Making Sense of Some Psychotic Symptoms

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In a well-known gestalt figure you may see either two faces or a vase, but it is impossible to hold both images in sight at the same time. It is similarly difficult to hold a dynamic and a physiological perspective on psychosis simultaneously. When I read Sech-ehaye, Fairbaim, and Searles, for example, I see only the faces, and say that disturbances in human relationships account for all the phenomenology of psychotic states. When, on the other hand, I read the works of neurophysiologists, I see the vase, and have no question but that altered neuronal structure and biochemistry may explain all the symptoms. In this decade there is an uneasy truce between the physiologists and the dynamic theorists. Everyone is rather hoping that, as we discover more about psychotic states, it will come out OK for everyone, that no one will be proven to have been foolish, and that no one will be out of a job. And, indeed, there are certainly many points of reasonable intersection between the two points of view. But there are also areas of genuine incompatibility, and I think we tend to downplay these differences. You just can't say comfortably that someone is reporting moving small figures in their visual field because their visual cortex is firing abnormally, with the abnormality founded in real cerebral pathology, and that the person was lonely and conjured the figures up for company. You can't easily say that someone is experiencing crawling sensations because their somatosensory region is being artifically stimulated, and that they are hypochondriacal.

During the last several years I have been looking at the temporal patterns of signs and symptoms in psychosis. Because I ask persons who have recovered from psychotic episodes to sort through cards bearing descriptions of these signs and symptoms, it has been to my best interest to see that the cards reflect the underlying disorders), which would tend to be placed in discern-able patterns, rather than reflect responses people give to the disorder. In the process of deciding which symptoms were most likely generated by the disorder itself, I have found it most useful to try to sight on one of the perspectives described above, the biological, and to see the ways in which psychotic experiences become more comprehensible with that approach. This is not to say that I do not believe dynamic factors play an enormous role in many, psychoses, but to say rather, that aspects of these experiences may not have been understood because the implications of a

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biological perspective have not been fully drawn out.

I. THE UNDERLYING DISORDER

Those symptoms which recur frequently in functional psychotic states (as perceived by observers and described in the many autobiographies written by ex-patients), and which are also seen in the auras of all epilepsies and the prolonged sequences of temporal lobe or complex partial seizure epilepsy, in the results of brain stimulation as reported by researchers such as Penfield, in the lesion investigations of Hans Teuber, or in the amphetamine-induced psychoses of Griffith, Ellinwood and others - these symptoms are likely to represent the underlying disorders.

Persons in psychosis describe their symptoms in strikingly similar ways, a similarity we would expect were these people reflecting on a common biological, probably neurological, process. So the symptom of **Heightened meaning** is described as follows:

Now the *least incident seemed vitally significant (Hennell, p.85) In Paris, before I realized that I was sick, there was a new significance to everything (Z. Fitzgerald, p.23, quoted in Mitford,p.105)*

I felt that there was some overwhelming significance in all this (McDonald, in Kaplan, p.175)

Everything was charged with immense significance (Coate, p.35) He then began to feel that everything had begun to take on enormous significance (Angrist, amphetamine psychosis, 1974, p.14)

Foreboding:

...a *foreboding of evil (Nerval, p.137) ...a premonition of coming disaster (Strinberg)*

...a terrifying idea about a coming world catastrophe (Boisen in Landis, p.448) I have the awful feeling that something awful is about to happen (Vonnegut, p.93)

Time changes:

/ sensed *with alarm that time was shortening (Martin, pp. 28-29) I had developed a sense of the foreshortening of time (Coate, p.29)*

Time seemed to stop altogether; the atmosphere was breathless, suspended and dead quiet (Dearborn, p.91)

Loss of depth:

Everything seemed two-dimensional (Stephan)

I see *things flat. Whenever there is a sudden change I see it flat. That's why I'm reluctant to go forward. It's as if there were a wall there and I would walk into it. There's no depth (Chapman's case,* ***#25, p.230)***

Lines of light:

Lightning appears to pierce the air on my right (Perceval, p.47)

...the ray of steely blue light (Davidson, p.87)

...distant streaks of light (Lang, p.1093)

Olfactory hallucinations, for example, are described as:

...a *soot-like smell (Schreber, p.98) ...the odor of smoke and scorched flesh (Jefferson)*

...the smell of her burnt up flesh (Green-berg, p.118)

...burning human flesh (Beers) ...smoked and poisoned corpses (Hennell, p.174)

...the totally decayed dead (Kroner, p.8) It smelted like rotting human flesh...It really is all psychological. That burning flesh smell is really all in your mind. (Stephan, p.154)

...the smell of burning...putrefying corpses (Davidson, p.146) These descriptions are a close match to the description Penfield (1954, p.109) elicited following stimulation of the olfactory area *the smell of burning rubber or some other stench;* the words of people with ulcinate epilepsy (Waxman and Geschwind), //Tee *burning rubber;* and tumors of the olfactory area (Jackson, 1958) *dirty burning stuff, and the odor of smoke of foetid character.*

This raw smell is comparable to the output of other primary sensory areas. So dots of light, circles, balls of fire, lines of light come from the visual cortex; bells, chirping sounds, sirens come from auditory areas; tingling, crawling, creeping, anaesthetic feelings from the somatosensory regions of the cortex. These quite "confined" brain outputs

are easy for me to accept as signs of a disordered brain.

There are problems with any attempt to rely on these symptoms exclusively. Cognitive events of a higher order, and many behaviors, are harder to ascribe with any confidence to this category of "primitives" or "release phenomena" evidence of the brain's working. An example of symptoms falling in the region between brain release phenomena and psychological responses is the set of symptoms characterizing fight (attack, self-attack) or flight (walking, running, with other automatisms such as nudity and spitting). Many of these may be elicited through the stimulation of a number of regions, including the posterior hypothalamus and the amydala; many may be also construed as panic responses to the very strange perceptions persons are experiencing as their psychosis progresses.

Another questionable area is the production of voices. Many people begin and end their auditory anomalies with the hearing of simple sounds, and the longer they hear these sounds, the more the sounds elide into voices. So:

In the beginning it was mostly nonsense, but as things went along they made more sense. Once you hear the voices you realize they've always been there. It's just a *matter of being tuned into them (Vonnegut,* p. 7 06) *Behind the far wall a discordant hum, like static, rose and filled the apartment...the sharp static mellowed into speech. (O'Brian, p.40)*

At various times, while my mind was hovering between reason and blank madness, voices from an unseen world came into my consciousness. The sounds, at first rhythmically unintelligible, swelled on the air to a crescendo of objurgations (Looms, p.62)

This movement from simple sounds to voices may be seen as either reflecting the progressive involvement of a new brain area (following, say, the pathway of a certain neurotransmitter), or reflecting the human mind's press for interpretation. Some people see moving dots of light; others say they see small people with candles. Is the same region involved?

The movement from simple to complex perceptions is important, as common diagnostic criteria for schizophrenia typically include only the interpreted perceptions (i.e. dots of light, tinnitus are excluded; people and voices are included). One study of hallucinatory modalities (Connolly and Cittleson, 1971) carefully excluded from the sample those persons who reported smelling cyanide, or something else clearly delusional. Clearly these researchers are saying that the disorder is one of mental construction rather than one of biochemical origin.

II. RESPONSE TO THE DISORDER

Should we look at it the other way around, and assume a neurological defects), the determinants of the various responses to similar biochemical or structural abnormalities then become an exciting area of exploration.

The onset of these brain changes is usually cataclysmic. Unlike the LSD taker, who is able to say why he is seeing the walls throb and turn unusual shades of purple, the person in "functional" psychosis has no explanation available. Many stay sufficiently clear headed to try to tell others that their minds are not working as they did before, that they are not hearing or seeing correctly, that they have unusual pains etc. Unfortunately many persons at this point in the psychosis are often labeled "crazy" for presuming to know something about the way their mind works, or are, more benignly, considered hypochondriacal. Consider this quotation from Hannah Green (1964, p.24). Frieda Fromm-Reichman has just asked her why she is "here" at the mental hospital, and she answers:

Clumsiness. Clumsiness is first and then we have a list; lazy, wayward, headstrong, self-centered...also a liar. That category includes subheads: False blindness, imaginary pains causing real doubling up, lying leg injuries, fake dizziness and unproved and malicious malingerings...Deborah thought she had spoken her real thought for the first time. It takes great stamina for a person to disregard a voice calling one's name, or not to be

disconcerted by a row of little men with hats on marching across one's room. A doctor's response that symptoms are "all in your head" is of no help. Jane Hillyer (1926), wrote:
The doctors, Mrs. W. and the nurses all endeavored to reassure me. They declared everything was alright. Though -now, what am I to believe - these people or my own senses? They say that letter is not written in three handwritings, and that I am not talking in all sorts of different voices...Well I can see for myself those different handwritings and hear myself unmistakenly talking in those other people's voices...Now what can it mean? Am I to believe what he says, contrary to the evidence of all my senses? That would simply be irrational. Mary Cecil is an example of a real heroine: she went to an orchestra rehearsal with her own personal devil hooting in her right ear "spraying capital letters" into the air. These events require a response, an interpretation or an action.

One important set of symptoms may be seen as people's attempts at symptom reduction. Persons who have stayed up all night, night after night thinking world-saving thoughts, or exchanging mysterious quantas of energy with someone else, or who feel their coordination going while a strange light hovers over the head of their acquaintances, often try themselves to right things by making changes in their diet, in their patterns of exercise and even in their body temperature. An unusual number, I seem to have noticed, become vegetarian, and develop a rather distinct aversion to meat (as do cancer patients, coincidentally). They may exercise more, or may try not to move at all, saying in each instance that they "felt better" if they did so. They may drink more or less alcohol or caffeine, and smoke more or less cigarettes than usual.

Some seemingly bizarre behaviors of persons in psychosis, when considered in the context of the full sequence, may be seen as efforts toward homeostasis. For example, the arousal that precedes fight, flight and compulsive posturing includes delivery of supplies of blood to the head that may cause headaches, and temperature changes. The attraction of psychotic patients for cold in the early part of the disorder may be seen as an effort to change this. Attempts to change one's temperature are quite striking: Vonnegut (1975), after running through the woods hearing wings beating about his head, reaches down into the snow and presses handfuls of it to his face. Similarly Schreber (1902) places his feet in the snow, or out a cold window, saying:
/ myself have often been forced to seek heat and cold...I.frequently clung to the icy trees with my hands for many minutes during the winter or held balls of snow until my hands were almost paralyzed. For some time...I put my feet through the iron bars of the open window at night in order to expose them to the cold rain. As long as I did this the rays could not reach my head...and I felt therefore, perfectly well apart from frozen feet (Schreber, pp.145-146) Milici and Von Salzan (1938) wrote of a client:
Consequently she wet her face and hair and held cold metals in her hands thinking that she could thus "draw the flashes away from her head." (p.656) She said, "I lifted a cold metal pot and the contact of that seemed to give me a little relief" (p.661) At this point I would suggest that psychotic conditions, rather than developing in persons with a common character structure, may be seen as bringing about changes in judgement, emotional needs, perceptual and cognitive capacities that reduce disparate persons to a more common denominator. I have been impressed by the range of ideosyncratic responses to common psychotic symptoms. We may wish to stick to certain ideas of the "schizophrenic personality" in order to keep people with this disorder as less of a threat to us, in order to minimize our fear of contagion, and to reduce pain at seeing so many competent people "felled like trees", brought into demeaning life positions.

If we assume that psychosis is a set of physiological disorders, the response of any

individual to psychotic signs and symptoms may be seen as depending on a variety of factors, including:

1. the character structure of the person; the typical defenses used; the rigidity of the self-concept.

2. the age of the person. Paranoid delusions are usually the product of a psychosis of later onset.

3. the rapidity of onset. Fast onset usually leaves less time for delusional development.

4. the brain regions involved. Some symptoms are harder to live with than others. Mark Vonnegut, for example, says that the changing sense of time was the most difficult.

5. the degree of preparedness. As I have said, the response to acid differs between someone who knows he/she has taken it, and someone who was given it surreptitiously.

6. the assistance available to the person; the presence of intimates to whom one may confide these frightening changes and receive comfort from them; the ability to take comfort from them.

Let us take the example of a person experiencing an olfactory hallucination. A person might be clear headed, know a lot about the brain and be able to say, "My olfactory area is being stimulated; there must be something wrong". This is not too far-fetched: John Lilly, after a more routine acid trip, began a psychotic period that included watching dots in his visual field. He then told the attendant that his visual cortex was being stimulated. They then called a psychologist, feeling that that was the craziest statement yet. Lilly, however, avoided any delusional interpretation. Others of more hypochondriacal orientation will remark that the odor is emanating from their body, while the more paranoid will claim that the F.B.I, or some exotic agency is sneaking the fumes into his room. Strinberg's responses are of special interest, as he began by reporting a rather benign odor, and then, as it continued for an unusually long time, began to say both that the odor had changed character (it was now the scent of decay), and that it was put there by his ex-wife. Consider also the various explanations people give for why they cannot eat. (By the time they are refusing altogether to eat, they are usually acutely confused, and the interpretations are fairly wild):

The "scientists" simply note that they don't eat:

/ refused to touch food...I ate reluctantly (Martin).

After six weeks I still had no appetite, still forced food down (Stephan, p.114). Some develop rather strained interpretations:

*Axel was here this evening. I told him that the food I have been given was so filthy I could not eat it...eighteen days of fasting and abstinence (Strinberg, pp.*99--*100).*

I felt better since I have not eaten meat. It arouses lecherous feelings (Nijinsky, p.77).

I refused to eat it because it was drugged (Boisen). Others appear depressed and guilty:

/ refused to drink water because it was unholy (Clark, p.476).

I had the feeling that I did not deserve the food that was brought to me although it was very welcome (Frasers case #3, p. 141).

I got the idea that in taking food I was in a sense eating the body of my youngest child (Anon, 1955). In these last examples one primitive of experience, the disruption of eating is given a variety of delusional interpretations. On the other hand, the existence of common primitives serves to generate delusions that are repeated across patients. Dynamic needs are sufficient to explain some delusions, but in those I am about to present, knowledge of the primitives helps an observer grasp how a delusion may be composed. Several themes will help illustrate:

The World as a Stage

From Marcus Aurelius to Shakespeare the world has been likened to a stage, and for many reasons. To the person in psychosis the world may literally lose its three-dimensionality, and so appear constructed as would be a stage:

...the paste-board scenery...the trees and hedges were of cardboard, placed here

and there, like stage accessories (Seche-haye, p.28)

I did not know whether to take the streets of Leipzig through which I traveled as only theatre props, perhaps in the fashion in which Prince Potempkin is said to have put them up for Empress Catherine II of Russia during her travels through the desolate country, so as to give her the impression of a flourishing countryside (Schreber, p.102) **The World Burning**

In a general sense, most persons in psychosis share the conviction that their known self and their familiar world have been destroyed. A number of persons who later became psychotic have been reported to have harbored over years the need for, the desire for such destruction, and this motivation may lie behind the theme of world burning.

The symptoms supporting the perception of the world as being destroyed by burning are a smoky light, sometimes in spiral columns, and occasionally, the additional presence of the olfactory hallucination of burning.

/ saw the whole horizon black with thick columns of smoke and I smelt the smell of burning and thought the great day of Judgement was actually taking place. (Davidson, p.46)*

She could see the sun glaring red through the black haze of air and space. It was as if some giant fungus had been puffed, exploded and now has left its billions of smoky pores filling the world. (Kroner, p.3)

At last I began to imagine that the final dissolution of all things was coming on thus, transferring the tumult of my own mind to external nature...It was my last look upon the earth that had once contained for me so much gladness and beauty. The rustling of the dead and dying leaves, the smoking light that lay over the landscape confirmed the impression

the sun's eye had a sickly glare

the earth with age was dim. (Anon, 1856, pp.30-31)

** Columns of smoke is reminiscent of Rossetti's images. Rossetti, who became increasingly paranoid and suicidal "often complained of a film as of curling smoke or effervescent champagne always before his eyes "(Bragman, 1936, p.114)* **The Pit**

The Pit is a less frequently encountered image, as it appears to spring from efforts to describe periods of partial and total unconsciousness, and many patients do not develop this severe a symptom. The Pit image contains the symptoms of falling, darkness and loss of consciousness, and, as it is often described as having yellow lights about it, simple visual displays.

/ fell into the pit yawning beneath me (Jefferson, p.37)

But Hannah Green, in **I Never Promised You a Rose Garden** (1964), developed the image in a more complex way. The Pit for her represented the place she fell to which lay beyond her hallucinatory/delusional land of Yr: *This time the fall was far. There was utter darkness for a long time and then gray-ness, seen only in bands across the eye. The place was familiar. It was the Pit.*

(P-51) One of her companion-gods, Anterrabae, seems to have been developed from this experience: he falls into the Pit - he is the "falling God" (p.63), he smells of burning (p.74), and he bears flashes of light, either in his hair or as a sheaf of sparks (p.212).

Will (1972) writes of his catatonic client that she speaks in a similar metaphor:

At about five years there was developed the concept of the Well - something like a cylindrical deep hole with glass-like black walls streaked with yellow. *At the top was an opening toward which one could climb by a ladder attached to the wall.*

III. CONCLUSION: Implications for Therapy

These considerations presented today have several implications for therapy work. First, it is crucial that a therapist be knowledgeable about and receptive to the variety of changes that occur in psychotic states. It

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is usually important for someone enduring such symptoms to share them with someone else, reviewing them in some detail. Second, the therapist may work to shortcut the building of delusional systems by concentrating on the nature of the underlying symptoms, and by ascribing their origins carefully.

There is now some debate among therapists as to the effect of paying such attention to symptoms. Some argue that this attention will either underscore a "sick role" or increase the likelihood of the symptoms' occurrence. There is no evidence to support such contentions. Hoffer and Osmond (1961), on the contrary, maintain that it is precisely the careful monitoring of their symptoms that gives patients a sense of adult control over their disorder.

It should be kept in mind that not all patients are willing to see all of their symptoms in such an objective manner, even under the best of settings. Some of the unusual experiences, especially those we tend to label "manic", are most precious to the person, and have given him or her new feelings of freedom and insight that do not "reduce" to objective viewing. A particularly moving description of someone conflicted by several ways of seeing one's symptoms is given by Dostoyevsk/s Prince Mishkin, in **The Idiot** (pp.258-259):

He *remembered among other things that he always had one minute just before the epileptic fir (if it came on when he was awake) when suddenly in the midst of sadness, spiritual darkness and oppression, there seemed at moments a flash of light in his brain, and with extraordinary impetus all his vital forces suddenly began working at their highest tension. The sense of life, the consciousness of self, were multiplied ten times at these moments which passed like a flash of lightning...Thinking of that moment later, when he was alright again, he often said to himself that all these gleams and flashes of the highest sensation of life and self-consciousness, and therefore of the highest form of existence, were nothing but disease, the interruption of the normal conditions; and if so, it was not at all the highest form of being, but on the contrary must be reckoned the lowest. And yet he came to an extremely paradoxical conclusion. "What if it is a disease?" he decided at last. What does it matter that it is an abnormal intensity, if the result, if the minute of sensation, remembered and analyzed afterwards in health turns out to be the acme of harmony and beauty, and gives a feeling, unknown and undivined until then, of completeness of proportion, of reconciliation, and of ecstatic devotional merging into the highest synthesis of life?...at that second, that is at the very last conscious moment before the fit, he had time to say to himself clearly and consciously, "Yes, for this moment one might give one's whole life!" then without doubt that moment was worth the whole of life.* It is important, then, for therapists to fully respect those with psychotic experiences, to believe them when they are describing changes in perception, drive, cognition and emotions, to use them as their own best doctors, and to convey to them, should they not have the belief already, a sense that their disorder is amenable to rational analysis.

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