

A conference was held in Prague, Czech Republic, in November 2002 that was entitled “Issues Confronting the Post-European World” and that was dedicated to Jan Patočka (1907-1977). The Organization of Phenomenological Organizations was founded on that occasion. The following essay is published in celebration of that event.

Essay 4

Rebuilding Reality: A Phenomenology of Aspects of Chronic Schizophrenia

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Abstract



Schizophrenia, like other “pathological” conditions, has not been systematically included in the general study of consciousness. By focusing on aspects of chronic schizophrenia, we attempt to survey one way of remedying this omission. Some basic components of Edmund Husserl’s phenomenology of human experience (intentionality, synthesis, constitution, epoche, and unbuilding) are explicated in detail, and these components are then employed in an account of exemplary aspects of chronic schizophrenia. We maintain that in schizophrenic experience some very basic constituents of reality – constituents so basic we call them “ontological” – are lost so that the patient must try to explicitly re-constitute those ontological features of the world.

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Using Husserl's concepts such experiences are described as a weakening of "automatic mental life" so that much of the world that is normally taken-for-granted cannot continue to be so. This requires the patient to actively busy him- or herself with re-laying the ontological foundations of reality.

Introduction

The study of human consciousness has long ignored prominent aspects of schizophrenia. A "prejudice for the normal" seems to inform present-day psychologies and philosophies of mind. We contend, however, that the study of consciousness must be able to adequately encompass schizophrenic mental life as well as manic-depressive mental life and others.

Adequately incorporating schizophrenic experience into a theory of the human mind will require much work because schizophrenia presents the attentive investigator with a wide array of puzzling and complex mental processes. In this article we shall deal with only a few delimited aspects of chronic schizophrenia. In previous essays we have treated other stages of the disorder (Wiggins et al, 1990, pp. 21-34; Schwartz et al, 1992, pp. 305-318; Schwartz et al, 1997, pp. 176-187; Naudin et al, 1999; 155-171)

Our ultimate aim is to develop a psychopathology of schizophrenia and other disorders that is able to locate these conditions within the broad spectrum of human existence. There is no shortcut to the development of such a psychopathology, however. A truly useful psychopathology would have to arise out of a relatively well-articulated psychology because only a general psychology of human experience could furnish the conceptual framework within which the explanation of pathological experiences could be ventured. Moreover, such a psychopathology would have to strive to include relevant data and concepts from neuroscience.

In this article we shall develop a Husserlian phenomenology of mental life to the point at which this phenomenology can begin to clarify those aspects of chronic schizophrenia we have in view. Since today an increasing number of writers make use of seemingly Husserlian terms and procedures, such as "intentionality," "constitution," "bracketing," and even "epochē," we shall need to define some of these basic concepts. This is necessary especially in light of the fact that many of these writers, in our opinion, misuse these Husserlian terms. Therefore, a significant part of our aim in this article consists in "setting

the record straight” on the basic concepts and procedures of Husserlian phenomenology. Developing a Husserlian approach to schizophrenic experience may require that we take the reader through unfamiliar territory and in the process develop an unfamiliar terminology. Following Husserl, however, we do claim that this seeming unfamiliarity can be overcome if the reader reflects upon his or her own experience and thereby finds in that experience the features and distinctions to which we refer. We maintain, in other words, that everything we write can be confirmed or challenged by the reader him- or herself if he or she thoughtfully follows our exposition and seeks to find in his or her own mental life the constituents we describe.

Along with the phenomenology and related to it come neuroscientific considerations. We are persuaded that adequate accounts of mental disorders today must at least venture to postulate connections between descriptions of experience and structures and events in the brain. We also indicate toward the conclusion of our essay some implications of our views for therapy.

Two Cases of Schizophrenia

We shall first exemplify those aspects of chronic schizophrenia that we have in view with vignettes of two subjects.

R.Z. is a thirty-five year old man. At twenty-two, he was hospitalized for the first time for three months with paranoid delusions. Following discharge, he went without treatment for three years, but was then hospitalized again with a diagnosis of simple schizophrenia. Subsequently, R.Z. has been followed on an outpatient basis with visits to the psychiatrist approximately monthly. A single man, he lives alone and does not work. His main activity is photographing the landscape that he sees from his window. He regularly shows these photographs to the psychiatrist and comments on them: “Here there is a car.” “There, the car did not move during the night.” “This is the same car on another day, there are dead leaves on the roof.” He says, “Time goes by, things do not change. I find time with photographs.”

At first glance the puzzling features of this example are the patient’s intense concern with aspects of reality that are so concrete and commonplace. There being a car “here” is so striking to R.Z. that he must photograph it in order

to demonstrate its truth. To us these “truths” would be obvious and self-evident. Why for R.Z. have they become items so astonishing that they need to be proved in order really to be believed? R.Z.’s need to confirm the obvious also appears in his statement, “Time goes by, things do not change.” The fact that time goes by while things do not change is a basic truth about the world. It is so basic we might call it an “ontological fact.” R.Z. is able to infer this ontological truth, however, only from the evidence he has accumulated for it in his photographs of cars. Why is it necessary for R.Z. to painstakingly assemble his incontestable “data” in order to prove this self-evident generalization? It must be because for R.Z. this ontological truth is not self-evident; as he expresses it, “I find time with photographs.”

R.A. Is a forty-two year old man. He was hospitalized for an entire year at age nineteen with paranoid delusions. Afterwards, he was treated with neuroleptics in a daycare setting for almost a decade. By age twenty-seven, hallucinatory voices began to express what he calls “proverbs.” Eventually, he was able to leave the daycare center for a vocational workshop where he learned the rudiments of carpentry and cabinet-making. Then he gave up all treatment and activity. He lived alone until age thirty-four. By this time, he was no longer hearing voices, but he was speaking entirely in folksy proverbs and clichés. He then moved to a house near his brother’s. Stating, “I am lacking a seat in my life,” he started building an armchair on which he engraved proverbs so as to “have his place, like the others, in everyday life.” He then married a neighbor, after which the proverbial voices occasionally returned. In rare times of crisis, he threatens to destroy his “proverb armchair” on which he sits every day. Sometimes he does partially destroy it in order to better rebuild it. At present, his situation has stabilized. He does seasonal agricultural work every year, and together with his wife, takes good care of his two young children. He does not take medication.

R.A. experiences himself as “lacking a seat in life.” He longs for a place in life that he believes other people to have. Again we notice the concreteness of this patient’s intense concern. A “seat in life” is understood by R.A. in a completely concrete sense: it is an armchair in which he can literally sit. But in order to attain such a seat, he must actually build it. This armchair locates him in life literally because he carves on it the proverbs on which he must explicitly

rely in order to carry out commonplace activities.

These two patients must laboriously piece together realities for themselves in order for their daily lives to be possible. The rest of us need not engage ourselves in such time- and energy-consuming activities because we can simply assume it as obvious that cars are identical from day to day, that time goes by while things remain the same, that we have regular places in life, and an indefinite number of other commonplace “truths.” Why are these patients burdened by very basic concerns that the rest of us can simply take for granted as self-evident?

In order to address these perplexities we shall devote considerable space to describing central components of Husserl’s phenomenology.

Some Basic Phenomenological Terms: Intentionality, Reflective Intentionality, and Straightforward Intentionality

When I reflect carefully upon my own mental life, I can notice that this life is by its very nature aware of objects. In Husserl’s words, mental life is intentional: every mental process is an awareness of something. When we say that every mental process is an awareness of an object, we shall be using the word “object” in the broadest conceivable sense, namely, the sense in which anything at all can be an object, e.g., a number, a centaur, a remembered grandparent, another mental process, or a quark (Husserl, 1983).

Note that the Husserlian use of the words “intending,” “intentional,” and “intentionality” differs from the common-sensical understanding of the words “intention,” “intentional,” and their cognates. The common-sensical understanding of these words connotes purpose or goal-directedness. We shall be using the words “intending” and “intentionality” in the more general, Husserlian sense. For Husserl, as we have indicated, intentionality signifies the feature of every mental process to be an awareness of something. Hence awareness of something as a purpose or goal, including the experience of striving to attain a goal, is only a sub-class of intentionality in the more general, Husserlian sense. For Husserl, a simple visual perceiving of something or a feeling of remorse over a past deed would qualify as intentional in the sense that they are both experiences of something (Husserl, 1983).

It is crucial to see that, for Husserl, the object intended is never a part of or included in the mental experience of it. The object intended is simply a

correlate of the intending mental process. The object-mental process relationship is a relationship of correlation between two different realities; it is not a relationship of inclusion of the object in the mental process (as a part of that process) (Gurwitsch, 1964, 1966, 1974).

Many distinctions can be made among different kinds of intentionality. We would first like to distinguish between reflective intentionality and straightforward intentionality. By “reflective intentionality” or simply “reflection” we mean intending one’s own intendings, being aware of one’s own processes of awareness. In other terms, by “reflection” we mean focusing one’s attention on one’s own mental life. Reflection is thus necessarily self-reflection: my focusing on my own processes of awareness. Husserlian phenomenology as a mode of thinking always proceeds through reflection (Husserl, 1973b, 1983).

Reflective intentionality can be contrasted with straightforward intentionality. In my straightforward mental processes, I am aware of a number or a person, for example, but I am not reflecting on my awarenesses of the number or the person. Straightforward intendings are awarenesses of something while reflective intendings are awarenesses of awarenesses (of something). Reflective intendings are processes whose intended objects are other mental processes (and their intended objects). In reflective mental processes I intend my intendings of something while in straightforward mental processes I simply intend something.

It is important to recognize this distinction because henceforth we shall be moving solely within a reflective attitude. Phenomenology is carried out exclusively from a reflective standpoint. Phenomenology is never done “straightforwardly.” In other words, the phenomenologist is always describing mental life and its experienced objects; he or she is always describing “intentionality,” the correlation between intending processes and their intended objects. Phenomenology is never a straightforward description of some experienced object, a description which, because it is carried out straightforwardly, remains unfocused on the mental process experiencing it (Husserl 1973b, 1983).

Transcendental Epochē

We shall now undertake a line of reflective reasoning that will lead us to the transcendental epochē.

If I reflectively examine my own experience, what I find is that I experience myself and the world as really existing entities. That is to say, the mental life I find reflectively is a mental life which believes that the objects and people it encounters exist independently of it; these things are experienced by me as existing “in their own right,” in a real world apart from me. Moreover, I experience myself as a real part of this larger, encompassing whole, the real world. My being, as an embodied, experiencing subject, is embedded within and dependent upon the being of the world. I am simply one worldly being among many others (Husserl, 1973b, 1983; Gurwitsch, 1966).

If I reflect further on this world and the things in it, I begin to notice that they are given to me through multiple mental processes occurring in my mental life. I also begin to notice that it is only by virtue of these multiple mental processes through which worldly things are given to me that these things exist for me at all. In this sense the existence of these things for me is dependent on these multiple mental processes: things would have no being or meaning for me unless they were accessible to me through processes occurring in my mental life. Hence I could never experience things or arrive at any beliefs or notions of them unless they were accessible through my mental life. My mental life thus turns out to be the medium of access to whatever may have existence or meaning for me (Gurwitsch, 1964, 1966).

If I reflectively analyze further the mental processes through which things are made accessible to me, I notice that a thing is experienced as an enduring thing only because it is given to me through a multiplicity of mental processes as the same thing. The many mental processes coalesce in such a way as to produce a unity in the object. The problem of the one and the many thus emerges here, not as a metaphysical problem, but rather as a transcendental one: How does it happen that, through multiple mental processes, the same thing is experienced? Husserl, following Kant, called this problem of how many mental processes produce a unification in the field of experience “the problem of synthesis”: many mental processes are synthesized together as being experiences of a persisting thing, and it is only through a whole array of such unifying and relating syntheses that a world of identical and enduring objects can come to exist and continue to exist for me (Husserl, 1973b, pp. 39-43).

Let us illustrate this notion of synthesis with a simple example. Suppose that I look out of my window one day and see a red sports car. And suppose that some days later I look out of the window and see a car. Now if this object has the same color, shape, and style as the car observed earlier, my mental life will

perceive this car as the same as the one I saw a few days earlier. My previous perceptions will be automatically joined with my present perceptions to be perceivings of the same car on two different days. This is what Husserl calls a “synthesis of identification” or “identifying synthesis” (Husserl, 1973b, p. 39-43), and it is for him one of the most fundamental kinds of synthesis. It occurs because of the similarities of the color, shape, and style of the perceived object. Like is synthetically joined with like, and through this synthesis identity is perceived (Husserl, 2001). If this synthesis failed to occur, the objects perceived on the two different days would not be perceived as the same object. The ongoing identity of perceived objects, then, depends upon ongoing syntheses.

Just as we said earlier that the world can be seen as dependent on the mental processes through which it is given, we can now expand this thesis and claim that the continuous existence of the world and its objects for me depends upon continuing syntheses of mental processes in my mental life. If these syntheses should cease to occur in my mental life, the ongoing existence of the world and its objects would cease for me (Husserl, 1973b, pp. 17-18).

We are now in a position to define a crucial Husserlian term, “constitution.” Constitution is merely another way of referring to synthesis. To say that an object exists for me by virtue of the synthesized mental processes through which it is given is to say that these mental processes “constitute” the object. There would, then, be no world of objects for me if my mental life did not continuously constitute that world. And we can say, correlatively, that the world as it exists for me is a constituted product or constituted achievement (*Leistung*) of my mental processes. In brief, mental life can be viewed as world-constituting. To regard mental life in this way is to regard it from a transcendental viewpoint. A mental life so viewed Husserl calls “transcendental mental life” (*transcendentale Bewusstsein*). Transcendental mental life is thus world-constituting mental life (Husserl, 1983, 1973b).

We want to avoid misunderstanding by asserting explicitly that when we say of mental life that it “constitutes a world,” we are not speaking metaphysically. That is, we are not saying that mental life somehow really brings the world into being. When we speak of “world-constitution,” we are speaking transcendently: we are concerned exclusively with the conditions for the possibility of experiencing a world of objects. We are thus speaking of “the world as experienced”; Husserl would say “the world as intended or meant.” Consequently, we are not speaking of “the world in reality.”

To regard the mind and the world from this transcendental point of view is, moreover, to have performed the transcendental epochē. The epochē is the path of reasoning we followed thus far while each of us reflected upon his or her mental life. Following that reasoning we reflectively noticed certain features of our mental lives. Now in order to remain close to Husserlian usage, we must say that performing epochē is the path that leads us to transcendental reduction; reduction, in other words, is the result of carrying out the epoche. Transcendental reduction is a certain reflective viewpoint on the mind-world relationship. This viewpoint has been reached through the process of epochē. What, then, is this reflective viewpoint of reduction? Within this viewpoint the world has been “reduced” to a constituted product of mental life. The world is no longer assumed to be a totality of realities existing in themselves, i.e., independently of mental life. The world is now seen as dependent on mental life in the sense of depending for its meaning on being constituted by the synthesizing processes of mental life. And my mental life has been reduced to the constituting source of whatever has meaning for me (Husserl, 1983, 1973b; Gurwitsch, 1966).

Since all worldly realities are now regarded by me as depending for their meaning upon my constituting mental life, I recognize that my own meaning as a worldly being also depends on these processes of constitution. I experience myself as one worldly being among others because my mental life has constituted me as such a worldly being. Or rather my mental life has constituted an entire world of objects, and in the process it has constituted me as one of these objects among others. My worldly being is thus a constituted being (Husserl, 1983).

We can now understand what Husserl means by “the natural attitude.” Prior to performing the transcendental epochē, I lived in the natural attitude. The natural attitude is the attitude in which I simply assumed that the world existed in its own right and that I myself existed as one being within this world among others. Now I have come to realize that this “assumption” was the result of constituting processes in my mental life. Because my mental life had previously constituted a world and in the process constituted me as a real part of this world-whole, I simply took it for granted that this world existed independently of me and that I existed in it as a part. The natural attitude is thus a constituted achievement of mental life: it is the attitude I have come to have toward the world and myself as a result of habituated ways of perceiving the world and

myself. But these “habits” were built up through my constitutive history (Husserl, 1983).

It might be illuminating at this point to delineate the neurological components of the brain that underlie these constituting mental processes. In the past twenty years neuroscientists have gathered ample evidence that the formation of such “habits” during a person’s “constitutive history” require structural alterations in the person’s brain. This neural restructuring, or “neuroplasticity,” occurs through small synaptic changes that take place whenever neural networks process information (cf. Spitzer 1999). Neural restructuring takes place on different scales of space and time. It ranges from fast synaptic biochemical changes that occur within milliseconds of coincidence detection of pre- and postsynaptic activity to long term restructuring of large neural networks.

Examples of habit formation taken from everyday life are instructive. A person learning to read Braille becomes more and more experienced with tactile sensations; and at the same time his or her brain changes. The space of the somatosensory cortex devoted to the processing of touch sensations from the right index finger becomes larger by an order of centimeters (# 1993). As persons learn to play the violin or the guitar similar changes occur in the somatosensory map coding for the left hand (# 1995). Furthermore, musicians have a much larger primary auditory cortex. It is presumed that this is for an enhanced and more finely grained processing of tones (# 2002).

The brain appears to possess its own generalizing capacity. It can be thought of as a device that extracts general rules from the manifold individual experiences that it processes. All experiences are processed by the brain in the form of fleeting patterns of electrical excitation of neurons. Whenever patterns are processed, tiny changes in the connective strength between synapses occur, and it is precisely these changes that underlie the formation of internal representations of outside structures.

As a result of these brain changes, my habitual ways of constituting the world and myself as a worldly being structure all of my experience. Consequently this habitual way of viewing reality continued to function when I initially began to phenomenologize by reflecting on my mental life and its intended objects. When I first began to reflect on myself, my reflection occurred in the natural attitude. But as I came to notice that this world and my own worldly being were intended correlates of my synthesizing mental processes, I came to realize that the world and my own mundane being depended for their

continued meaning on the mental processes through which they were constituted as such. Having now disclosed this transcendental dependence of the world on my constituting mental life, I can refrain from assuming that the world exists independently of my experience. Such a refraining from assuming the independent existence of the world as I continue to reflectively examine my experience of it, Husserl called “bracketing.” If, as I reflect, I refrain from living in the natural attitude, then I can live in a “transcendental attitude,” an attitude of transcendental reduction; and from within this transcendental attitude, I can analyze the various synthesizing processes through which my mental life constitutes a world (Husserl, 1983).

This bracketing of the natural attitude is not a straightforward refraining from believing in the existence of the world and its objects. It is rather a refraining I as a phenomenologist carry out in reflection on my mental life and the world intended by my mental life. For this is a refraining which I perform precisely in order to reflectively examine the constitutive functioning of my mental life. I want to examine this constituting mental life in detail without assuming that it is a real part of a larger real world. I want to examine this mental life without this assumption because I want to observe and describe the synthetic processes whereby this worldly reality comes to be constituted. From a stance outside of the natural attitude, I want to reflectively examine mental life so that I can see how its natural attitude comes into being. Hence it is the reflecting phenomenologist who performs the transcendental epochē, and it is the reflecting phenomenologist alone who then lives in the transcendental attitude (Husserl, 1983).

Any human being may, of course, doubt the reality of what they experience. They may and do experience such doubts often enough. I may come to doubt that the computer in front of me is real. Indeed I may even straightforwardly doubt that the whole world is real. Moreover, I can neutralize my belief in the reality of the experienced world; i.e., I can straightforwardly experience the world without having any belief one way or the other regarding its reality. But this is not transcendental epochē or bracketing. People with mental disorders may be profoundly uncertain of the reality of what they are experiencing. They may experience something, say, an automobile, neither believing nor disbelieving in its reality. They may perceive this automobile while “suspending judgment” regarding its reality. But they are not thereby performing a transcendental epochē.

Phenomenological Unbuilding (Abbau)

We shall now return to the specifically phenomenological attitude and follow it further. As a reflecting phenomenologist I have now recognized the constitutive functioning of my mental life. I can now begin to trace carefully just how this constituting occurs through various synthetic processes. Husserl maintained that if we do this, we shall sooner or later notice that these synthetic processes are layered or stratified. That is to say, certain kinds of synthetic processes presuppose other, more fundamental kinds. Suppose, for example, that I am holding a rock and I let it loose. It falls, hits my foot, and I feel a sharp pain in my foot. At one level of mental life – let us call this stratum (b) – these events were experienced as a causally related sequence of events. In other terms, a multiplicity of mental intendings were synthetically joined together so as to be experiences of a causally connected chain of events.

But in order for this stratum of experience to occur, another level was presupposed: at a more basic level of mental life – we shall call this stratum (a) – my hand, while it moved, was intended as an identical object, and the rock, while it fell, was intended as an identical object, and my foot, as it began to experience pain, was intended as an identical object. Therefore, at this level a multiplicity of mental processes intended my moving hand as the same object through time; another multiplicity of mental processes intended the falling rock as the same object through time; and yet another set of mental processes intended my foot as the same object as it began to hurt. Hence stratum (b) could occur in mental life only on the basis of stratum (a). Husserl would say that stratum (b) “was founded on” stratum (a). The two strata thus exist in a founded/founding relationship to one another.

Husserl would unearth several other strata here. At the lowest layers of mental life he would locate what he calls “the time internal to mental life” (*innere Zeitbewusstsein*). At these lowest strata, present intendings are synthesized with previous intendings through what Husserl calls “retendings” and these same present intendings are united with future intendings through “protendings.” By virtue of these processes automatically intending one another as they at the same time intend objects, mental life takes on continuity and development. Here we cannot trace the *Abbau* of mental life back down to these levels. We have mentioned the strata we have only in order to illustrate what we mean when we say that world-constituting mental life is layered or stratified (Husserl, 1973a).

Now Husserl thought that for purposes of phenomenological analysis one can systematically unbuild these founded/founding strata, carefully describing the constitutive achievements that are distinctive of each. One carries out such an unbuilding by describing a particular stratum thoroughly and then abstractively disregarding it and moving down to the stratum on which it is founded. For example, the phenomenologist would fully describe the synthetic joining of the multiplicity of experiences which constituted the sequence of events as causally related, and then she would abstractively disregard this level of causal connectedness and examine separately the mental syntheses by virtue of which each object – the hand, the rock, and the foot – was experienced throughout the changes occurring in it as the same object. A complete phenomenological *Abbau* of world- and self-constitution would consist in a description of all the manifold strata of synthetic intentionality in the order in which they found one another. For our purposes in this chapter we would like to draw the reader's attention to only one, very important difference in these intentional layers (Husserl, 1973a).

The higher layers of intentionality are characterized by the fact that they are actively generated. That is to say, the higher strata of intentionality would never occur in mental life if some agent living in this mental life did not actively and purposefully produce them. Other, lower strata of intentionality occur automatically or passively. That is to say, they occur even though no agent actively brings them about. This agent who lives in the higher strata of mental life and who actively brings about these mental processes Husserl called the "ego." The "ego" of which Husserl speaks, then, is an agent who inhabits certain strata of mental life, namely, the upper strata of mental life. The ego is that agent in mental life who attends to or focuses on objects; the ego is the thematizing agency in mental life. Notice that "ego" here is not simply another name for mental life as a whole (Husserl, 1973a, 1983).

The lower strata of mental life are ego-less: there is no ego living in them and actively generating them. The lower layers of synthetic intendings thus arise "on their own," i.e., passively, as Husserl would say, or automatically, as we would prefer to say. The most basic constituents of the world and self are constituted automatically. We might say that the most fundamental make-up of reality is constituted by mental life "behind the back" of the conscious ego. Since it is the ego who focuses on objects, automatic mental life intends the surrounding field of awareness. The ego attends to objects which appear as

themes against a horizon or background of which mental life is automatically aware (Husserl, 1983).

Experimental neuroscience has studied perception, including the kind of perception in which the ego thematizes or attends to an object. Those investigations are beginning to delineate precisely how mental life is restructured automatically, i.e., without our being aware of such restructuring. For example, (cf. # 2002) in an experiment using functional magnetic resonance imaging, subjects were shown a completely random succession of circles and squares on a screen, each for two seconds. Subjects were told that the sequence was random, and that they simply had to watch the stimuli and to press one of two buttons, one whenever they saw the square, the second upon viewing the circle. There were more than sixteen hundred such circles and squares. Any random sequence contained short strands of subsequent stimuli that appeared to be in a specific order. The order, however, was detected only automatically; it was not thematized by the subject. For example, if four squares appeared in a row, automatic mental life detected a rule and, below the level of the thematizing ego, protended yet another square. Accordingly, the subject's reaction times decreased with the number of repetitions. But configurations other than repetitions are also automatically detected. For example, if there was a sequence of subsequent interleaved circles and squares, automatic mental life, upon perceiving a square, will protend the coming appearance of a circle. In short, whenever an order appeared within the otherwise random sequence, automatic mental life registered this order and this led to a decrease in response time for the next stimulus that appeared to follow the order. It also led to an increase in response time if the stimulus did not follow the order. When the subject's brain scans were analyzed following the experiment, it turned out that small regions in the frontal lobe had become activated when orders were violated and that such activation had depended parametrically upon how well the sequence had been established, i.e., on how often the apparent sequence had appeared before the crucial stimulus. Activated regions of the brain had increased their activity in a predictable manner: there had been a slightly higher activation after a series of seven than after a series of six stimuli. Such data imply that the brain automatically takes into account what has happened twelve to fourteen seconds before its current stimulus and responds accordingly. All this occurs, of course, "behind our back."

At the lower layers of intentionality, therefore, mental life automatically constitutes an ordered world. World-space and world-time, to take two notable

examples of large scale order, are automatically constituted. The active ego finds itself living in a world that has “always already” been (pre-egoically) constituted as spatially extended and temporally enduring. Moreover, automatic mental processes also constitute a world-causality, another pervasive form of order. The ego can thus turn to and thematize objects and events that occur within these encompassing pre-constituted orders.

Automatically constituted space, time, and causality are not the space, time, and causality of science, of course. All scientific conceptions must be actively constituted by egos. Hence the space, time, and causality that are automatically constituted are pre-scientific. Scientific conceptions of space, time, and causality are, however, built-up on the pre-given basis of pre-scientific experiences of a more fundamental space, time, and causality. Scientific space, time, and causality must be constituted through egoic acts of idealization, formalization, and mathematization performed on pre-scientifically experienced space, time, and causality (Husserl, 1970; Gurwitsch, 1974).

Since mental life, below the level of the ego, automatically constitutes a spatially extended, temporally enduring, and causally ordered world, we may say that the ontological structure of reality is automatically constituted by mental life. The ego, living at higher strata of this same mental life, experiences this ontological order as pre-given, as “always already there.” But this basic ontological order is experienced by the ego as pre-given only because it has been previously constituted at lower levels by automatic, pre-egoic mental life. The ego can thus plan, deliberate, choose, and act all on the basis of a world whose objects exhibit meaningful identities and familiar relationships to one another. The activities of the ego presuppose an existing world whose basic ontological structure is self-evident (Husserl, 1970).

In the process of automatically constituting the world as spatially extended, temporally enduring, and causally ordered, mental life automatically constitutes itself as a real part of this larger world. Hence mental life comes to situate itself within encompassing spatial, temporal, and causal relationships. Mental life thus automatically mundanizes itself: it constitutes itself as one worldly entity among others and as located within the same worldly connections of space, time, and causation that encompass other worldly entities. The “being-in-the-world” of Dasein which Heidegger deems ontologically irreducible Husserl would view as a constituted phenomenon: constituting a world, mental life co-constitutes itself as “being-in-the-world” (Heidegger, 1962). We would like to emphasize that, for Husserl, all of this occurs in the lower strata of mental

life, i.e., the layers of intentional processes below the level of egoic involvement (Husserl, 1983).

The Common-Sense Lifeworld

The lifeworld occupies an intermediate place in the constitutive strata of mental life: some components of the lifeworld are constituted purely automatically and other aspects are actively constituted. Husserl does maintain, however, that the domain he calls the lifeworld is constituted pre-scientifically (Husserl, 1970). In order to distinguish human experience within the lifeworld from scientific consciousness, we shall, following Alfred Schutz, refer to experience within the lifeworld as “common-sense” (Schutz, 1962).

Common-sense experience in the lifeworld occurs at both active and automatic levels. All speech acts, for example, must be produced by an ego; language must be actively constituted. Automatic intentionality, on the other hand, is pre-linguistic or, as Husserl says, “pre-predicative.” Common sense is composed of both linguistic and pre-linguistic levels of experience. Consequently, there is much that common-sense “knows” that is “known” “behind the back” of the ego; there is much that common sense “knows” that has never been put into language. And still this extensive pre-linguistic “knowledge” must be constantly deployed as we interact with one another and carry out our everyday tasks in the lifeworld (Schutz, 1962).

Central to our existence in the lifeworld is our intersubjective experience, i.e., our interaction with other people. My mental life constitutes certain aspects of other people automatically, i.e., through lower level synthetic processes. If we employ the German word, *Verstehen*, to refer to our understanding of other people as embodied, experiencing subjects, then we may speak of a pre-scientific, common-sensical understanding (*Verstehen*) of other people; and we may say that a significant portion of it is pre-linguistic. Other aspects of other people, however, my ego must constitute actively, for example, through engaging in conversations with them. The speech of the lifeworld, the language of common-sense, is nontechnical, natural language. Much of the meaningfulness of natural language depends on the pre-linguistic meaningfulness that people and things already have for us in our common-sensical understanding of them (Husserl, 1970; Schutz, 1962).

The above sketches of the phenomenological methods of *epochē* and

unbuilding along with our brief phenomenology of the lifeworld will perhaps suffice as we now attempt to apply them the two individuals with schizophrenia depicted at the beginning of this essay. First, however, we shall examine a third case of a person suffering from this disorder.

A Phenomenological Approach to Schizophrenia

S.A. is now fifty-six years old. He was hospitalized for the first time thirty-one years ago “after an unhappy love affair.” At the time, he was experiencing frequent auditory hallucinations and paranoid delusions with persecution themes. Over the ensuing ten years, the patient underwent numerous hospitalizations. Eventually, neuroleptics became a routine part of clinical care and he was treated with these agents, but he refused all medications after each discharge and settled into a pattern of living that has persisted until the present day. His contacts with others are limited to his mother and the psychiatrists whom he sees episodically. He does nothing but listen to the radio, to “professionals of speech” who are able to speak about principles of life; and he writes his own “principles” on little scraps of paper. Gradually he became more stable “by following the principles.” He introduces himself as a “philosopher” and always has a small bundle of notes that represent the latest copy of his “principles.” No delusions have been noted in his file for over 20 years; at most there are brief periods of anxiety that bring him to the outpatient mental health service when “a new idea brings disorder” to his principles. He explains, “My principles allow me to effect a rational reconstitution of my biography after the event.”

He is now capable of a stable mode of daily living – his routines and behaviors are best characterized as idiosyncratic rather than as negligent. When his mother went to hospital, S.A. proved perfectly capable of living alone and had some contact with neighbors. His philosophical principles are classified into three sections: 1) “natural method,” 2) “psychology,” and 3) “corporal ergonomics.” The “natural method” is a “rational method” of knowledge that involves “the pure observation of others and inanimate objects on the basis of intuition.” It consists of two principles: a) “people should take inanimate matter as a model in order to constitute their firmness and the rationality of their movements,” and b) “what is essential to balance is the resistance of the body in relation to the forces of the environment.”

His “psychology” begins with self-observation wherein he describes himself as “schizophrenic” on the basis of his “fundamental fatigue”: “I

remained lying down for two years; I was overcome by a basic psychoasthenia. Then I sought to cling to something. I thought: why stand up? I clung to the reason why we stand up. Standing up: that gives a form to the desire to live. Life is made up of simple principles... these ideas come to justify my right to be here... I lacked the force that you need to make yourself heard by others and which makes things always seem so obvious to others...." S.A.'s psychology is composed of simple numbered principles, for example, "1. for others life is simple," "7. principle of the least effort," "12. mental health is a spontaneous exchange with the surroundings and an initiative of the self," "17. schizophrenia is asthenia," "22. an identity is necessary for everyone," "32. the schizophrenic has lost sovereignty over himself; he is obliged by his illness to hang on to simple principles," and "47. tranquility and renouncement." He defines himself as "someone apart, an asthenic philosopher."

We maintain that much sense can be made of these three cases if they are understood as exemplifying a weakening of the syntheses that occur at both the higher and the lower strata of mental life. Both the active syntheses that must be performed by an ego and the automatic syntheses that occur "on their own" below the level of egoic involvement are weakened. Thus the ego finds it difficult to actively "put things together" because its own ability to think has been weakened. Moreover, this weakness occurs precisely when the ego faces what is already an all-too-burdensome task: namely, the rebuilding of a world that has been unbuilt because of the weakening of even the most basic automatic syntheses. And because these most basic automatic syntheses are the ones that constitute the ontological structure of the spatial, temporal, and causal world, their weakening leaves the ego with a difficulty that would prove staggering for even a strong, healthy ego: namely, actively re-conceiving and explicitly articulating the most fundamental principles of being and human life. The difficulty of the task for a weakened ego is therefore all the more daunting.

These phenomenological claims can be related to neurobiological ones. The dopamine system in the brain has come to be seen as playing a crucial role in the pathophysiology of schizophrenic experience. The dopamine system consists of a few thousand cells and resides in the ventral tegmental area (area A10) of the brain. It sends fibers to the nucleus accumbens (a part of the limbic system) and to the frontal cortex. When this system is stimulated in normal subjects as well as in individuals with schizophrenia, dopamine is directly and diffusely released in the frontal cortex; and at the same time dopamine release in the nucleus accumbens triggers neurons that release endogenous opioids.

Variations in the pattern of such release have been associated with schizophrenia.

In the past five years neuroscientists have learned that dopamine is part of the brain's reward system. Whenever something positive happens, this system becomes active. Early neuroscientific methods required a very strong "positive stimulus" to reveal this effect, e.g., the reintroduction of intravenous cocaine to a cocaine addict who was in prolonged and absolute withdrawal ("cold-turkey") (Breiter 1997). More recent investigations demonstrate that the same system is activated in normal human beings after eating chocolate (#2001), hearing nice music (# 2001), winning a game (#1998), and even looking at an attractive face that looks back (# 2002)

A seminal study in animals published in 2001 disclosed in addition that these same neurons signal the importance of a stimulus (Schultz et al. 2001). All organisms are bombarded with stimuli and have to sort out the important ones from the unimportant. In the 2001 study, the dopamine system was shown to perform this "sorting out" function. The dopamine system burst upon the occurrence of a salient, important stimulus, but it remained silent if the stimulus did not contain any new information. In other words, the dopamine system was able to calculate saliency and assign "meaning" (i.e., it fired) when some stimulus configurations were received, and it remained silent (i.e., it did not fire) when other stimulus-configurations were received. From this study, we may conclude that dopamine is intimately coupled with the automatic bestowal of meaning.

In schizophrenia, this system is no longer appropriately fine-tuned. It rather becomes overactive or underactive. If it is too active, many things become salient even though they in fact are not; that is to say, meaning is assigned to all kinds of trivial stimuli. Symptoms such as delusions and hallucinations can be understood within this framework. But just as importantly an underactive dopamine system no longer produces much (or any) meaningful experience; and the world becomes uninteresting and boring. The world is experienced as not worth the effort of getting out of bed and confronting from day to day.

Notice that the dopamine system also operates "behind our back"; i.e., it is correlated with the automatic levels of mental life. It furnishes the ego with pre-given, meaningful raw material upon which it can act. It can thus be seen that a patient whose brain suffers from a dysfunction of this system must piece together egoically that which is normally pre-egoically constituted (i.e., automatically synthesized). Furthermore, we can recognize how the activities of

the ego are weakened by a withering of automaticity: a weakened ego suffers from a double burden since it must do more with diminished capacity.

The Unbuilding of Automatic Constitution

Let us now phenomenologically examine the weakening of the automatic syntheses. Because the automatic synthetic processes which normally constitute the common-sense lifeworld are weakened in schizophrenic mental life, the space, time, and causality of the lifeworld undergo a de-structuring. The mental life of S.A., for example, is no longer able to automatically constitute much of the pre-linguistic order of the lifeworld, and for this reason his linguistic acts lack the pre-structured ground of meaningfulness on which they need to draw. Consequently, S.A. is driven to egoically formulate and consciously adhere to his numerous “principles.” These egoically constructed “principles” perform for him the structuring function which, in normal people, is achieved through pre-egoic, automatic intentionality. S.A.’s ego must actively take on the work that is accomplished “behind the back” of the normal ego. Hence his ego must engage in “rational reconstruction.” This rational reconstruction has its own specific method: “the pure observation of others and inanimate objects on the basis of intuition.” Since it is the very make-up of the world that has undergone a de-structuring in S.A.’s experience, he must become a “philosopher”: he must rationally reconstruct the underlying principles that impart order to the world.

S.A. is aware that for other people the lifeworld makes far more immediate sense than it does to him. He writes, “things always seem so obvious to others” and “for others life is simple.” For others, i.e., normal people, things are obvious because their mental processes synthetically coalesce in such a way as to automatically constitute meaningful, enduring, and familiar objects. As a consequence, the actions of normal people can presuppose a pre-given world, a spatial, temporal, causal, and social order that their mental lives consistently constitute. Hence “mental health is a spontaneous exchange with the surroundings and an initiative of the self.” The actions of normal people appear to S.A. as “spontaneous” because normal people have no doubts about what things are: their mental lives automatically constitute a structured world of objects whose meanings are “obvious.” For S.A. the meanings of objects are not obvious, and therefore he is not capable of “spontaneous exchanges with the

surroundings.” Their meanings are not obvious because the processes in his mental life do not automatically coalesce into unified syntheses.

For normal people this intersubjectively constituted world does not vary in its basic ontological structure. Because S.A.’s mental life does not automatically constitute this same world for him, he cannot presuppose its basic invariant organization whenever he thinks, plans, or acts. Therefore, S.A.’s ego must shoulder ontological tasks. Shouldering such tasks would be an enormous burden for even a normal individual, however. Human beings are not capable of imputing a fundamental ontological structure to a reality which lacks it. If the world is to have a basic ontological structure, it must be automatically constituted by mental life. The human ego – even a strong, healthy ego—cannot on its own actively construct and sustain the basic organizational principles of reality.

Notice that for S.A. the automatic syntheses that constitute one’s own identity in the world have also been weakened. He writes, “an identity is necessary for everyone.” For most people this goes without saying; it, like most of common-sense, is simply taken for granted. But for S.A. it is a discovery. It is connected, we think, to S.A.’s other statements: “Then I sought to cling to something. I thought: why stand up? I clung to the reason why we stand up. Standing up, that gives a form to the desire to live.” For S.A. the desire to live has no obvious form. It must be synthetically joined to standing up in order to have form. Through actively standing up S.A. egoically constitutes for himself a place in the world. Something similar is found in R.A.’s need to build his “proverbial armchair.” His placement in the world is not automatically constituted by his mental life. Hence he finds that “I am lacking a seat in my life.” The only way for him then to acquire this “seat in life” is to egoically construct it.

We maintain that for the person with schizophrenia the world has been unbuilt. The *Abbau* which the reflecting phenomenologist imaginatively performs as she abstractively disregards particular strata of mental life has actually occurred in the straightforward experience of the person suffering from schizophrenia. Because the lower strata of mental life are not synthetically functioning or are functioning only weakly, the person feels threatened with a kind of selflessness and worldlessness. The person, in other words, experiences an “ontological insecurity” (Laing, 1965). In such a predicament, the ego must attempt to do what pre-egoic mental life fails to do: the ego must actively strive to impart a fundamental ontological structure to the given. This is what R.Z. is

doing when he explicitly states, "Time goes by, things do not change." R.Z.'s ego must explicitly attest to what his automatic mental life should constitute through its pre-egoic intendings, a world of objects enduring as the same through time.

Indeed, R.Z. must take photographs so that he can hold them side by side because only in this simultaneous presentation of the several photographs can the identity of the car be confirmed. The identity of the car is lost from day to day as R.Z. looks out his window: the different perceivings of the car are not synthetically joined with one another across this passage of time; automatic mental life cannot on its own bridge the temporal gaps. And consequently the car is not automatically identified as the same phenomenon. Lived time is time lost. As R.Z. writes, "I find time with photographs." Time and continuity through temporal change are not automatically constituted as basic ontological constituents of reality. R.Z. must egoically piece together the fragments of time captured in photographs in order to prove that the temporal continuity of things is real.

R.A. must egoically discover, formulate, and abide by his "proverbs" in order to inhabit a common-sense world with others. Normal people, because of habits acquired in everyday social interaction, automatically behave in ways that locate them in the lifeworld and enable them to navigate through it. But normal people would probably be unable to explicitly formulate the "rules" which constitute such common-sense. Common-sense is a "knowledge" underneath the conscious awareness of the ego. R.A. has lost such automatic common-sense. Hence he must rediscover it and, so that it will not elude him again, carve it in readable form on his armchair. R.A. finds it imperative, if life is to be possible, to literally build a "place" for himself in the world. And he can identify himself with this "place" by literally sitting in it. R.A. needs to establish this, his ontological placement in reality, because his mental life does not automatically do it for him, "behind his back."

In normal persons, automatic mental life constitutes a world and in the process constitutes itself as an enduring part of this world. With the onset of schizophrenia the constituted world and the constituted worldly self become unbuilt. This unbuilding of the world reaches down to the lowest strata of constitutive mental life: the layers of lived time. Lacking this ontological foundation which normal persons can simply presuppose as given, individuals with schizophrenia must assume a burden which no human being should be compelled to bear, the burden of actively constructing and maintaining an all-

encompassing structure in which events can make ordered sense and life can take a meaningful course.

The Weak Ego in Schizophrenia

The ego of the person with schizophrenia, however, suffers from a weakened ability to think and reason. S.A.'s "principle" number 17 affirms: "Schizophrenia is asthenia." And nevertheless there has been delivered over to this weakened ego the task of re-conceiving the basic ontology of the natural, social, and personal worlds. An ontologist out of existential necessity, S.A. labels himself "an asthenic philosopher." S.A. introduces himself as a "philosopher," and, like a true philosopher, he intently reworks and refines his "principles." He is a philosopher, however, who remains limited by his "fundamental fatigue." Hence it seems significant that his seventh "principle" reads "principle of the least effort."

The weakness of egoic activity can be seen throughout the three examples we have cited. The egos of R.Z., R.A., and S.A. must think at relatively concrete levels, levels that do not require much abstraction or theorization. When R.A. realizes that he lacks "a seat in life," he is able to devise a seat for himself only by building an armchair in which he then bodily sits. He is unable to conceive of a "seat" for himself in which he would have such-and-such a social position, perform such-and-such roles, be related in such-and-such ways to such-and-such people. That would require a grasp of what it means to be a member of society of which he is incapable. When S.A. feels the need to make sense of daily living, he is able to obtain principles for this only by listening to "professionals of speech" on the radio. His first principle states, "for others life is simple." He cannot comprehend that other people have an implicit understanding of appropriate ways to behave in certain situations and that this understanding is common to all members of society and that each member expects the others to conform to it.

Granted, much of the difficulty that people with schizophrenia encounter when they attempt to think results from the lack of a pre-structured world that has been automatically constituted. If one inhabits a world in which the causal relations among objects and even the continuous identity of objects themselves is uncertain, unreliable, and shifting, then it is difficult to speak about this "world" in a way that would make sense to others. In other words, the

unbuilding of the reality that we have depicted earlier leaves the ego with very little support for its thinking and planning. Nevertheless, we maintain that this absence of an automatically constituted foundation for the higher level activities of the ego does not fully explain the concreteness and simplicity of the solutions that R.Z., R.A., and S.A. laboriously conceive. Part of the explanation also lies in the weakness of the ego when it strives to reason. The ego's capacities for abstract conceptualization are too limited.

Implications for Therapy

The view of schizophrenic mental life presented here has definite implications for therapy. In the first place, special vulnerabilities beset the mental life of a person with schizophrenia. Others—including clinicians, relatives, and a caring community—must therefore take care to diminish the burden of vulnerability. People with schizophrenia often cannot handle the simplest aspects of their lives and therefore need help. But as our examples show, people with schizophrenia can and should have opportunities to re-learn and re-build normality. Of course, this must occur within humane environments which foster respect for the dignity of persons and appreciation of the human ability to grow beyond the limitations and obstacles imposed by illness, personal circumstances, and other people. More specifically, helpful approaches in clinical settings may include facilitating familiarity with crafts and arts, as seen with R.A.'s photography and R.Z.'s woodcraft. They may also include working toward re-establishing social connections, through group activities, programs, and therapy. Medications certainly play an important role in present-day therapeutic programs, but patients must not be overdosed with drugs that make them drowsy or, even worse, interfere with their motivation and emotion. It should be stressed that this is precisely what typical antipsychotic medications, such as chlorpromazine and haloperidol, can do, especially when used in high doses to maintain sedation and behavior control and to eliminate symptoms of illness. Therefore, schizophrenic patients should be treated with atypical antipsychotic medications, such as clozapine, risperidone, olanzapine, quetiapine, and ziprasidone, if they are to learn in new environments and if they are to stabilize new, individualized, and productive modes of world-constitution. The newer, atypical antipsychotic medications are presently given because they cause fewer acute motor side-effects and possibly fewer long term motor side-effects (tardive dyskinesia).

Within the framework outlined here, these medications should be administered because they enable the patients to experience the world more normally, that is to say, more meaningfully.

Conclusion

Schizophrenia is a complex kind of human experience. But, since it is a kind of human experience, an adequate study of consciousness must seek to illuminate this complexity. Hence we need an account of schizophrenia that fits it into a more encompassing theory of the mind. We have sought here to develop some of that general conception of human consciousness as well as the specific psychopathology of schizophrenia. The general conception of human consciousness we have taken from Edmund Husserl. On the basis of Husserl's notions of epoche and unbuilding, we have explicated different strata of mental life. We have focused especially on the distinction between those strata in which an ego is living and those lower, automatic strata that are ego-less. We then employed our phenomenological concepts in order to interpret the experiences of three patients suffering from chronic schizophrenia. We sought to show that the mental lives of these patients have undergone an "unbuilding" that can be conceived in Husserlian terms. In this way we tried to disclose the difficult and even dangerous existential predicament in which the person with schizophrenia finds herself. The individual with chronic schizophrenia, simply in order to exist, must directly confront and resolve ontological perplexities which those of us who are "normal" have handled for us by the depths of our mental lives which comfortably function "behind our backs."

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