalent for the dream. Such prophylactic group therapy will exist whenever unconscious needs are met in a disguised manner. Dr. Stekel's description of the theatre as mass therapy echoes Aristotle's statement that tragedy effects a catharsis of fear and pity. Nor is the invention of such therapy in a primitive culture any more difficult than the invention of the cultural organization itself. For the constraints of the organization give rise to corresponding dreams; the relief afforded by the dreams can be noticed; this advertence may be given dramatic expression; the dramatic expression would meet in a disguised form the unconscious needs of the community; and if the dramatic expression is not included in the cultural organization, then the culture will not survive to be investigated by anthropologists. This basic mechanism admits a series of applications that range from knowledge issuing forth in prophylactic purpose through successive stages of intellectual obnubilation to close approximations to abnormal phenomena. Man's capacity for art and science, psychology and philosophy, religion and morality, operates in the primitive and in the uneducated without awareness of the differences between these departments and without any sharp distinction between them and under-

lying impulses or needs. In the complex phenomena of totemism, in the rites of the Mother Goddess, in the myths of the Sky Gods, there appear reflections not only of the social organization of hunters, agriculturalists, and parasitic nomads but also of human sexuality; nor did the Mosaic prescription of images prevent the back-sliding lamented by the prophets, nor the mystical flight from sense of the Buddhists, eliminate the earlier Brahminism, nor the rational criticism of the Greeks forestall popular hatred of the Christians. Again, there is a nice distinction between the sensitive mechanism that enforces a tabou and the rational judgment that imposes a moral obligation. Freud was aware that his path would have been easier if he had glazed over the more shocking elements in his discoveries; yet to take the easier course would have involved not only a violation of his intellectual convictions but also a conquest of his feelings. Still, such a coincidence of conscience and moral feeling can be procured not only by the determination of judgment in accord with the feelings instilled through parental and social influence. Once feeling takes the lead, critical reflection can prevent an arbitrary extension of the moral code. But in the primitive and in the child, not only is critical reflection undeveloped and unequipped but also there is little capacity to distinguish between the outer constraint of commands imposed through affection and fear and the inner implications through which reasonable judgment entails reasonable living. Then moral feelings are free to develop according to the psychological laws that link affects to successively associated objects. The tabou not only operates but also tends to expand in much the same fashion as the compulsion neurosis.

2.7-6 A Piece of Evidence. In his History of the Psychoanalytic Movement Freud prefaced his indictment of the secessionists, Adler

and Jung, with the statement that he had always asserted that repressions and the sustaining resistance might involve a suspension of understanding. But where Freud recognized a consequence, we have seen an antecedent. Our study of the dramatic bias begins from the flight from insight and, rather systematically, it has led us to repression and inhibition, the slips of waking consciousness and the function of dreams, the aberrations of religions and morality and, as a limit, the psychoneuroses. Naturally, there arises the question whether any specialists in the field of abnormal disorders provide us with confirmatory evidence on the connection between repression and a refusal to understand. An affirmative answer is offered by Dr. Wilhelm Stekel's Technique of Analytic Psychotherapy (The Bodley Head, London, 1939). The work, which is thoroughly practical in conception and purpose, consistently considers analytic treatment as a retrospective education. Once the differential diagnosis has excluded both somatic disorder and the imminence of psychosis, the working hypothesis becomes the assumption that the analysand is the subject of a scotoma. A favorable prognosis requires that the patient's critical reflection and deliberate choice are allied with the analyst; but along with this rational attitude there exists a flight from knowledge that is to be cured by knowledge. During the analysis this flight continues to manifest itself in two manners named the resistance and the transference. Just as in the rest of his living the patient's understanding spontaneously finds measures of self-defence and thereby nourishes the scotoma, so in the intimate drama of the analysis the patient is engaged both in devising means to prevent the coming revelation and, at the same time, repressing the insights that would explain to him his own conduct. Such is the resistance; it is plausible, ingenious, resourceful; it adapts itself

to each new situation; yet so far from being deliberate, it is at least fundamentally non-conscious. There is also the transference. The development of the scotoma has involved the repression of feelings of love or hatred for persons in the patient's milieu; this repression and the consequent inhibition mean that the patient is the subject of neural demands for affects that, however, are detached from their initial objects; the transference is the emergence into consciousness of these affects directed upon the person of the analyst.

Just as the root of the disorder is a refusal to understand, so its cure is an insight, a "lightning flash of illumination". Just as the refusal excluded not some single insight but an expanding series, so the cure consists in the occurrence of at least the principal insights that were blocked. It is the re-formation of the patient's mentality. Moreover, these insights must occur, not in the detached and disinterested intellectual pattern of experience, but in the dramatic pattern in which images are tinged with affects. Otherwise the insights will occur but they will not undo the inhibitions that account for the patient's affective disorders; there will result a development of theoretical intelligence without an abreaction of aberration. Finally, the patient is not to be thought capable of curing himself; for the cure consists precisely in the insights which arise from the schematic images that spontaneously the patient represses; and even if by an extraordinary effort of intellectual detachment the patient succeeded in grasping in part what he was refusing to understand, this grasp would occur in the intellectual pattern of experience and so would prove ineffectual; indeed, the effort would be likely to produce an obsession with analytic notions, and there would be some danger that such merely theoretical insight would tend

to inoculate the patient against the benefit of a true analytical experience with its dramatic over-tones.

The analyst, then, is needed. To perform the differential diagnosis, he must know medicine. Otherwise he will risk not merely ministering to the mind when the body is ill but also attempting to treat psychotics and so acquiring the reputation of driving people insane. Further, the analyst must himself be free from scotoma; a bias in his understanding of himself will also be a bias in his understanding of others; and this is all the more dangerous if he attempts to follow Dr. Stekel's active therapy. This active therapy rests upon knowledge that is parallel in structure to common sense. As has been seen, common sense consists in a basic accumulation of insights to which must be added further insights derived from the situation in hand. Similarly, the analyst's knowledge has two parts. There is the basic accumulation derived from an academic formation and from personal experience. It consists in an understanding of the psychoneuroses or parapsychoses in their origins, their development, their results; it is a grasp of a vast manifold of possibilities; it involves an ability to proceed from a patient's biography and behavior, his dreams and associations, to a grasp of his precise flight from knowledge. However, that precise flight was the hidden component of an individual history; it possesses not merely typical features but also its own particular twists and turns; and it continues to be operative in the analytical situation. The analyst has to outwit the resistance. He has to discern the transference, be able to make capital of it, and know when to end it. He has to be able to wait for favorable opportunities, ready to take the initiative when the occasion

calls for it, capable of giving up when he is defeated, and ingenious in keeping things going when he sees he can win. In this complicated and dangerous chess-game, he has to be gaining insight into the patient's basic trouble, winning his confidence by the explanation and removal of superficial symptoms, and preparing the way for the discovery of the profound secret. Finally, he has to be able to end the analysis, stiffen the analysand to self-reliance, contribute what he can to the happy ending in which both need of the analyst and disturbing memories of the analysis pass away.

It is time to revert to our question. Does there exist empirical evidence for the assertion that the suspension of understanding is not merely a possible consequence but also a genetic factor in psychogenic disorder? Unfortunately there are divisions among specialists in the field and so, instead of giving a single answer, I must give two.

To those not disinclined to agree with Dr. Stekel, one may say that there exists empirical evidence for a psychotherapeutic notion in the measure that the notion is operative in actual treatment, that it is operative in the treatment of all types of disorder rather than in a partial selection of types, that it survives prolonged and varied experience, that the survival contrasts with a readiness to drop unverified notions, that failures cannot be traced to the notion in question. Now Dr. Stekel has attained an international position both as an analyst and as a writer of technical works; he is able to describe his Technique of Analytic Psychotherapy as the fruit of thirty years' experience; in that book the analyst's working hypothesis is that the patient is suffering from a scotoma and the analyst's goal is to lead the patient towards a "lightning flash of illumination"; this view dominates the whole treatment and is relevant to the whole class

of parathies or psychoneuroses; finally, there is a good deal of evidence for Dr. Stekel's independence of mind and his readiness to abide by results.

However, there perhaps are those to whom Dr. Stekel's favor for an opinion provides presumptive evidence that the opinion is erroneous or at least rash. To them I would point out that the present issue is not the validity of the whole of Dr. Stekel's theory and practice but solely the existence of empirical evidence for a single correlation. I am not asking for the adoption of Dr. Stekel's active method; I am not even urging that analytic treatment is desirable; my concern is restricted to a theoretical issue, and my question is whether or not evidence exists. It seems to me that a negative answer is impossible. Even if one prescind entirely from Dr. Stekel and his pupils, still there occur other analytic treatments in which the cure operates through knowledge; but the knowledge in question is of a particular kind; it is not sensitive knowledge apart from organization through insights, for hypnosis is not a satisfactory method; it is not knowledge on the level of critical reflection and judgment, for delusions are not the principal characteristic of psychoneurosis; it is the intermediate factor that we have been investigating under the name of insight, and on the present theoretical level it makes no difference whether the patient be led to the insight by an active method or left to discover it for himself by a passive method.

2.7-7 A Note on Method. There is a final point to be made, and it regards the significance for depth psychology of recent developments in scientific methodology. At the turn of the century mechanist determinism was still the world-view dominant in scientific circles. Freud's discovery and development of the notion of psychogenic disorder came at the ambiguous moment when the old outlook was about to dissolve

and, as one might expect, the ambiguity of the moment forced ambiguity upon his work. Were mechanist determinism correct, then neither normality nor disorder could be psychogenic; Laplace's demon could calculate both from the world distribution of atoms in any basic situation; Freud could be said to introduce a new name and a new technique inasmuch as he dealt with collocations of atoms through their psychic appearances; but Freud could not be credited with the discovery of an autonomous science. On the other hand, if mechanist determinism is incorrect, the category of the psychogenic promptly assumes a significance that Freud himself could not suspect. Let us attempt to clarify this point.

As we have seen, empirical science is the determination of correlations verified in observables. Mechanism is the additional determination to invent what is neither a correlation nor verified nor observable. What is so invented, is pronounced real and objective; and in comparison with this fictitious treasure, the observable becomes the merely apparent. Thus, in nineteenth century physical theory, the aether is real and objective, and its properties resembling, say, a sponge-like vortex are what make electro-magnetic equations true. Nor is this all. Because verified correlations are attributed to imagined atoms or aether, they are not abstract but concrete; and once classical correlations are considered to be concrete, determinism follows and the possibility of statistical laws, except as a confession of ignorance, rigorously is excluded.

Now Freud's own investigations threw some doubt on the scientific character of mechanist objectivation. He was aware of the importance of extroversion in the object-finding that pertains to the psychic side of sexual development. He could appeal to projection to account for the transformation of the unconscious ill-will

of primitives to deceased relatives into the explicit ill-will of the departed spirits to the bereaved mourners. But he had no intention of going back over the path traversed by Galileo and Descartes, Hobbes and Berkley, Hume and Kant. Nor did the methodology of then contemporary science provide him with a canon of parsimony that restricted scientific affirmation to verified correlations and to observables. On the contrary, on many occasions Freud represents the outlook of his time and tends to regard observable psychic events as appearance and unobservable entities as reality. What precisely is the libido? Is it what is known either by observing nerves or by observing psychic events or by correlating these observables or by verifying these correlations? Or is it a construction that stands to Freud's verified correlations in much the same manner as the spong-vortex aether once stood to electro-magnetic equations? To resolve the ambiguity, if it can be resolved, would call for an investigation by a trained expert in the history of science.

Again, Freud was professedly determinist. But in so far as determination is operative in Freud's work, it amounts to the postulate that there is a reason for everything, even for numbers that one appears to select at random. But if one admits that some reasons are only probable, that postulate becomes compatible with statistical laws; and if Laplace has failed to exclude probability from physics, there is little likelihood of its being excluded from psychology. There is a more momentous consequence. For the acknowledgment of statistical laws gives a new status to the science of psychogenic health and psychogenic illness. Neural determinants settle not unique psychic events but sets of psychic alternatives. Psychic determinants acquire an independent function of selecting between neurally determined alternatives. It becomes possible to conceive

two distinct sets of schemes of recurrence, one conscious and the other non-conscious, where each set follows its own classical and statistical laws yet through its own laws is linked to the other set. Then, psychichealth is the harmony of the two processes, conflict and break-down are their incompatibility, psychogenic aberration is a direction of the stream of consciousness that heads towards break-down, and analytic treatment is at once a reorientation of the stream of consciousness and a release from neural obstructions with a psychic origin. This is no more than a thumb-nail sketch but, if neural determinants admit psychic alternatives, the psychic can acquire an independent role, and that independence is the basic significance of statistical laws in the conception of psychic and neural relations. Moreover, our whole presentation has been careful to observe the canons of parsimony and of statistical residues; we have spoken simply of intelligible relations between psychic events under the name of patterns of experience and of intelligible relations between neural events under the name of neural patterns; nor were neural patterns conceived as unique determinants of psychic events but, on the contrary, they involved no more than neural demand functions capable of being satisfied in many ways.

There is a further aspect of the matter. On the assumption of mechanist determinism, one may speak of the actual, of the necessary, and of the impossible; but within the confines of that view there is no room for the potential, for what really could occur yet in fact may not occur. On the other hand, once statistical laws are acknowledged, the potential assumes its proper status; each present situation is the potential for a variety of future situations, none of which is necessary, none of which is impossible, yet only one

of which will arise. Moreover, this notion of the potential is needed for the adequate conception of Freud's discoveries; the censorship, whether constructive or repressive, pertains to the potential of future conscious states; the neural demand functions similarly pertain to that potential; the situations, favorable or adverse, in which experience occurs, pertain to the potential of the experience. The unconscious, that is never conscious, is the neural. The preconscious, that can become conscious, is the potential. The repressive censorship is a negative potential opposed to a positive potential arising from the neural and the situation.

A final point has to be made. Freud hesitated for a year before publishing his Interpretation of Dreams. His conscientious devotion to the insights he had won made him stress aspects of his discoveries that he knew full well would arouse resistance, opposition, and vituperation. But while I cannot but admire the self-sacrificing devotion to conscience in a man sometimes supposed to have abolished guilt, I must point out that this loyalty was directed less to his own discoveries than to the mechanist determinism current in the scientific milieu of his age. There is nothing revolting or shocking in the affirmation that man has a commonly rejected potential for parricide, cannibalism, incest, and suicide; otherwise, those unpleasant names would not exist. Freud's difficulty arose because determinism eliminated the notion of the potential to leave only the actual, the necessary, and the impossible; and it was further complicated by the mechanist obsession that has to invent an unobservable reality and has to regard as mere appearance the observable and as mere thinking the verified correlation. As yet, we have not been able to state what we believe the real and objective to be, nor even

to say what is meant by a thing, a man, a person. In due course we hope to do so. But, at least, we can conclude that within a scientific context, controlled by the canons of parsimony and of statistical residues, Freud's spectre tends to vanish. The latent content of the dream, so far from revealing the "real" man, exhibits merely potentialities rejected not only by waking but also by dreaming consciousness.