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The Ocular Block

Schizophrenia has been a perplexing disease of diverse classification and proposed etiologies with equally diverse treatment approaches. Reich's discovery that ocular blocking and deep brain contraction was at the basis of this disorder was a major breakthrough in the understanding of schizophrenia as well as all character types with ocular armor. Since then, knowledge of ocular blocking has been extremely useful and productive in the orgone therapy of neurotic as well as psychotic disorders.

Clinical observations over the years, however, continue to suggest that schizophrenia is a complex entity which is not completely explained by simple reference to ocular or brain blocking. The exact nature of this blocking, where and how it occurs in the brain, its causes, the age of onset, and possible genetic predisposition are all factors about which there continues to be substantial controversy and little hard evidence. Reich's statement, for example, that the ocular block in schizophrenics occurs in the first ten days of life is not supported either by modern clinical observations, nor was it documented by Reich himself. It is now clear that "ocular blocking" covers an extremely wide range of qualitative and quantitative effects seen in clinical practice, from the severely disabled schizophrenic to the mildly contactless neurotic.

In this issue of the Annals we are pleased to present two articles, "Clinical Symposia" and "The Ocular Character," devoted to a discussion of the nature, causes and extent of ocular blocking, its clinical recognition and treatment. Two different theoretical positions emerge. The first, a more traditional orgonomic one, asserts that all schizophrenia (from the mildest, highly functioning case to the severely disabled hospitalized type) is due to similar ocular blocking mechanisms which differ only in degree; that is, the various forms exist on a continuum. The second viewpoint suggests that there are two (or possibly more) subgroups of schizophrenia which are qualitatively different, and that our diagnostic and treatment approaches need to reflect this difference. While the present articles do not attempt to settle this problem, they do serve to challenge existing ideas and stimulate more careful observation and theorizing. Asking the right questions is an essential precursor to discovery. We hope these articles will contribute to this process.

The Editor



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Studies of the Reich Blood Test in Cancer Mice

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Abstract

The results of 57 Reich Blood Tests in a cohort of 17 C3H/OUJ spontaneous mammary tumor mice are presented. Findings in tumor-free normals and tumor-bearing females are compared, and a statistical analysis of the energetic indices, i.e., the 1% time, GMA, and various other parameters, is made. While confirming the significance of certain observations previously made by Reich and the authors in human subjects, there are dissimilarities between the diatheses in the mice and human cancer that suggest the mammary tumors may not be the result of a shrinking biopathy.

Introduction

The present work was undertaken in an effort to characterize the Reich Blood Test in female mice with malignant tumors and to compare the results to those in animals from the same cohort before the development of tumors. Included are the results of tests in several males in whom tumors do not form. The hybrid strain C3H/OUJ (Jackson labs) was chosen for this purpose because of the females' tendency to develop mammary cancers spontaneously, usually after 26 weeks of life. It has been demonstrated that these growths are associated with a mammary tumor virus (MTV) that is transmitted from the adult to the suckling young via the mother's milk. The origin of the virus is unknown. Typically, the tumors are very well differentiated, tend not to metastasize, but may spread extensively by invasion. Presumably, the absence of secreting mammary glandular tissue accounts for the lack of tumors in the male, i.e., there is no target organ for the virus.

A second benefit from studying the Reich Blood Test in these animals is that it is a vital preparatory step for possible further research on the neoplastic process itself. For example, it may generate parameters by which the effects of T inoculation or organotic devices might be evaluated.

The third, and certainly not the least of our concerns in this work, was to afford ourselves the opportunity to compare the findings in the mice with what we have learned of the Reich Blood Test in human subjects; and further, it could offer some preparation for what we might see in human cancer patients with advanced disease. As will be seen, our results, plus a consideration of certain features of the neoplastic diathesis

1

in these mice, raise some questions about the applicability of these animals as an experimental analogue for the cancer biopathy in humans. Conversely, certain particulars of the mechanisms of oncogenesis in the C3H/OUJ mouse have caused us to reconsider our views on the origin of cancer in humans.

Materials and Methods

The initial cohort consisted of ten animals: nine retired female breeders and, by a fortuitous accident, a single mature male. In a month, a litter of six males and two females resulted, ultimately expanding the test group to 18 animals. On arrival (May 1985), two of the females already had small tumors. The mice were caged in groups of two or three and earmarked for identification.

Reich Blood Tests were performed at irregular intervals, ranging from a day to several months. While the original intention was to obtain as many tests as possible before the appearance of tumors so as to establish a baseline, we later elected to follow individual animals as closely as possible once they were discovered to have neoplasms. Tests were then done at shorter intervals to obtain longitudinal data, i.e., to follow the effects of tumor growth. Since it was desirable to have one operator do all the tests for the purpose of consistency, this meant working with these animals for extended periods. As the tumors developed in fairly rapid succession in all the females, the result was fewer tests in tumor-free females than we had hoped for. Having the 7 males for testing eliminated the time stricture in obtaining additional data for the tumor-free group.

Each animal was weighed prior to testing to the nearest 0.1 gram. The maximum length, width, and thickness of each tumor was measured to the nearest millimeter as a crude estimate of size. The linear measurements were multiplied together, and this product was termed tumor mass (TM). While this incorporates too much error to give an absolute value of the tumor mass, it does suffice for purposes of comparison. The

animals were examined every 5-7 days to detect the earliest appearance of tumors.

A cautionary note is necessary here regarding the saline medium utilized for testing. We have found that saline bottled in plastic containers produces anomalous behavior in the tests of both mice and human subjects. The findings include:

- an overall marked prolongation of breakdown;
- arrested breakdown or reversal of breakdown:
- 3. hemolysis of cells.

Returning to the use of glass bottled saline eliminated these artifacts, i.e., the tests progressed in the usual manner. The reasons for this effect are unclear.*

Test samples were obtained with the animal in a restraining chamber from which only the tail protrudes. All the mice were initially treated with a depilatory cream to remove the layer of scaly keratinized skin from the tail.** Thereafter, for each test, the tail was simply washed thoroughly in tap water and completely dried. The tail is punctured in the proximal third of the shaft with a Number 11 scalpel blade. In very sick mice it has been sometimes necessary to slice the extreme tip of the tail to obtain sufficient blood. This is the sole difference in procedure from that used to sample human subjects.*** The handling of the sample has been dealt with elsewhere (1:2).

- * There has been an increasing tendency of late for pharmaceutical companies to package products for intravenous infusion in soft plastic bags or rigid plastic containers, presumably because plastic is less expensive than glass, lighter for shipping purposes, and shatterproof. The plastic is considered to be so inert that it does not react with the contained fluids. For years now whole bank blood and blood products have been stored in plastic bags for administration. Our experience with saline packaged in plastic, while not necessarily impuning the safety of these infusions, suggests there is a definite effect from the plastic polymer.
- ** The scales of dry skin get into the sample and cause artifacts.
- *** Here the finger is punctured with an AUTOLET.

Results

A. Gross Appearance of the Animals

This evaluation included the condition of the fur, brightness of the eyes, overall mobility, and the presence or absence of visible or palpable emaciation or cachexia. Fine distinctions were not attempted so as to avoid bias. Rather, the animal was simply described as well or obviously sick whether or not it had a tumor. We were struck by the rapidity with which the tumors grew and the enormity of the tumor burden the mice could carry before becoming obviously and unequivocally ill. All ten females ultimately developed mammary tumors. The duration of the survival period from the point of detection of the tumor ranged from 24 to 104 days, with an average span of 60 days. It was our impression that animals with tumors of the pelvic and high thoracic mammae had shorter life spans; this may have been due to tumor impingement on respiratory and/or excretory pathways. Autopsies were not done, so this cannot be confirmed.

B. Gross Appearance of the Blood

The appearance of the blood as it emerged from the wound was evaluated according to color and cohesiveness in keeping with Reich's original protocol.

1. Color

Color was described in this study as bright or dark red. Other adjectives such as "dull," "cloudy," or "pale" were used when some particular quality was evident. Reich regarded the hue as informative with regard to orgone charge—bright red signifying a higher charge or "B" reaction, while a dark or purplish color was associated with a "T" reaction. In our mice, a different correlation was found. The results of the present study are summarized in Table 3.

2. Cohesiveness

In all 18 observations of the tumor-free animals, the blood issuing from the wounds formed erect globular droplets. Reich regarded this pattern of bleeding as

a sign of relative organotic vigor, i.e., part of the "B" reaction. Of 37 observations in our tumor group, 18 showed evidence of decreased cohesiveness, that is, the droplet appeared watery with a tendency to sag or spread out, this pattern being consistent with a "T" reaction. In those animals of the tumor-bearing group exibiting clear signs of debilitation, decreased cohesiveness was present in 13 out of 16 tests. On average, death occurred within 2 weeks of the appearance of this sign regardless of the condition of the animal upon its discovery. The record also shows that this sign can develop in as little as 5 days; that is, 5 days was the shortest interval between two tests, the earlier of which showed an erect droplet.

C. Microscopic Morphology and Dynamics

The blood of the C3H/OUJ mouse showed certain distinct differences in appearance in behavior compared to other murine types we have examined. The significance of all these characteristics is not entirely clear. However, several of them suggest the possibility of an inherent biophysical weakness in this strain.

1. "C" Cells

The term "C" cell was coined to describe the small, plump erythrocytes which are seen in various degrees in the fresh specimens. These cells appear as taut biconcave discs in which the cell frame looks incomplete so that it resembles, instead of an "O", a little "C". They were found in almost every specimen in the tumor group and were uniformly present in the nontumor group. With their sharp three-dimensional appearance, prominent orgone energy fields, and vividly blue frames crisply delineated from a typically small center, we considered them representative of a population of relatively vigorous erythrocytes. As the tests progressed, these cells would inevitably change into the more familiar biconcave discs with complete frames. However, this process was also accom-

panied by flattening, a loss of 3-dimensionality, and an enlargement of the center, with a decrease in frame-to-center definition. It seemed to us that these alterations corresponded to a loss of energy and turgor in the cell. When it occurred to us that the percentage of "C" cells might reflect the energetic vigor of the animal, we began to count their numbers in the 100 cell sample. Plotting these percentages against the 1% times and the delta-49, however, showed no correlation. Yet it was our strong impression that, in the very sick mice, the number of "C" cells was less (and they appeared to flatten out more quickly than in the normal and well tumor groups). As will be seen, the statistical analysis did confirm this (Table 1).

The "C" cells would indeed appear to be related to the health of the mouse. They are possibly the true normocytes for the C3H/OUJ hybrid. The "C" cell may simply be a genetic variant analogous to hereditary stomatocytosis as seen in human subjects.

2. Rapid Loss of Turgor and Shape

A rapid flattening out of both the "C" type and the usual biconcave disc type erythrocytes was observed in the tumorbearing animals. This was recognizable as an enlargement of the cell perimeter, a loss of definition of the frame from the center, and a paling of the frame from vivid aquamarine to grey-blue. These changes were frequently associated with unusual alterations in shape, e.g., round changing to polyhedral, stellate, amebalike or "frying pan" shapes, or single or multiple blunt spikes. Despite these distortions, these cells often did not degenerate bionously with any particular speed, frequently remaining free of vesicles beyond the end of the test (60 to 80 minutes). Hence, even in their presence, one might find "normal" 1% times and delta-49 values. Sometimes these forms might be present from the beginning, usually in

very sick animals with large and/or multiple tumors. In these cases, they were associated with borderline or abnormal 1% times. Some cells were also found to collapse or contract without undergoing bionous changes.

What was surprising was that all the findings described above were observed in the non-tumor-bearing animals—male and female—as well. Although these abnormalities were not quantified, and hence the tumor and non-tumor groups cannot in these respects be rigorously compared, our impression is that the difference between the two was only a matter of degree. Moreover, there was even an occasional instance in which the overall picture in a tumor mouse might look "healthier" than that of a particular mouse from the tumor-free group. We can say that a high incidence of aberrant forms seen initially or very early in the test was most commonly found in sick animals with a heavy tumor burden.

3. Other Morphologic Abnormalities

Most of the following findings also apply to both tumor-bearing and tumor-free groups. The fact that these and other features are shared by both groups, and in some cases associated with normal 1% times and delta-49 values, raises some doubts about the C3H/OUJ mouse as an experimental analogue for cancer as we see it in humans. This will be discussed further below.

- a) Eccentric cell centers and irregularities in frame width were seen commonly inasmuch as they are typical of the "C" cell. However, they were found in the other erythrocytes as well, and particularly in the sicker tumor group subjects.
- b) Variation in size and shape was most often present in the tumor group—particularly in the sicker animals. This has been recognized elsewhere as a significant parameter in the GMA rating of the Reich Blood Test.

c) Pallor of the frame color on initial examination was a rare finding and could only be seen distinctly in a few of the premorbid animals.

- d) Reduced 3-dimensional quality was seen in both groups, but most commonly in the tumor group, and most markedly in the sicker animals. Rated on a scale of 1 to 4, the majority of the tumor-free group was 4+—never less than 3+—whereas the tumor group was frequently 3+ or below. This was largely a function of the "C" cell population.
- e) Decreased central excitation was associated exclusively with very sick animals with a heavy tumor burden.
 It was not, however, a consistent finding.
- f) Narrowing of the orgone energy field was found commonly in the tumor animals, being observed in 31 of the 39 tests in this group and in every test in which the animal was clinically ill (14 of 14), while being noted in only 4 of 18 in the tumor-free group. As we have seen, the importance of this parameter, which was emphasized by Reich, is confirmed in this study.
- g) White blood cells appeared noticeably increased only in the sickest of animals. In many of the other tests, it was not uncommon to find not a single leukocyte in the entire field of view. Also, vividly ameboid WBCs and erythrophagocytosis were occasionally seen in premorbid tumor animals.

4. Features of Bionous Breakdown

In keeping with the morphologic abnormalities of the erythrocytes in this strain of mouse, there were striking irregularities in bionous disintegration.

 a) Bionous cell collapse was the single most consistent phenomenon in all the tests. Without exception, and regardless of the presence or absence of tumors, the cells which developed

- bions inevitably and rapidly collapsed. So severe was the distortion that in many instances they became unrecognizable as bionous cells. Not one expanded "bracelet" form was ever seen to hold up. To rule out an artifact, the operator performed a test on himself using the same saline, slides, etc.
- b) Bion location. While in most cells the bions appeared to form peripherally or just subperipherally, there was also a noticeable tendency for them to form in aberrant locations. And as the cells were collapsing so rapidly in the midst of vesicle formation, it was often difficult to ascertain just where in the cell they were originating. "Raspberry" forms were the usual end product in both tumor-free and tumor-bearing animals. Occasionally, the individual bions would fuse and their membranes disappear—a phenomenon Reich observed in cancer cell formation.
- c) Bion size and number per cell. A very consistent finding in both groups was the propensity of the cells to develop fewer but larger bions. In normal white mice and humans, it is not unusual to see 5-9 medium-sized bions in a circle—the so-called "ring of pearls" or "bracelet." This was distinctly lacking in the C3H/OUJ mouse, where an average 2-3 large bions developed per cell. Indeed, cells would often collapse around one or two bions. A single instance of bion fission was noted.

D. Statistical Results

The results of ANOVA applied to the main experimental parameters are shown in Table 1, which compares 17 tests in normal mice (13 in males and 4 in females without tumors) and 37 in females with tumors, divided by observation into those that appeared grossly "well" (23 tests) and obviously "sick" (16 tests).

Tab	le 1	l:	Statistical	Results
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Average	Normal	Well	Sick	Stat. Sig.
TBW	35.3	36.0	35.9	not sig.
1% time	19.1	7.4	3.9	P<0.004
Delta-49	52.4	67.3	58.3	not sig.
GMA	7.7	6.4	2.7	P<0.0001
% "C" cells	46.6	34.5	28.8	P<0.032
Tumor size		9.8	24.0	P<0.0001

It is clear that two of the major energetic indices, the 1% times and GMA, distinguish between the three groups at a statistically significant level. The delta-49, however, did not, for reasons that will be discussed below. It is interesting to compare these values with those from human tests. The 1% time for normal mice falls within the normal human range: the 1% values for the well and sick tumor mice fall into the borderline category. The GMA for normal mice is at the lower limit of normal for humans, while the GMA values for the cancer mice would be definitely abnormal in humans. The delta-49 values all fall in the normal range for human testing. The percentage of "C" cells also distinguished between the three groups, particularly regarding the division between normal mice and those with tumors. The significance of this fact is not yet understood.

In view of the fact that this study was specifically aimed at the cancerous process via the development of visible tumors, the total body weight (TBW) and tumor size are of special interest. The markedly different values for the tumor size clearly objectifies the clinical separation of the mice into the "well" and "sick" groups (note that the tumor size parameter is not the weight of the tumor, as explained earlier). The tumors were in many cases so large they constituted a sizable fraction of the animal's total body weight. In this regard, the TBW results are most revealing, since there is no significant difference between the well and sick groups (total body weights of 36.0 and 35.9 grams, respectively). This suggests that tumor growth was at the expense of the rest of the animal's tissues, i.e. as the tumors grew, eventually they reached a size where the rest of the body must have been losing a comparable amount of weight. This finding tends to suggest that the tumor might be more appropriately viewed as a parasitic growth rather than the result of simple tissue putrefaction.

Table 1 shows that the average values of the 1% time and GMA decrease in value from left to right, i.e. going from normal to the clinically sickest mice. However, a plot of the frequency distribution (not shown) of the 1% times for the normals and cancer mice showed two heavily overlapping distributions; thus, although the mean values were different, individual values frequently fell into the adjacent distribution. This is confirmed numerically by the delta-49, which is directly related to the standard deviation of the distributions: the delta-49 was not statistically significant. That is, there was a great deal of variation within each group— so much so that no cross-correlation tests were significant. Specifically, 28 statistical tests for comparisons between the parameters gave results which did not approach significance. These tests compared the 1% time, delta-49. and GMA with the TBW, tumor size, lifespan and %C cells; thus, none of the energetic parameters cross-correlated with the gross and microscopic biological parameters.

Careful examination of the data shows one reason why this is so. Table 2 gives the 1% times and tumor size for one of the mice followed longitudinally as the tumor developed:

Table 2: Tumor size in mouse II-3

Date	1% time	tumor size
9-13	35	0.38
11-1	-8	18
11-9	7	18
11-15	9	25
11-17	8	25
11-20	-	25
11-22	25	25
12-6	-3	28

Thus, while the tumor continued to increase in size, the 1% time fluctuated between the extremes of 35 and -8, in one case showing a value of 25 when the tumor was far advanced to a value of -3 only two weeks later. This variation suggests two possibilities: (1) inconsistency in the reading of the bionous cells, and (2) natural variations in the 1% time in the mouse. One possibility for (2) is the high degree of diurnal variation in murine activity, which might cause variation in the 1% time (and other parameters) if the tests were not done precisely at the same time of day, or with the mice at the same level of activity.

The fact that the energetic parameters and biological parameters did not cross-correlate even on a gross statistical basis is also evidence that the tumor growth, in this animal model, is not a good model for the carcinomatous shrinking biopathy that takes place in humans. That is, if we view the tumor growth in mice as more akin to a parasitic growth rather than due to a preceding energetic shrinking, then the failure to find cross-correlations accurately reflects the fact that the energetic changes are secondary, rather than primary, in this example of cancer. It may be that the disease in mice is not steadily relentless but variations occur in its energetic state as its basically healthy energetic system responds to what is partially a parasitic process, partially a secondary shrinking biopathy, and partially an increasing T-intoxication.

Several of the parameters which form part of the qualitative assessment were evaluated as binary variables, i.e., as being either in one state or another. They are shown in Table 3 and consist of (1) the gross blood color, being either bright red or dark red; (2) the blood turgor of the drop issuing from the tail, being either erect (normal turgor) or reduced; and (3) the field of the cells, being either normal in extent or reduced. A Chi-square test applied to each of these tests showed all to be statistically significant.

Table 3: Selected qualitative parameters

	Blood	Blood Color		Turgor	Field	
_	Bright	Dark	Erect	Reduced	Normal	Reduced
Normal	6	10	17	0	14	3
Well	5	16	17	5	7	16
Sick	12	3	1	13	0	14
Chi-Square	P<0	0.02	P<	(0.01	P<0	0.001

In the first two groups (blood color and turgor), it is clear that dark color and erect droplets are more often associated with clinically well mice, while bright red color and reduced turgor are associated with obviously sick mice. On the other hand, normal fields are shown to be associated only with normal mice; the cancer mice, whether they appeared well or sick, tended to have reduced fields.

Thus these tests distinguish between "well" and "sick" as well as "normal" and "cancerous."

E. Discussion

It is clear that certain of our findings in the C3H/OUJ mice are qualitatively in agreement with features of the Reich Blood Test as described for human subjects. As will be

seen, however, there are some notable differences, not only in the gross and microscopic blood picture but in the course of this murine cancer, that cause us to question its identity to the human cancer biopathy. Furthermore, the very existence of these and other animal cancers may require us to reexamine some of our concepts about the cancer process in humans.

In general, the present work confirms the validity of the 1% time and GMA as indices of the energetic vigor of the blood. In particular, the statistical analysis confirms the value of assessing the cohesiveness of the blood and the extent of the erythrocyte orgone energy field. Because we have so seldom encountered abnormalities in these last two parameters in human subjects, it has not been possible until now to scrutinize them rigorously.

1. Blood Cohesiveness

Cohesiveness of the blood is evidently an important criterion. Decreased cohesiveness was found to be an ominous sign in the C3H/OUJ. It can develop rapidly, is seen late in the course of the illness, and presages death by 2-4 weeks. As in humans, it is usually associated with abnormally low 1% times. Decreased cohesiveness has been a much less common finding in our experiences with humans and, while considered to be a serious sign, it has not been shown to be as portentious as it is in the mice. This may simply be because these animals were far more ill than any of our human subjects. Another possibility is that it may ordinarily be a much later development in the mouse's disease. In any case, the appearance of decreased cohesiveness would seem to mark a major turning point in the course of the animal's illness.

2. The Erythrocyte Orgone Energy Field

In our computations concerning the width of the erythrocyte orgone energy field, we counted tests as "decreased" even if only a minority of the cells in this field showed this sign. Nevertheless, we

found a very good correlation with the presence of tumors as well as the clinical condition. This conveys some idea of the significance and sensitivity of this criterion which, like the assessment of cohesiveness, is a relatively easy one to make. We might mention in this connection the evaluation of *central excitation* which in our opinion is by contrast quite difficult to quantify. This is perhaps borne out by our inability to demonstrate a statistical significance to this criterion.

3. Blood Color

Although we have found a definite significance in the finding of a bright red blood color, that is, that it is clearly associated with clinical illness in the mice, this finding is in conflict with Reich's experience. At the least, we cannot be sure the blood color as it has been observed and reported under the conditions of this experiment has the same meaning as it does in his or our human testees. In obtaining samples from the mice, there was a deliberate attempt to strike the tail vein so as to ensure a brisk flow of blood. This alone is likely to result in more dark-colored samples. Third, the predominance of bright red in the sick tumor group may have been due in part to the greater likelihood of anemia in these animals. A hemoglobin determination at the time of sampling (not included in this protocol) might clear up some of the ambiguities. We can say that the bright red color seen in these animals is significant, but further investigation is required to be certain of its cause.

4. Microscopic Blood Morphology and Dynamics

Rapid loss of turgor, shape, and 3-dimensionality, and aberrant cell formations were in general much more severe than we have seen in tests of humans. The same might be said of the marked tendencies toward erythrocyte collapse before, during, and after bion formation and the unusual size, number, and location of

bions themselves. What was even more remarkable and unprecedented was the equally rapid evolution of most of these abnormalities in the tests of the clinically "normal" tumor-free controls. One cannot in this situation account for their presence on the basis of "toxicity" or "damage" sustained during circulation through a tumor mass.

In our estimation, the finding of these abnormalities, regardless of the presence or absence of tumors, clearly points to an inherent, systemic weakness in the C3H/ OUJ hybrid, one which underlies the erythrocyte's inability to hold a charge and ultimately creates the animal's unusual predilection for tumor development. At some critical point after removal from the mouse, there begins a relatively rapid loss of energy from the cell, which is probably similar qualitatively to the normal situation. We would view all the abnormalities which follow as relating, again, to an impaired ability to retain charge. We can only speculate on the biophysical defects that account for this. With the propensities for abnormalities in shape, one wonders if perhaps a membrane defect is involved. We find no mention, however, of such a disorder in Jackson Laboratory's volume: The Biology of the Laboratory Mouse (2).*

5. Tumor Mass and Total Body Weight

The relationship between TM and TBW, as we have said earlier, is of considerable interest and may have broad implications. In every case, the mice amassed huge, often multiple, tumor burdens and frequently continued to gain weight until they died. Cachexia was a late pre-morbid complication, and in a few cases, the animals had succumbed before it made its appearance. These gains could be due only to tumor growth. First, there was the observable rapid enlargement of the neoplasms themselves, and second, as these

were mature animals, their own natural growth had already ceased; the weights of the tumor-free males ("normals"), for example, never varied by more than 2 grams. Furthermore, these gains in tumor weight may have been larger than the rises in TBW indicate because there was simultaneous cachexia late in the process. That is, the animal was starting to lose weight, but at a slower rate than the tumor was gaining.

This is in marked contrast to the usual course one sees with human cancer patients in whom weight loss usually begins much earlier, is progressive and is essentially unrelated to the size of the tumor. It would seem that the mouse, biophysically speaking, walls off or *sequesters* the tumor, maintaining his own vitality but simultaneously allowing the tumor more time for growth. It was, therefore, not unusual to find 1% times in the normal range and good general physical activity and appearance in the face of a huge and rapidly increasing tumor burden (the "well" tumor group).

Not until the very last does the mouse appear to be losing significant amounts of energy in combatting the tumor; at which point, he or she begins to shrink. Death may then ensue from one or more of the following causes:

- a) The tumor enlarges to the point of outstripping its own blood supply. Central necrosis of the tumor mass leads to overload of the reticuloendothelial system, congestion of the liver, kidneys, and spleen, and to liver and kidney failure and toxicity.
- b) Arteriovenous shunting through the tumor mass with forward congestive heart failure, cardiac enlargement, and hypertrophy.
- c) Microangiopathic hemolytic anemia, hypoxia and tachypnea, with schistocytosis and aberrant cells.
- d) Mechanical obstruction of the urinary tract, airways, or other vital organs.
- e) Superinfection.

^{*}There are no references to examinations of fresh living blood cells in this book.

f) Metabolic overload with net catabolic change in connection with a-e contributing to congestive heart failure and producing cachexia.

Given the unique nature of the tumor diathesis in the C3H/OUJ mouse, i.e., the tumor size, TBW relationships, and the behavior of the blood energetic indices, we believe we are justified in viewing the tumor in this case as a *parasite* that ultimately grows too large for its host.

6. The C3H/OUJ Tumor Diathesis and the Human Shrinking Biopathy Compared

As the present work progressed and the data accumulated, doubts arose about the validity of viewing the process in the mice as truly analogous to the human cancer biopathy. We have alluded to certain differences in the way mice and humans respond to the tumor itself, which suggest that the mammary tumor does not have quite the same significance or impact on the mouse as does, for example, a carcinoma in the human. They are both malignant neoplasms, but they are not necessarily both due to cancer biopathies.

To begin with, the predominance of genetic factors in the mice is incontrovertible. Inbred strains of laboratory animals most definitely exhibit varying susceptibilities to spontaneous and induced cancers. In the present case, an added milkborne viral factor—the equivalent of an environmental carcinogen-is also involved (2:522). The role of a preexisting shrinking biopathy is largely excluded by the fact that the differences between susceptible and nonsusceptible strains exist even though both live under the same conditions in the laboratory. Secondly, the absence of cachexia or its late appearance in the presence of huge tumors—the sequestration phenomenon—is unique. Shrinking does finally occur, but it is clearly secondary to tumor growth. Lastly, it very much appears that the tumor probably does kill the mouse mainly by

its size. It becomes a metabolic and mechanical burden, which eventually interferes with normal functioning and nutrition.

In the human cancer biopathy, changes in the emotional, social, and work life, i.e., resignation, antedate the appearance of gross anatomic disease; no virus is known to be involved. Weight *loss* often anticipates the development of tumors, and though a form of sequestration undoubtedly occurs, it does not seem to be as effective in reducing the overall impact on the patient as it does in the mouse. And, finally, death is far less commonly a direct consequence of mechanical effects of the tumor.

The importance of making distinctions between the process in man and mouse is not to degrade the usefulness of the animal model in cancer research. Obviously, there are also significant similarities in the disease and the defenses against it in the two species. Reich's preliminary work with mice* contributed immensely to his understanding of the cancer biopathy and laid the foundation for his treatment of human cancer patients with the orgone accumulator. There is undoubtedly much to be learned from the mouse that could be of benefit to humans. Rather, our emphasis on the dissimilarities is to show that these animal cancers may not be, strictly speaking, the result of biopathies. The implications of this go far beyond the applicability of the mouse in research. Not only does making this distinction help us to understand the differences in the response to the disease but, moreover, it suggests that if there are other primary mechanisms for initiating it in the mouse, then these might also be at work in humans.

He used, among others, a spontaneous mammary tumor strain that was most likely the C3H/HEJ (Jackson Laboratories).

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Editorial Comment

If we are correct in our suspicion that cancer tumors, as in the present case, can arise in the absence of a preexisting shrinking biopathy, might this not also be the case in some humans? Is every instance of human cancer necessarily the end product of characterologic resignation and a shrinking biopathy? There is a considerable body of evidence both from humans and animals against such a conclusion. We need only cite the many studies that demonstrate that sufficient application of known carcinogens will induce malignancies in animals. There are cancers in humans clearly related to industrial exposures, e.g., asbestos, aniline dyes, painters of radium dial wrist watches, etc.; the list of agents and the dangers of exposure to them is ever increasing. The reason for stressing this point has to do with its implications with regard to psychiatric orgone therapy and prognosis, not to mention our attitude toward the cancer patient.

Reich made clear the hazards in attempting to treat cancer patients. Most noteworthy in the present context is the observation that a carcinomatous breakdown may be induced in charging up an organotic system that is no longer capable of tolerating or holding the charge. This is one of the main reasons why the diagnosis of shrinking biopathy carries

so serious a prognosis.* Naturally, this has engendered in us an understandable caution, if not reluctance, in approaching these patients. What is unfortunate is that it may have also engendered an avoidance of them. And this may stem from a dogmatic conviction that if they have cancer at all, the resignation must be there, however disguised or inapparent and the situation is hopeless. It is certainly true that the resignation can be well hidden and we can miss it; but our contention is that resignation might not be present because we may not in every case be dealing with an underlying shrinking biopathy. A case can be made in this connection for secondary resignation. Consider the pressures brought to bear on the patient when the diagnosis of cancer is made. Despite what has been said to the contrary, most people at some level regard the diagnosis as an automatic death sentence. Secondly, it has a perjorative connotation, perhaps especially amongst the lay public who have read Reich; there is something peculiarly "bad" about people who "get" this disease, as though they have somehow brought it on themselves.

Clearly, if such fundamental qualitative differences as we have suggested really exist, then it would behoove us to approach the problem with an open mind. Reich was the first to identify and elucidate the shrinking biopathy, which is undoubtedly a principal factor in the near epidemic proportions cancer has assumed. However, it could be as damaging to make a dogma of this concept as it has been to ignore it. It has become increasingly obvious that there are other mechanisms at work in the origin of the disease.

R.A. Dew. M.D.

^{*}Another serious concern is that, where large masses of tumor tissue are involved, death can occur as a consequence of choking the excretory systems with the breakdown products of tumor destruction.

The Effects of Calcium on Preparation 6

COURTNEY E BAKER, M.D. PATRICIA S. BURLINGAME

Abstract

This paper summarizes some of the quantitative and qualitative effects on Reich's bion preparation 6 by the addition of calcium in various concentrations. Earth bions were added to preparation 6 solutions and the charge on the bions assessed in the presence of various calcium concentrations over a period of several weeks using the technique of bion migration. Clear-cut initial inhibition of bion migration was found at high calcium concentrations, but little benefit appeared to result at lower concentrations.

Introduction

During the course of his bion experiments (1). Reich observed that the addition of certain substances to earth bion preparations had the specific effects of promoting either expansion and swelling or contraction and shrinking. Potassium and lecithin were found to promote swelling, while cholestrin had a shrinking effect. He also found that the presence of eggwhite in these preparations led to the formation of motile, nucleated. cell-like structures that underwent division and budding. Boiling the preparations increased the motility and variety of motile forms, along with the turbidity of the colloid. The latter effect was apparently due to the charge on the suspended particles, which was confirmed by the ability of the bions in these preparations to migrate when exposed to a weak electric current. The addition of gelatine and various nutrient substances further increased the complexity and motility of the forms, as did extending the boiling time. The results of these additions to preparation 6, as this experiment was called, supported his theory that the nature of the motile forms thus created could be influenced by the addition of specific substances.

Preparation 6-cc

Materials and Methods: The present experiment is based on the preparation labelled 6-cc, which is defined by the steps of presterilizing (by autoclavation) the substances

prior to mixing, followed by a further autoclavation after mixing. The ingredients and proportions used consisted of a modified version of the formula presented in *The* Cancer Biopathy (2).

The following three solutions were prepared and then autoclaved for 30 minutes at 120°C and 20 psi: (1) 25 ml nutrient broth, 25 ml 0.1 N KC1, 50 ml distilled water, and 50 mg gelatine, U.S.P.; (2) 0.2 ml eggwhite in 10 ml of 0.1 N KC1; (3) two drops of lecithin in 10 ml of 0.1 N KC1. Following autoclavation, the solutions were combined. and a small quantity of coarsely filtered bionous water from a previously-made culture (6-10 months old) of earth bions was added. The mixture was then distributed among several test tubes and again autoclaved. The tubes were sealed with water vapor-impervious film to prevent evaporation, and stored in a 35-40°C incubator. Observations were generally made on the day of preparation, at one, two and four weeks, and then periodically over the next several months. Each tube was discarded after being sampled to avoid the possibility of contamination.

Observations: Reich found organized structures only after mixing the primary solutions together; the solutions themselves appeared to contain only lecithin tubes, loose clusters of vesicles, and various structureless forms with no organic movement. Upon

mixing and heating the solutions, however, he observed vigorously moving bions, rods, nucleated cells, and "pseudo-amoebae" (clusters of bions within a membrane that exhibited such life-like properties as pulsation, streaming, division, budding, and "eating"). He was able to subculture these forms in broth, agar, and boiled-down preparation 6 material.

In these experiments, all forms mentioned by Reich were observed. Additionally, a good correlation was noted between the ability of the bions to migrate and the opalescence of the fluid, i.e., if the fluid appeared clear, the bions generally would not migrate. Macroscopically, in successful preparations, a uniform round mass of material formed on or near the bottom of the test tube within one day of preparation. Often a fine, helical thread extended from this mass to the surface of the liquid. It appears that the tendency of the preparation to organize simple ingredients into more complex forms on a microscopic level is expressed on a macroscopic level as well. The "dead" preparations that contained no organized forms and whose bions did not migrate also did not contain the above-mentioned cohesive masses, but instead contained piles of individual particles. Attempts to subculture preparation 6 in broth have so far been unsuccessful.

Preparation 6 with Calcium

Preliminary Experiment: In The Bion Experiments (1:23), Reich presents a table of substances and their shrinking or swelling effects. Although calcium is listed in this table, nowhere in the text does he mention that he investigated its effects on preparation 6. We therefore decided to add calcium to this preparation (as a contraction agent) and attempted to determine if in fact it would balance the expansive effect of potassium and thereby increase the complexity and motility of the observed forms. Four concentrations were used (0.1, 0.05, 0.01 and 0.001 Molar) in addition to control preparations that contained no calcium. The calcium (CaC12) was added to the broth-KC1-gelatine solutions, with the eggwhite and lecithin solutions containing only KC1. The following criteria were used to judge the beneficial effects of a given concentration: the macroscopic appearance (opalescence, the presence of a cohesive mass, a fine thread); the microscopic appearance (number and motility of bions, the presence of cell-like structures and other complex forms); and the ability of the bions to migrate.

The results of the preliminary experiment (see Table 1) seemed to demonstrate a direct correlation between the amount of calcium present and the inhibition of the organizing function of the preparation. The addition of 0.1M calcium "killed" the preparation. The fluid was completely clear on the first day, and remained so. Instead of a cohesive mass, a pile of sharp white flakes appeared on the bottom of the test tube. Few bions were present, and they neither showed any spontaneous motility, nor did they migrate. The addition of 0.05M calcium yielded softerlooking particles, more bions, and a few rods. The bions did not migrate until day 21, and then only at a much slower rate than in the control preparation. A 0.01M solution of calcium produced opalescent fluid, along with an irregularly-shaped mass with a thread. The microscopic appearance was similar to that of the control preparation, and the bions did migrate nicely, although not until day 7. A 0.001M solution produced results qualitatively similar to that of the control, although the bions did not migrate as rapidly, and the macroscopic appearance began to deteriorate sooner.

Attempts to subculture preparation 6 with calcium yielded encouraging, although by no means unequivocal results. A layer of cloudiness appeared at the top of the broth tube into which three drops of the 0.05M calcium preparation had been added eight days earlier. The 0.01M and 0.001M solutions produced cloudiness in the subculture tubes within one day. Finally, there seemed to be an increase in the number of bions present in the 0.05M and 0.001M calcium tubes, as compared to the controls.

Table 1: Preparation 6 with Calcium: Preliminary Experiment

Observations/Ca	0.00M	0.10M	0.05M	0.01M	0.001M
Macroscopic					
Cloudiness	+	0	0	+	+
Globs	+	0 sharp flakes	0 particles	+ irreg.	+
Threads	+	0	0	+	+
Microscopic					
Bions	very many	few	many	very many	very many
Rods	+	0	+	0	+
"Cells"	+	0	0	+	+
Vesicular spheres	+	0	0	+	+
Migration (u/sec)					
Day 0	1.37	0	0	0	1.13
Day 7	1.55	0	0	1.13	1.20
Day 14	2.63	0	0	1.05	1.16
Day 21	1.11	0	0.43	0	0.64
Subculture					
Cloudiness	no	X	yes 8 days	yes 1 day	yes I day
Bions	few	X	several	few	several

Repeat Experiment: A second series of preparation 6 was conducted using new concentrations of calcium, including that found in human blood (0.0025M). In this series, the calcium was added to all three primary solutions, rather than just one solution as in the first run. The concentrations used were no calcium (control), 0.0006M, 0.0025M, 0.01M, and 0.025M (see Table 3). The parameter used to determine the effects of calcium in this series of preparations was the rate of bion migration, with only incidental observations being made on the appearance of the solutions and the nature of the structures formed. The migration rate was first measured using a sample of liquid taken from each undisturbed ("unstirred") tube, in order

to determine the charge on any bions present in a suspended state. Each tube was then stirred, and a sample taken and tested from the newly suspended material. Thus, two measurements were made on each test tube in this series (stirred and unstirred) in contrast to the first run, in which only stirred samples were used. Migration rates were measured on the day of preparation and at 1, 2, and 4 weeks.

Results: The bion migration measurements from the preliminary experiment are shown in Table 2, and those from the repeat experiment in Table 3.

In the preliminary experiment, two preparations were made of the control solutions. In addition, enough tubes were available to

Ν

1.44

0.10M

Ave.

Table 2: Blott Migration values from Fremmary Experiment								
Calcium/Weeks	0	1	2	3	4	18	78	Ave.
0	1.82	1.48	1.14	1.27	-	1.28	1.98	1.50
0	1.37	1.55	2.63	1.11	1.28	0.95	0.96	1.41
0.001M	1.13	1.20	1.16	0.64	-	0.68	0.99	0.97
0.01M	N	1.13	1.05	N	-	0.91	0.93	1.01
0.05M	N	N	N	0.43	N	N	N	

0.86

Table 2: Bion Migration Values from Preliminary Experiment

Table 3: Bion Migration Values from Repeat Experiment

1.50

Calcium/Weeks	0	1	2	4	Ave.
0	0.56	0.78	0.66	1.04	0.76
0.0006M	0.78	0.73	0.87	0.68	0.77
0.0025M	0.88	0.73	0.52	0.65	0.70
0.01M	0.55	0.55	0.55	1.09	0.69
0.025M	N	0.48	0.83	1.47	0.70
Ave.	0.55	0.65	0.68	0.98	

Note for both tables: migration velocity in microns/second N = no migration observed.

1.34

take readings over an extended period of time, i.e., up to 78 weeks. In this experiment, 10 migration measurements were made on each sample, and the results averaged to give the values shown in the table. This was accomplished by measuring the velocity of five bions in both directions by means of reversing the polarity of the current (this technique averages out bion motion due to drifting in the solution). The samples were withdrawn from a sealed test tube which was *stirred*, opened, and sampled; this procedure thus resulted in measurements of bions that were in solution as well as resting on the bottom.

Table 2 shows only modest reduction in migration velocity for periods up to 78 weeks. It also demonstrates ("Ave." column) that the control groups show a slightly higher average velocity than the groups with calcium. No meaningful trend is apparent in the average values over time ("Ave." row). No migration occurred in the groups with the higher calcium concentrations, except in the

0.05M group, which finally showed migration after three weeks. Thus, this data shows that no benefit was discernible from the addition of calcium, at least as far as bion charge was concerned, and it conferred a distinctly inhibiting effect at high concentrations.

1.22

0.96

In the repeat experiment (Table 3), calcium concentrations were chosen to bracket the human blood value of 0.0025M. In this experiment, a sample of fluid was withdrawn from the solution of an unstirred test tube. and 10 measurements were made and averaged. The tube was then stirred, and 10 more readings made. In this way, an attempt was made to test the relative strengths of bions in solution vs. those resting on the bottom. This procedure was adopted to test the idea that perhaps bions in suspension (rather than those resting on the bottom) had a higher charge, because it is known that particles in a colloid are held in suspension by their charge. The average value of the migration velocities of all unstirred samples was 0.67

microns/sec.; that of the stirred samples was 0.76 microns/sec. This difference was not quite statistically significant (P<0.065). In addition, it shows that, contrary to expectation, the bions on the bottom of the test tube had the higher average charge. Possibly, the slightly higher charge led to mutual attraction, clumping together, and settling to the bottom. However, since the difference was not statistically significant, the readings were averaged together, to give 20 measurements for each concentration.

Table 3 demonstrates several major similarities, as well as several major differences from Table 2. In both experiments, the control groups and (in Table 3) the lowest calcium group (0.0006M) as well, showed slightly higher migration velocities ("Ave." column). In addition, the highest concentration (0.025M) did not migrate at first, similar to the 0.05M group in the first experiment. However, it not only began to migrate at the second week, but by the fourth week, showed by far the strongest migration velocity. Possi-

bly this behavior demonstrates an initial severe contraction of the solution followed by an eventual strong rebound charging. Evidently this effect is not purely mechanical. In addition, Table 3 shows a steady increase in the average migration velocity over time ("Ave." row) so that, after 28 days, the average velocity had almost doubled. This can be interpreted as evidence of ongoing charging and biological organization, i.e., a nonmechanical effect.

Finally, the average values of migration velocity in Table 3 are somewhat lower (roughly half) than the values in Table 2; the cause of this is not known. However, two differences between the two experiments may be noted: (1) in the preliminary experiment, calcium was added to only one of the solutions, while it was added to all three primary solutions in the repeat experiment; (2) the averaging of the stirred/unstirred samples would tend to lower the average velocity in the repeat experiment.

Table 4: Migration Velocity Before and After Transposition

Group	Day 0	Day 14
Control: Calcium = 0	1.09	1.72
Control: Calcium = $0.0025M$	1.37	0.68
Control: Calcium = 0.025M	1.41	N
0 Calcium bions into 0.025M soln.	1.20	0.99
0.0025M bions into 0 Calcium soln.	1.69	0.97
0.0025M bions into 0.025M Ca soln.	0.38	1.06
0.025M bions into 0 Calcium soln.	0.97	1.85

Transposition

Observations of higher life forms have demonstrated that organisms are often able to adapt themselves to whatever levels of necessary substances are presently available and at times actually develop a requirement for unnaturally high levels of a substance. An example of this phenomenon is the occasional development of scurvy in individuals who suddenly stop taking massive doses of vitamin C; the amount of this vitamin normally needed to prevent scurvy is no longer

adequate, as the organism has become used to, and dependent upon, much higher levels. It was decided to determine if an analagous function was present on the bion level.

The migration rate was determined on a stirred, 10-week-old preparation 6 containing 0, 0.0025M and 0.025M calcium. Using sterile technique, the preparations were then centrifuged, and the decanted supernatants passed through 0.45u filters. Each bion pellet was then resuspended in a supernatant con-

taining a different concentration of calcium than that in which the bions were formed. The rate of migration of the transposed bions was measured after approximately 40 minutes and again at two weeks. The data is shown in Table 4.

Results: Inspection of Table 4 shows no consistent pattern in the bion migration rates of the transposed bions. Both the control preparations and the four mixed solutions show erratic variations in the velocities, i.e., one control increased at 14 days, and two decreased. In addition, in the mixed group, the results are evenly divided between solutions that increased at 14 days and those that decreased, and also evenly divided according to the new solution concentration (i.e., bions put into stronger solutions both speeded up and slowed down, and bions put into weaker solutions also showed a variable response). Larger samples will be necessary to average out the natural variation in response, as well as to determine if indeed a transposition effect exists with variable calcium concentrations.

Summary

The overall results can be summarized as follows:

 There is no apparant increase in charging of bions put in solutions of preparation 6 containing low concentrations of calcium;

- (2) At high calcium concentrations, there is an initial inhibiting effect on bion charging, followed in some cases by eventual strong charging;
- (3) The preparations comparing stirred vs. unstirred samples gave results suggestive of a substantial (although not statistically significant) difference, enough to warrant further study;
- (4) The results of the transposition experiment were inconclusive.

In future experiments, we plan to study the stirred/unstirred comparison more carefully by using distinct samples of bions in solutions vs. samples taken directly from the bottom of the tube (rather than diluting the effect, as in this experiment, by taking the bottom bions from the "stirred" sample, where they were diluted with the "unstirred" bions in solution). In addition, we will test variation in transposition experiments using pH as the variable rather than calcium.

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Human Armoring An Introduction to Psychiatric Orgone Therapy

MORTON HERSKOWITZ, D.O.

All Bibles or sacred codes have been the cause of the following Errors:

- 1. That Man has two real existing principles: Viz: a Body and a Soul.
- 2. That Energy, call'd Evil, is alone from the Body; and that Reason, call'd Good, is alone from the Soul.
- 3. That God will torment Man in Eternity for following his Energies.

But the following Contraries to these are True:

- Man has no Body distinct from his Soul; for that call'd Body is a portion of Soul discern'd by the five Senses, the chief inlets of Soul in this age.
- 2. Energy is the only life, and is from the Body; and Reason is the bound or outward circumference of Energy.
- 3. Energy is Eternal Delight.

William Blake, The Marriage of Heaven and Hell

Chapter 1 What is the cure? What is the disease?

"I was feelin' very bad, scared of everything, even to go out of my house. No doctor was doin' nothin' for me except to make me very dopey. So a lady down the street told me about the gypsy man who was very good. So I went to see him, and he said he could get me better. He held an egg to my head here, and he said he was gettin' the bad thoughts out. Then he made me swalla three eggs. I had to eat them raw. Then I started vomicking, and I tell you doctor I never vomicked like that in my whole life. Later on he brought in the pan and showed me what I vomicked-up. There was a mean little snake in there; that's what was makin' me feel so bad.'

This tale told by a patient in a psychiatric clinic defines the therapeutic ideal; to find the definitive cure for the comprehended disease; as it were, to be able to administer the specific antibiotic with which to conquer the emotional infection. The gypsy man, alas, failed to duplicate his marvelous cure in a subsequent episode. Psychiatric theory was not enriched.

There is no dearth of theories in psychiatry. Someone who took the trouble to count enumerated more than two hundred psychotherapeutic regimens, each with its own theoretic base. Admittedly, some of these are variants on a basic theme, as the slightly deviant schools comprehended within psychoanalysis. Even so, the number and diversity of approaches to the treatment of emotional disorder must be dismaying to the educated patient seeking treatment. Shall the tension of his life with which he cannot successfully cope be relieved with drugs, by seeking to gain insight through the processes of formal psychoanalysis, or by a more commonsense approach? Or can he be trained out of his difficulty in a graduated behavioral

program of insight? It is apparent that there are techniques that assist us in revealing how we are enthralled and how we become bound to our demons. Do we free ourselves in discovering the process? There is a certain validity in each of these musings, yet we are left with a wonderment.

The behaviorist is clear in his mind—the symptom is the disease. "You are afraid to walk over a bridge. I shall teach you to cross bridges, and you will be well." Many years ago, one of my patients was serving an internship under one of the foremost behaviorial therapists. She came to her treatment session fresh from a conference in which her mentor had demonstrated the successful treatment of a phobic reaction in the patient. "He (the therapist) said the patient was cured," she exclaimed, "but I know the guy, and he's an emotional wreck. He's a miserable, incompetent human being who's a wreck minus a phobia, and that's cured?"

The patients on chemical treatment sometimes attain symptomatic improvement. The depressives may run a shorter course of depression on their drugs. The manic depressives may suffer fewer and less severe exacerbations and longer remissions on their lithium. The schizophrenics may be relieved of their delusions and hallucinations with the assistance of their neuroleptic drugs, although they often purchase this relief at the price of the deadening of their spirit, living their lives in dull apathy. The neurotics gain symptomatic relief from their tranquilizers, as attested to by the fact that these are the most widely used drugs in the country. None of these drugs combats the disorder as an antibiotic combats infection. Rather, it neutralizes the symptoms, as insulin neutralizes the pancreatic deficiency in diabetes. Just as the successful use of insulin indicates the presence of diabetes, the use of the psychopharmacological drugs advertises "Depression, Schizophrenia, or Neurosis exists here."

Does insight into the meaning of our feelings, actions, and symptoms liberate us from the process that creates them? On the

one hand, we have evidence that it may. Many have experienced some relief from the combined processes of verbal ventilation and insight. Yet many others have not. I am reminded of a patient who came to me after eleven years of formal psychoanalysis. "I could write several volumes about what I learned about myself in analysis, but I've got the same damned symptoms I started with," he said. Freud was aware of this problem. He assumed that psychoanalysis was not successful in those cases in which it proceeded as an exercise in cerebration. It was most effective when emotions were freed in tandem with insights. Unfortunately, though the fact is manifest, there is no way that the procedure of psychoanalysis can ensure that emotional depths will be uncovered in its exploration of the unconscious. Largely through the work of Wilhelm Reich, psychoanalysis increased its efficiency in this regard with the technique of analyzing the character structure. However, it is apparent that even character analysis is a roundabout way to repressed emotions.

The confusion about the proper method of treating emotional disorders is equaled by the disarray of concepts regarding the disease itself. Using schizophrenia as an example: on the most superficial level, what the American psychiatrist labels schizophrenia is not necessarily what the Russian psychiatrist calls schizophrenia, and the British psychiatrist might disagree with both. Some psychiatrists have made the case that schizophrenic patients within the asylum walls are less insane than their keepers and visitors. They say that, compared to the patients, society is the madder. Obviously, the patient who complains that his neighbor is aiming an (nonexistent) X-ray machine at his genitals is suffering from delusional thinking. But what of the delusions we concede to one-another by implied agreement? I will allow that your lord was born of a virginal conception if you allow that my God has forbidden me to eat shellfish and pig.

Most of us will agree on the worst cases. The patient who sits in his catatonic trance,

mute, bone-still with static eyes, clearly is in the grip of an emotional malady. But let us consider two other cases. The first, a patient, suffers from attacks of anxiety. Periodically, she is troubled with a sense of oppression in her chest, her heart races, she feels suddenly cold and frightened. She is bright, sensitive, has warm relationships, enjoys her work, and is efficient. Her symptoms label her a psychiatric patient. Her spouse is dull, unfeeling, uninterested. He moves through his life unrelated to the world outside his capsule. He has no symptoms. except that he cannot fathom much more than mere existence. He will never be a psychiatric patient; though he is symptom-free, he is far more crippled emotionally than she.

The symptoms, then, are not necessarily the truest index of emotional sickness. They are but one form of the manifestations of disorder. Emotional disease may also proclaim its existence in an inability to empathize, in a failure to be moved deeply by nature or art, etc., etc. There is a malfunction beyond specific symptoms and beyond particular aberrant behavior patterns. The source of the malfunction is the disordered character structure.

In his early work with character, Reich could only work with behavioral manifestations of character, investigating why the patient always agreed or always disagreed, why he came late to appointments, why she said everything with a smile, etc. With focus and study, he came to recognize that the flaws of character are written in the body. Dulled eyes, a tight jaw, a stiff neck, a tight throat, raised shoulders, held breath, taut loins, tight buttocks were the physical, the biological statements of character disorder. He came to recognize that these tensions were the way human organisms repress emotions, and that this process altered the energy economy of the total organism. He called the process "armoring." Armoring, as it is reflected in attitudinal behavior, is called character armoring; as it's manifested in bodily tension, it is called muscular armoring.

Armoring is the substrate of emotional (mental) disorder, excepting those instances due to toxins and physical deformity, e.g., brain tumors. Armoring is where body and mind touch to effect abnormal behavior. Conversely, the unarmored organism is not beset with distortion as it reacts to environmental stimuli. It feels pain when hurt, moves with joy and thrill when that is possible, senses the longing of knowing and reaching out to the natural world. It is sentient and freely mobile. It has bounce.

The concept of armoring does not exclude discoveries of the psychopharmacological researchers. It is clear that armoring affects hormones and enzymes. The mind and the flesh and the chemical substrates are of one piece. Anxiety and epinephrine are inseparable, just as stubborness and stiff necks are.

To return to our original inquiry: The disease is not the symptom that the patient perceives, nor the behavior that his associates observe. These are the demonstrable effects of an underlying disorder of character, the result of physical armoring. The symptoms and the behavior may be altered by various means, chemical, physical, or psychological; but the underlying disorder persists, which ordains that the life will be lived with constraint. There will be limitations on feeling, thinking, acting, and relating, which will set a qualitative stamp on that life. We gird ourselves against our terrors by armoring, and the girders become a straitjacket on our lives.

Emotional dysfunction extends beyond symptoms and behavioral deviations; it encompasses our limitations in reacting wholly to our world. Armored humans suffer from a defect in metabolizing life.

For the most part, we are not aware how we are bound as we live our "lives of quiet desperation." We demonstrate for freedom of speech unmindful of how we constrain ourselves to think only within narrow paths. We are so fearful of floating in the mystery of existence that we rush to calm our anxiety with the ready-made answers of organized religion or put on a brave show with scientific

formulas we have inherited. We rationalize our fear of fighting when we are angered. We stiffen when we are in danger of feeling tenderness. We fuck when we are in peril of loving.

Wilhelm Reich discovered the process of armoring and its meaning in our lives. He also devised the technique with which we could attempt to dissolve the armoring and called the method "psychiatric orgone therapy." It was the first therapy that recognized the significance of armoring in psychiatric disorders.

Psychiatric orgone therapy is not a cureall. It is a painstaking system of therapy that entails some degree of physical and often a great deal of emotional discomfort. It has succeeded in effecting rewarding changes in the lives of many patients.

Chapter 2 The First Session—Observation

The point of the initial contact with the patient is to gain perspective on the character structure. This is accomplished by observation of the patient's behavior in all manifestations that reveal the character armoring, and then, by viewing the patient as he lies on the couch, searching for the places where the body holds, disclosing physical armoring. The purpose of this evaluation is to establish, first, whether the patient is a suitable candidate for therapy, and then to formulate an initial plan of operation.

For the purposes of this description, the "first session" will include the procedure from the time the patient enters the office through the initial biophysical evaluation as he lies on the couch. In real time, the observation on the couch may not occur on the initial visit, sometimes not for months.

The therapist has an impression of the patient before any words are uttered. The gait, dress, facies and attitude all speak of the particular way this individual moves through life. The complaints and symptoms that bring the patient to therapy are elicited. Sometimes a brief history will suffice, in which case, the patient may be observed on the couch in the initial visit to determine the extent of the physical armoring and to begin to relieve it. One would then leave the more complete history-taking for a later time. This would be the likely procedure when the patient's complaint and suffering is acute, and relief is a more important, immediate goal than a full history. In other cases, one might spend the first three or four visits listening to the patient's story, eliciting a detailed psychiatric and medical history, all the while evaluating the behavioral characteristics of the informant. At this time, one may determine that the patient is not a good candidate for psychiatric orgone therapy because the motivation is poor or the character is brittle and could not tolerate assault. In this case, the therapist might refer the patient

to a conventional psychiatrist who could as competently give the patient emotional support or help to manipulate the environment without threatening the character structure.

In some cases, the therapist decides that, given a certain history and character, it would be judicious to only talk with the patient for weeks or months until the patient has gained sufficient confidence to begin the physical work on the couch.

Regarding motivation: Some patients come to therapy only to satisfy their wife's (husband's) request, determined not to do the necessary work. They are sent back home. Others may come to psychiatric orgone therapy because they regard it as antiestablishment (which it is, but not in their political sense) and because it's the "hip" therapy. Whether the therapist would choose to treat these patients would depend on the character structure behind the attitude. In some cases. these attitudes would represent one among many character traits of superficiality and might yield to therapeutic pressures. In others, they might represent negativism of such huge proportions as to stand fixedly opposed to a therapeutic approach. A sensible therapist would send such patients packing.

There is an implicit agreement with every patient who comes to therapy: Both the patient and the therapist are free to terminate treatment when either is dissatisfied with the course and progress of the therapy. The patient may not understand well enough that severe dislocations, both personal and social, occur as he progresses in therapy. And as this becomes increasingly clear, he may become frightened and choose to withdraw; and this is his right.

A strictly observing Catholic young man came to therapy with moderately severe emotional symptomatology. I was impressed with his seriousness. Both he and I put a great deal of energy into the first three sessions, and things were moving well. He came to

the fourth session and requested that we talk rather than work on the couch. He asked whether continuing in therapy might alter his religious beliefs. "It all depends on how far we get," I answered. "A certain amount of loosening can be accomplished without affecting them. But, when we get beyond a certain depth, they will undoubtedly come into question." "In that case", he said, "I think I'd rather not come any more."

He returned after six months. "If my religion is valid, it will stand up against any rational thing that happens," he reasoned, "and if not, then I'd better find out now; so let's start again."

The therapist may discover as the therapy progresses that the patient has arrived at a point of equilibrium where the intensity of the symptoms has decreased and the armoring is looser but still present, and he may decide that to continue beyond this juncture would expose the patient to emotional vicissitudes beyond his tolerance; he may then propose that therapy be terminated at that point, at least temporarily. Or, the therapist may become disenchanted with hopes for further progress by repeated evidence of the patient's failure to cooperate, by his continuing to indulge his appetite for drugs, for example, and the therapist may discontinue the therapy.

This digression into the rights of the patient or therapist to discontinue may have wandered from its point of origin, so let us reiterate. In psychiatric orgone therapy, the patient is observed from two aspects: First, the symptoms, the historical survey, and the observed behavior give the therapist an indication of the psychological side of the patient's character (any "psychosomatic" symptoms would, on the other hand, point to areas of physical armoring.) Then, to complete his picture, the physician must also learn how and where emotional repression is represented in the physical structure, where the body is armored.

In the treatment room, the patient is requested to take off his clothes and to lie on the couch. The general rule in therapy is that

patients of the opposite sex are treated in their underclothes, and patients of the same sex as the therapist may be treated in the nude or in underclothes, as the therapist sees fit. The patient removes his clothing because the therapist is constantly observing bodily changes: skin color, skin termperature, hair erection ("gooseflesh"), nipple erection, the visual and palpatory signs of muscular tension, etc. A secondary benefit of the clothing removal is related to the fact that, to some extent, clothing is used as social armor, and its removal renders the patient more revealed: there is one less place to hide. Here, too, there are no rigid rules. Patients who are extremely embarrassed to take off their clothes might be treated clothed for a number of sessions, until they feel more comfortable disrobing.

The fact that patients undress for therapy has, of course, occasioned sick fantasies in some minds. *Honi soit qui mal y pense*.

To prepare the reader for the theoretical discussions that will follow, it would be instructive for him to sit beside the therapist and see what he sees as he observes the patient on the couch in this first session. The thoughtful and observant visitor may be surprised at some of the reactions he witnesses. His interest in the theory might then be enlivened by his curiosity, rather than accepted passively as by a dulled student in a crowded lecture hall.

Before the therapist proceeds, he observes the patient before him. Is he at relative ease, or is he obviously upset? Does he lie prone, supine, in a fetal position? Are his legs crossed, spread open, separated with toes turned in, or legs bent at the knees resting on the feet? Is he pale, hands sweaty and cold, pupils dilated? Is his face masked, serious, sad, embarrassed, or expectant? Does it look as if it will break into a smile? Are there any sharp lines of color demarcation (florid face and neck, pale chest, for example) or any sharp lines of temperature change (warm abdomen, cold loins)? What body areas are held in tension, which parts are relaxed? This is an initial reading, and it

often speaks more than a patient could say in hours.

Patient #1

A middle-aged male is lying staring at the ceiling. His legs are crossed, his hands clasped and resting on his abdomen. he is literally holding himself together. His palms are cool and slightly moist. Occasionally, he sneaks a furtive sidelong glance at me, then returns to looking at the ceiling. His chest barely moves; breathing is revealed mostly by abdominal excursions. The jaw is held rigidly and the lips are tightly pressed.

I instruct him to breathe with his chest, raising his chest with a full inspiration and permitting the chest to collapse with a long, full expiration. I demonstrate the breathing. The patient begins to breathe, but as he continues he begins to catch his breath in his throat at the height of inspiration. This is corrected with some difficulty. The patient is now staring more fixedly at the ceiling, and he is clenching his jaw more tightly. Now his palms are quite cold, betraying his anxiety. As he continues, he asks, "What shall I do now?" He is advised to just continue doing what he's doing. After a while, an involuntary laugh breaks through, which he attempts to suppress. "Let it go," I say, "let whatever happens, happen." Despite this instruction, he continues to attempt to deny the laughter, but after a while it breaks through more strongly and is more difficult to hold back. I pry his jaws open and instruct him to keep his mouth open and to increase the volume of the sound. Now the laughter changes to guffawing, and the patient is rocking with it. "What the hell am I laughing about? There's nothing funny," he manages to say as he continues to be seized with his laughter, tears now falling down his cheeks. At times, he manages to quiet the laughter and continues to breathe, but then it explodes again. "This is crazy," he keeps repeating as he laughs.

Gradually, the frequency and intensity of the laughter subsides until he is only breathing. His chest moves more easily now, and there is a satisfaction in his breathing. "Can I stop now, that's enough?" he asks, and I agree. He dresses and, as he leaves, he says, "That was wild. I feel a little nervous, but I feel good."

Patient #2

An attractive young woman in her thirties lies on the couch in apparent bewilderment. "Are you Dr. A. (her referring physician)?" she asks. "No," I answer, "I am Dr. H. Dr. A. sent you to me." "I think I like him better than you," she comments, looking at the corners of the room in an attempt to orient herself. "Are you going to hurt me or do anything bad to me?" she wonders aloud, and I assure her that I am not. "Would you open your mouth?" she asks, and when I do, she carefully examines the oral cavity and its contents for several minutes. "Okay," she says, and she gently shuts my mouth.

As I inspect and feel her body, there is no place that is tightly held except for slight tension in the cervical area and the scalp. She barely moves her chest when she breathes. The major pathology is in her face. Her eyes are dull, almost stupid, though it is clear that she is quite intelligent. Her extremities are warm; there is no anxiety present. From time to time, she pokes at her ear and grimaces as if to push her eyes forward in their sockets.

When asked to breathe, her chest moves fairly freely, not in a full and deep respiratory excursion, but not tightly bound, either. However, she can take only four or five successive breaths, then her breathing diminishes to its former quiescent state. Repeatedly she is urged to try to keep the breathing going, but it is apparently more than she can do. "Can we try something else?" she asks. Admonishing her to continue to breathe steadily, I move a small flashlight back and forth and then in haphazard directions before her eyes, instructing her to follow the light by moving only her eyes holding her head still. She can do this only for short periods; then her eyes cross or she looks away and goes blank. She

is clearly unhappy with her performance, and starts with renewed determination to continue longer at each new attempt.

I now ask her to continue to hold her head in place as she lies there, and to let her eyes move successively from wall to wall, sidebottom-side-top, describing a large circle with her eyes. She is to do this as quickly as possible, and to not merely move her eyes, but to make them see as much as they can while they move. As she performs this task, her eyes stick in the upraised position. She has difficulty moving them to see the wall behind her. Instead of moving her eyes in successive, equally spaced circles, her eyes make a single loop and become stuck at the top. We work on the movement at the top of the circle, but she is becoming frustrated, and her lips and mouth are forming into a pouty little girl cry which soon erupts. We return to the eye movement for a little while, then to simply breathing. She reaches for my hand and continues holding my hand. I announce the end of the session, and she says, "That was good."

Patient #3

A seven-year-old boy is lying apprehensively on the couch. His pupils are wide. He's staring off to the side but watching me out of his eye's edge. His chest feels solid as a wooden cage. I have never felt such a chest in a child and only rarely in an adult, and then only in elderly patients, usually those suffering from pulmonary disorders such as emphysema. The chest is held in a fixed, inspiratory position. This patient has come not because of any respiratory problems, but because of a behavior disorder. He is uncontrollable in school; though he has never caused any serious trouble, he is constantly disruptive. The situation is similar at home. His mother says that though he's not really a bad boy, he wears her out with his constant minor transgressions and excessive activity. The only symptom that is obviously related to his rigid-box chest is that of stuttering.

When he is asked to breathe, his chest remains immobile and his belly balloons up

and down. I restrain the abdominal movement with one hand and press on his chest cautiously with each expiration (cautiously, because this chest is so brittle that I am wary of cracking a rib — this is a seven-year-old!). Nothing much is happening; there is still very little give in the chest.

I dig my fingers into his intercostal muscles (the muscles between the ribs) and he winces and squirms, but doesn't utter a sound. "Doesn't it hurt?" I ask, and he nods that it does. "Then why don't you yell?," I say, and he shrugs. "Come on now, yell," and I dig my fingers into his intercostals again. He grimaces, part jocular, part silly, part frightened, and utters the merest sound. He is squirming so that I have a battle to hold him in place with the unrelenting fingers digging into his chest. This continues until my fingers are aching. A few discrete tears drop down his cheeks, but still no sound. All the while now his eyes are on me, and they are good eyes, looking me in the eye, sad. Partly because of my aching fingers and partly because I do not want to hurt him any more, I withdraw my hand. He takes one deep breath; his chest moves a little when he breathes now.

Patient #4

A young lady in late adolescence, acutely anxious, is lying on the couch. She complains of difficulty in breathing and a feeling of constriction in her throat. She fidgets the sheet with the fingers of one hand and fingers her hair with the other. Her feet and toes are in constant motion.

She is asked to breathe and has difficulty both in drawing a full breath and in letting the breath expire freely. As she continues to breathe, she becomes aware of tingling in her finger tips, and this increases her fear. As the tingling proceeds into her hands she cries, "Stop it, please!" She is now instructed to punch the couch and yell simultaneously. She punches tentatively at first, then with more vigor. Her voice moves from an innocuous sound to the beginning of a yell; but, before it can proceed to a full yell, it turns into a whine. I press hard on muscles

in her neck that have become tense bands since she first attempted to yell. She voices the pain briefly, then bursts into sobs, which continue for the duration of the session.

Patient #5

A grossly obese young man in his late twenties lies on the couch, and one has the impression that the most significant thing going on is that he is glad to get the load off his feet.

In response to the request to breathe, he appears to cooperate. The chest is moderately mobile. The neck is somewhat stiff, and the eyes are vacuous. When asked to look at me as he breathes, he follows orders and looks at me with the same blank eyes that formerly stared into space. When asked to follow a light, his eyes move with momentary ambition, then dull-out again. An attempt to provoke his neck musculature by prodding leaves me wondering whether I am causing him any pain through all that fat. He continues to breathe dutifully. Nothing happens. I ponder how and whether I can get to him at all through his glassed eyes and fortress of lard

Patient #6

A quiet, tight-lipped man in his forties, taut-necked, chest-held, staring-off, breathes. As he breathes, his shoulders become more rigid. I poke between his shoulder blades, and he says, "Ouch! Don't do that," with a smile. I continue poking, but harder. The smile becomes continuous and he keeps murmuring, "No, don't do that." I encourage him to punch the couch and he counters with, "I'm not angry at the couch," smiling. I imitate his words and vapid smile, and while smiling emptily like him, I urge him again to hit the couch, all the while digging into his shoulder. He proceeds to hit the

couch innocuously with open hands, and I urge him to close his fists and punch with all his might. He gradually increases the pitch of his punching until he is emotionally involved. Now he is really punching and yelling, "Damn you!" He breaks out into a body-wide cold sweat, and I tell him to stop. Now his chest is moving freely, spontaneously. His hands are ice cold. I tell him to quiet his breathing down a little, and he becomes a little warmer. I ask to whom he was yelling "Damn you," and he says he doesn't know. The session ends with the chest still free, and he has an almost beatific expression. There is a gross tremor of his outstretched hands, and his heart is still racing. He is advised to rest in the waiting room till the tremor disappears.

Patient #7

A patient in her mid-twenties lies breathing and continually interrupting herself to ask whether she's doing it correctly. She resumes after I, with a little impatience, redirect her to shut up. Now, rather than vocally requesting confirmation of her performance, her eyes seek out mine, and they keep asking, "Is this all right?"

I explain that this situation is not one devised for her to gain my approval, but to fathom and express the hidden parts of herself. She starts again with deeper sighs, now tinged with the breath of emotion. Her eyes become less guarded, softer. She is permitting herself to sink into the quiet lake of her own feelings. In a minisecond, she rouses her eyes toward mine and asks, "Is that better?" Caught between the impulse to break into laughter and the desire to throttle her, I begin to explain her resistance. The session ends on this exposition.

Chapter 3 The Concept of Armoring

The reader acquainted only with conventional psychotherapeutic techniques will have noted that there is scant resemblance between the modalities he knows and the events reported in the preceding chapter. The verbal communication that is the hallmark of the dynamic psychotherapies is almost nonexistent in the reported sessions (though therapy includes times of talking). A patient unsophisticated in psychiatric practice once reported to me in amusement that his friend was seeing a psychiatrist "and all they did was talk." Therapy is clearly not drug oriented, though in some situations drugs may be prescribed temporarily. There is little that bears a similarity to the behavorist's conditioning techniques, though a farfetched case could be made that the patient is being supported in, and therefore conditioned to, new modes of functioning.

What of the phonemena witnessed in those first sessions? The first patient was made to breathe more fully than usual. The breath caught in his throat, and when that was corrected, he inexplicably was seized with uncontrollable laughter.

The second patient, disoriented and disorganized, achieved some temporary clarity and satisfaction by the hour's end—from eye exercises? From the brief spell of crying?

The little boy was prodded and poked with not much obvious reaction and his chest at the end was slightly more flexible. But where was the connection between the behavior disorder with which he suffered and the fact that his chest was rigid and became a little looser in his session?

The key that opens the door to our comprehension of the data is the process which Reich, with fine reason, called "armoring." The essence of armoring is that it is at once a physiological and psychological event. It represents the physiological anchoring of emotional repression. Emotional repression implies an opposition of forces; the repressed

pushes up toward expression, and the repressing pushes down toward repression. In this process of constant opposition, energy is continuously consumed. With armoring, energy is constantly withdrawn from the organism's free use, and dissipated in the ceaseless battle to bury emotions.

Though Reich discovered the meaning of armoring for science, men have always known of armoring and reacted to it. The great novelists observed it clearly when they described character. The frozen curl of the lips and the dilated nostrils presaged weeping, the catch in the breath when what was about to be expressed must suddenly be concealed—whatever the covert expression, the artist had read and correctly translated it. Our response to the masterly description indicated that we, too, knew. Perhaps it was necessary to remind us with verbal pointers before our consciousness was jolted into recognition, but the plasma awareness was there.

To some extent, each of us governs our interpersonal responses by reading of other's armoring. We say of the stiffnecks, they are unyielding. We are wary of the biting anger in the clenched jaws. We despair of conveying our need to the dulled eyes. We have sexual anticipations of the pelvis held forward that we do not have of the retracted pelvis.

The ability to read armoring is in part a function of our own armoring. It is obvious that the distracted eyes not only bump into furniture and trip over their own feet; they do not "see" people either. In a less obvious way, you, with your tight chest, are unaware that most chests are held; whereas, when my chest is free, I experience the tension in your chest empathically as a tendency to a constriction of my own chest. When I am with someone loose-chested, I can breathe more freely. On the other hand, if I am even dimly aware of the spite expressed in my lips, and

it's an annoyance to me, when I read (albeit unconsciously) the spite in your mouth, it may be the cause of instant antipathy towards you, though I know nothing else about you. To the extent to which we are so accustomed to our armoring that we are dead to it, we are unaware of it in others. Insofar as we are free of particular armoring, we can read it clearly in others.

The problem of armoring pertains not only to physical and emotional health, but to insight, perspective, world-view. Throughout history, the unarmored human has suffered from the armoring of his peers. To his clear insight, they have replied, "But I have eyes, and I don't see that." "I never felt that in my vagina," say the armored pelves. Until now, we have failed to distinguish between organisms that function freely and naturally and those which function in a distorted fashion. We called them all "organisms" and ascribed equal powers to them. To have failed to apply the modifier, "armored," has tumbled us into a semantic error of the highest order and led us into a world of confusion.

Reich's contribution was not merely that he called our attention to the armoring process, but that he described the lawfulness of the phenomenon in the organism's energy economy. The difference between simple observation and description, and perceiving an event in its proper scientific perspective is as wide as the mind. For millenia, we displaced water in our tubs and watched apples falling from trees and learned nothing about our universe.

Reich revealed to us that wherever there is emotional repression there is a concomitant protoplasmic contraction manifest in the body. This physical tension tends to become chronic with time, binds energy, and constricts the free pulsation of our bodies, thus it is truly an armor that imprisons us for life. Our physical armoring characterizes our body just as our characterologic armoring delineates our behavior. Armoring is the point at which biology meets psychology, or (another way of saying the same thing)

armoring is the physiological anchoring of the aberrant behavior manifestation. The elucidation of this concept has given us a rock upon which we can stand more steadily to evaluate human events and see man in relation to his universe. It is the means by which we can determine where man deviates from his nature. There has never been a discovery of greater human import.

If we are all armored (and we are), then the history of humanity at least for millenia has been the history of an emotionally and physically crippled animal. Our revolutions and our religions always fail to liberate us because, after we have twitched to free ourselves, we still find ourselves within the same cocoon, which we continuously weave. Armored man creates institutions that, on the one hand, promise to free him from his tension ("Love God and you will be saved") and, on the other, deliver him right back to armoring in perpetuity. For the truth is that, like the long-termer who has been imprisoned from youth, we have made some peace with our jail environs and, though we hope for it, we harbor a deep fear of the day of release when we will be discharged into the open, unknown, sunlit world outside. This fear conditions every gesture, every act, every opinion.

The old-fashioned cartoonist would portray Aspiring Humanity as a soaring creature beating his wings with such effect that he creates the illusion of flying. All the while, the soarer's feet are clasped in the maw of a mythic beast with sly eyes, Human Armoring.

Once apprised of the armoring process, we are amazed that we failed to discern it so clearly before. A young mother now notes that each time the family visits her in-laws, her infant son returns with a rigid back and unease that requires weeks of soft eye contact to dissipate. She never saw it before; she only knew that the visits affected his feeding pattern. The ease with which armoring can be instituted is most obvious in young children (though the rapidity with which adults can develop headaches in uncomfortable situ-

ations does not leave us far behind for purposes of demonstration). A patient describing the rigid neck and shoulders and the cold extremities of a 3-month-old relative said, "He's well developed beyond his age, both physiologically and neurotically."

If we would graphically portray the effect of armoring, we might begin by depicting a freely pulsating plasmatic bladder, a jelly fish, say, and watch for a while as it glides gracefully from its expansive to its contractive phase and back. There is beauty, ease, a rightness in this pulsatory dance that is duplicated throughout unarmored nature in the lope of a bear, the reaching-out and arriving of the amoeba, the peristalsis of the mammalian intestine, the contraction and expansion of a heart, and the wave of a sidewinder snake (but to armored man, "That snake motion gives me the willies; the jellyfish, too, and the beating heart for that matter").

To demonstrate the effect of armoring, let us place a rubber band across the middle of the jellyfish. The beauty of the pulsation is gone. The free, unitary pulsation is replaced by pulsation in twos and fives. The animal functions as much in response to the constricting rubber band as it did heretofore to the great ocean in which it lived. It is cut off from direct contact with its cosmos, and instead of being beautiful, it is now unnatural. The band has not only interfered with the physical aspect of how the jellyfish pulsates, but it has in effect made it into a different creature, affected the totality of its functioning.

Armoring distorts human functioning to the same extent that the rubber band deformed the illustrative jellyfish. Innocent impulses become cockeyed impulses. Armoring transmutes an organism born to religious awe (cosmic longing) into one who calls circumcising newborns and celibacy religious duties. It changes eyes that linger and look deeply, as do a young child's, into eyes that look sidelong and run away. Aggression, which is the instrument for overcoming obstacles and adversity, and which leads us to

explore, becomes the tool of hatred and money acquisitiveness. Our bodies lose their ease and grace and become stiff, wheezy, dyspeptic, and constipated. Our armoring disfigures us literally and spiritually.

If we return to the example of the jellyfish and the rubber band, we can illustrate other aspects of the armoring process. If there were only one band and it were not too constricting, the organism might almost function as a jellyfish, albeit being distracted and uncomfortable. But, if there were many bands dividing the entire jellyfish circle into segments, or if there were one broad, taut band constricting the animal almost in two, functioning would be grossly distorted to the point that all the organism's energies would be used in merely surviving. This condition is the case with a large part of the mass of humanity. Whereas the lightly or more less noticeably armored humans can pursue their works and expend their energies for good or evil, the large number of heavily armored people have ceased to struggle, and live out their days inert, and unfeeling. These, not the distrubed psychotic or the complaining neurotic, are the sickest humans.

For academic purposes, armoring can be viewed from either the psychological or somatic side. Thus, we take one of these inert humans and, by skewing our vision, view him purely psychologically. He lives a life of dull routine. He works mechanically at a mechanical job. He comes home and drinks one or two quarts of beer, eats, watches TV. and often falls alseep engaged in this activity. He has sexual intercourse with his wife on Saturdays and holidays, stops at the tap room to drink beer with the guys on Fridays, and then usually comes home a little drunk. He has a big breakfast on Sundays and spends most of the day supine, watching TV. He goes for a two-week vacation at the same rooming house at the shore each year. His children visit every few months, and once he has inquired as to their health and job he has little to say. He is probably roused most by a good game on TV. He says that he is not prejudiced, but he has feelings about the

blacks who are beginning to move into his neighborhood, thinking of the property value and the principle that "people should stay with their own: "Nothing in the world moves him very much, positively or negatively, but, he says, "I'm not complaining." He hates fights, gets along ok with the guys. "They don't bother me, and I don't bother them.' In fact, his life was satisfactory to him until he sustained a minor injury at work and become increasingly apprehensive at his machine and so fearful of going to work that he concocted transparent excuses to stay at home. The fact that an injury touched upon some deep anxiety raises him above the most lifeless of the inert. Another might have had an arm severed and gone on dully.

What does a man's physical armoring look like on this level? His eyes are lifeless and never make contact. He can move his eyes to follow an object only very slowly. His face is a mask of blandness, lined only by age, not by character. The muscles of his neck are flabby, lacking tonicity. No gag reflex is elicited when he inserts his fingers deep into his throat. His chest barely moves with respiration; no matter how he tries to breathe deeply, he cannot move his chest. His abdomen is hard. His pelvis is dead. The picture is the same from the behaviorial and physical sides. He is barely alive, though he may continue to exist for many years.

The functional identity of the character (psychological) and muscular (somatic) armoring can also be revealed in examiniation of particular areas. To attack either exposes the patient to the anxiety that armoring holds in abeyance. A patient whose intolerance of hostility is hidden behind a facade of passivity and submissiveness is provoked by an insulting description of his spineless behavior. If the provocation is sufficiently skillful, the patient will begin to react with anger. As he does, his anxiety will be revealed in his cold, sweaty hands and tachycardia (increased heart beat rate). Or the same patient, who when asked to punch the couch with anger has failed weakly and affectlessly, now, with painful prodding of his shoulder armor, begins to really punch, muttering, "Damn you, Damn you." A cold sweat suffuses the entire body surface and the pupils are wide, for the patient is scared of his own hostility.

The armoring, characterologic or muscular, allays anxiety. In the performance of this function, it establishes a more peaceful equilibrium for the organism, but at the expense of full contact with the environment and with its own core. In the example just cited, the patient neither perceived his own hostility nor expressed it appropriately in the world. He lost the freedom of spontaneous reactivity and the fullness of his emotional substance in exchange for quietude. He traded true and lively communication for a predictable, boring niceness, which characterized him. In place of free and genuine contact, he exhibited a substitute contact, a social facade behind which the reality of his person was diminished. He no longer pulsated along with the jellyfish and the ameba.

A skilled observer can predict that there will be little or no emotional reaction from an individual with strongly armored eyes and rigidly held chest who is suddenly bereft of a loved one. At most, there will be annoyance or discomfiture at the sudden change in his living arrangements. In fact, the problem as stated is inaccurate, because our armored example is incapable of possessing a "loved" one. The unarmored individual faced with the same circumstance may react in a variety of ways. He may withdraw into solitude so he can concentrate on his pain, undistracted by well-wishers; he may sob for hours or days; he may think deeply on life and death; he may seek out other intimates so that they can communicate the depth of their feeling, etc. The only element of his behavior that is predictable is that the experience of death will move him deeply. The particular way that he will react is totally unpredictable. The difference between unarmored and armored behavior is the difference between a variable curve and a straight line.

Armoring, to the extent that it is a temporarily useful function, tends to perpetuate

itself. The infant who first discovers that by holding its breath it can momentarily decrease the intensity of the huge emotional pain it is feeling will tend to hold its breath when it experiences its next, lesser pain. If this process is not corrected, the infant will develop an armored chest by early childhood with which it can diminish the experience of all pain. The armored child becomes a now adult who conducts his life to avoid any exposure to pain, maintaining the integrity of his armoring and, unfortunately, grossly limiting his exposure to life's experience. As a parent, he will be closed to his child's pain. The child, lacking parental sustenance in painful situations, will soon learn to armor in turn. And thus it continues generation after generation.

The question "Where did armoring begin?" is an intriguing one. From his history, we know that man, at least Western man, has been armored for millenia. We know that there are variations in the intensity of armoring within a culture, and between cultures. Some primitive peoples are relatively unarmored in comparison to us, e.g., the Trobrianders as described by Malinowski, and the Maasai in Kenya. Other primitives, the Melanesian Dobuans, for example, are, judging by their behavior, far more armored than we.* The degree to which a society has advanced materially is, therefore, no criterion of the extent of armoring within that society. Why are humans, as far as we can tell, and excepting our domesticated animals, the only armored mammals? (I refer only to mammals because we do not understand the behavior of extra-mammalian animals enough to evaluate it.)

In Cosmic Superimposition, Reich tackled the problem of the origin of armoring. In what he called "more than empty speculation" but "less than practicable theory," he postulated that, at that point in the dim past when man just became capable of reasoning beyond the immediate circumstance in which

he found himself (i.e., reasoning not merely to discover the best way to extricate himself from a dangerous situation or how to accomplish a work task), when reasoning became a ding an sich—when he knew that he knew—the perception was so frightening that he armored against this inner fright, and the process has continued in the species. The consonance of this postulate with the biblical loss of Eden for having tasted of the fruit of the tree of knowledge is fascinating, making allowance for a literal translation of knowledge as knowledge versus the biblical implication of "knowledge" as sexuality.

There is difficulty with this postulate as we apply it to our own experience. When we observe our children growing, we correlate their armoring with observable social traumata. We do not witness in the relatively unarmored children that, as their perceptions deepen and their awareness increases, chronic armoring is attending the process. This, of course, does not invalidate Reich's hypothesis, because the case of primitive man cannot be equated with that of a growing modern child; it merely fails to add evidence. The definitive answer to this intriguing question is simply not known at this time.

Individual armoring is the thread from which the fabric of our society is woven. And, on the other hand, society determines by which threads we shall pattern our lives. The relationship is reciprocally reinforcing. This is the bottom reason that significant social change creeps at a wounded snail's pace. The "sins" that the biblical prophets railed against are still with us, undiminished. The religious institutions, designed to save our souls, are as blind and corrupt as when Jesus preached against them. In The Murder of Christ, Reich referred to the relationship between man's armoring and the societal institutions that reinforce that armoring as "The Trap". Armored men, he believed, have always perceived their entrapment, if only dimly. They have murmured or shouted against it. The reformers have launched revolutions that were to free men from the trap, and in the course of time, each revolution

^{*}Among the Dobu, treachery and hostility are considered social virtues.

failed; after a flurry of apparent freedom, men remained stuck where they had been. Curiously, those who pointed a way out of the trap were usually vilified and often persecuted.

There is a mean irony in man's essay to escape the effects of his character. The reformer and the revolutionary, in their attempts to overcome prejudice, avarice, and "sin," palpitate for a moment in a wave of nobility and largesse, then, when the reform or revolution achieves power, the position of the revolutionary party gradually hardens and develops its own prejudice, avarice, and "sin," which evokes the next revolutionary.

Reich referred to the failure of leaders and seers to include the factor of human armoring in their planned march into a better world as a "biological miscalculation in the struggle for human freedom." The simple fact, Reich suggested, is that, while men aspire to freedom, dignity, independence, and joy, they are structurally incapable of achieving them. Freedom in the minds of the masses of humanity implies merely escape from under the oppressor's knuckles, which is reasonable enough but insufficient. Once escaped, they must be capable of managing their lives rationally, they must have a scale of values that gives priority to the satisfaction of their deepest needs. Armored men are so cut off from their own depth that they are not even aware of their deepest needs, and if they are "freed," they become lost in superficialities and excesses. They are so accustomed to direction from above that, given their own head, they are incapable of conducting their lives responsibly, and soon they cry for a new leader to whom they can entrust the course of their lives. So long as the human masses are armored, their social organization must reflect this biological distortion, and freedom is a chimera.

The condition of being a man in The Trap is frustrating. So many of us lead dull, unsatisfying, painful lives. We distract ourselves with entertainments, which wears thin. We keep busy to keep from feeling our emptiness. We champion causes, perhaps

achieve a minor victory, and in time discover that we have not gained much on filling our inner emptiness. Some of us find surcease through our guru or Jesus. We put our hand in the palm of the Master and permit ourselves to be conducted through life, cut-off from life somewhere, but guarded and peaceful. Others of us confine our lives to our work, or champion causes—the attainment of Communism, proselytizing among the "unorgonomic," etc.—to distract us from ourselves.

We are so blind to the fact that our entrapment is unnatural that an eminent American psychiatrist proposes that we can live our lives only with a basic store of delusion.

What in the world are delusions? and When in the name of heaven are they necessary? Let us now answer both tentatively, as follows: Delusions are the denials and the substitutive or compensatory beliefs necessary to make each man's world seem a little more like the heaven he so ardently desires. We dare not, then, disregard the psychological truism that such beliefs, in a truly humanitarian sense, are indeed sacred, and that we tamper with them at our patient's—and our own—peril. Let us keep this theme implicit in all our discussions of psychotherapeutic techniques in the chapters to follow.*

We make our way through the centuries leading "lives of quiet desperation" suspended on cords of delusion.

The critical question, then, is whether the character of modern man and his society flow from man's essential nature and are then, in a deep sense, unalterable, or whether homo normalis and his institutions are the product of biological distortion. Those therapists who advocate that a patient "adjust" to his environment are obviously commenting on the essential "correctness" of things as they are, though they may simultaneously despair of the situation. Reich was the first who talked

^{*}Masserman, Jules, The Practice of Dynamic Psychiatry, p. 484.

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of society as the patient. To him, homo normalis and the society that evolved from his structure were both deformed. This is certainly not to say that Reich was iconoclastic or cynical. Just as there are impulses toward health in the sickest patient, so are there wholesome tendencies in society.

As illness is an attempt to right the pathology that affects the individual, the societal eruptions often reflect the same tendency. Whatever exists, Reich cautioned, has its own good reason. We may recognize that the institution of organized religion causes a great deal of damage, that the institutional police can be repressive and brutal. But without the restraint of religion, there would be freer play of men's sick sexualtiy in the world (the fact that the religion also helped to create the sick sexuality does not bear on this argument immediately), and without the police force, the incidence of criminal activity would multiply wildly. The institutions reflect the societal sickness but are also the attempt to deal with it. To recognize the first property and disregard the second, and on this basis to call for the abolition of the institution, would be socially irresponsible and would lead to chaos. Summary decapitation of social evils is a method that only befits the Queen of Hearts in Wonderland.

Some Properties of Individual Armoring

A five-year-old boy lies in his bathtub enjoying the sensation of the warm water running over his skin, stroking his penis gently, immersed in the delicious sensation as his organ grows. Suddenly he is shocked by the screams of his mother and grand-mother who must have been standing at the open door. They rush in with ugly faces and shattering voices, accusing him of heinous behavior, threatening to throw him out of the house if they ever catch him doing that again. He is utterly paralyzed. His body feels sick—numb, except that there is an aching pain in his penis. In that instant, he thinks that he may die.

A patient in his mid-thirties is lying on the couch, breathing feely, relaxed except for

some minor finger movements. The therapist has noted for some time that, in times of anxiety, the patient's hands wander down to cover his penis and protect it. The therapist sits observing the patient in his quietly pleasurable breathing. Suddenly he lunges toward the patient's genital region with a shout. (He dares to do this because, having known the patient for many months in therapy, he is aware that the patient is relatively unarmored down to his abdomen and pelvis). The patient defends himself with an instantaneous rush of his hands to cover his genital; his mouth and eyes fly open, pupils dilate, his skin blanches, and he is frozen. The frozen attitude gradually shifts to one of deep and prolonged thought, while the pupils are still wide and the eyes scared. He starts to cry, then sobs with deep belly sobs. When the sobbing subsides, he tells the therapist about the episode in the tub at age five, which had been repressed up to this time.

The recovery of memories of acute emotional traumata is fairly common in the process of attacking armored segments. The memory is in the muscles.

An ambulatory schizophrenic patient in her mid-twenties lies on the couch, her eyes following a flashlight in the therapist's hands, which he moves in quick darting motions before her. They have been working intermittently for several years on freeing her armored eyes.

They both recognize that she sees more now than ever before, that her eyes move more freely, and that she can tolerate some limited expression of emotion in her eyes. At this point, they both assume that the regular trips in and out of institutions, which have persisted since pre-puberty, are a thing of the past. Mother says she is delighted with the progress.

Mother is a short, chubby, twittery, walking Hallmark card. It is impossible to communicate with the mother on any meaningful level. The therapist is completely sympathetic to the plight of the daughter of such an apparently pleasant, concerned, empty woman. The wonder is that the patient is still

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able to hear after all that twittering.

In all of the hard work on mobilizing the patient's deadened eyes, there has never occurred the recovery of any repressed memories of situations with Mother. The reason is that "Mother" is not an acute trauma, though she completely immobilized the daughter's eyes. "Mother" is the insidious way things happened; she is a process. Mother leaves armoring without memory.

A sensitive and lively child is attacked repeatedly by an older and bigger boy at school. The child initially makes an attempt to fight back physically and is beaten badly. Next, he makes an attempt to verbally assault his oppressor and is beaten again. He finally discovers that he can use his superior wit to make sly, derogatory remarks that go above the head of his tormentor, and here he has established equilibrium. With the trickiness, he is able to covertly express his hostility and remain unharmed. When he is tricky, his eyes do not look open as they usually do, his chest is held, and his shoulders are tighter. He is armored. However, in the presence of other children and with his family, he is still free and lively. He is able to wear his armor for special occasions only. This is a temporary armoring.

Temporary armoring is a condition of survival in an armored society for all but the saintly. We are not always in a position to tell our boss that he is putting his work on our shoulders, or to tell our teacher that he has not prepared his lecture. We endure and bristle. So long as we can keep our bodies and spirits generally free, the temporary armoring does not cause serious harm. The danger is that temporary armoring may become chronic. Specific passive endurance may engender a generalized attitude of passive endurance, and we are in shackles.

Once the self-imposed restraint that protects us from an immediately threatening situation becomes exchanged for the security of the swaddling-cloth armoring, it takes an act of daring to break out and expand against our confines. If we lack that courage, we are caught, and the imprisonment perpetuates itself.

There is a reciprocal relationsip between what the psychoanalyst discovers and what the organomist observes. The unconscious material. the character attitudes. symptoms, are the effects of the armoring process, but the orgonomist deals with armoring, how the body and spirit becomes sick, whereas the conventional psychiatrist deals with what the sickness consists of. To the extent that the psychiatrist recognizes only the initiating event in the environment and the resulting symptoms, without awareness of the process by which the symptoms are formed, he is handicapped in reaching his patient.

To be continued.

The Ocular Character

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Introduction

This paper will discuss the energetic qualities and character traits shared by ocular characters. First, Wilhelm Reich's research will be reviewed to define the ocular character type and to demonstrate the biologic basis of ocular pathology. Second, we will summarize the effect of this biologic disturbance on subsequent psychologic development. Third, we will discuss personality traits commonly seen in ocular characters. Fourth, a clinical example will review salient features. Finally, we will conclude with a discussion of the classification of ocular characters and with some brief comments on the diagnosis of schizophrenia.

Biologic Foundation

In the bioelectric experiments, Reich proved that the metaphorical psychic libido is, in fact, a real energy that can be objectively measured (1). Within the body, the orgone energy concentrates in autonomic nervous system ganglia in the region of the solar plexus. Reich referred to this area as the "core." Excitation or sensation is the movement of orgone energy within the body; expansion is movement of energy from the core toward the skin surface, and contraction is energy movement from the periphery toward the core. In health, expansion and contraction follow one another in a rhythmic. pulsatory fashion; no central nervous system or intellectual capacities are necessary. Perception is the subjective awareness of excitation; it does require a central nervous system and cerebral functions. The bioelectric experiments demonstrate that feelings or emotions involve central nervous system perceptions of actual energetic movement or sensation. For instance, in healthy individuals, pleasure is subjectively felt when objective bioelectric readings indicate the energy moves from the core to the skin surface, and anxiety is felt subjectively when readings indicate energy movement from the periphery toward the core. Thus, pleasure is identical with expansion, and anxiety or unpleasure is identical with contraction.

The full integration or coordination of objective excitation and subjective perception requires that the organism be free of blocks (armor). In health, where armor does not inhibit the free-flowing energy, the individual has contact with his core; he perceives his primary drives, likes himself and his body, and is independent. The bioelectric experiments also demonstrate what is meant by good contact with the environment. When an individual has full contact with the environment, he feels a sense of belonging and of responsibility; he perceives social situations accurately and understands other people.

Ocular characters by definition have their primary armor in the ocular segment, and this armoring prevents, in every case, full integration of sensation and perception. The specific block was felt by Reich (1) to be a contraction at the base of the brain, which functionally separates the brain (i.e., perception) from the rest of the body (i.e., sensation). This split results in:

- —misinterpretation of one's emotions and an incomplete integration of self-perceptions into a unified sense of self (lack of core contact); and
- —misperception of external stimuli with a resultant inaccurate perception of the environment (lack of contact with the environment) and an inability to "see" the relationship between the self and the world.

If the sensory-perceptive split is severe, gross impairment in reality-testing occurs, and the patient is psychotic. In psychosis, the individual incorrectly evaluates his sensations, perceptions, and thoughts, and forms incorrect inferences about himself and the external reality. Reich's concept of the sensory-perceptive split is useful in understanding the meaning of many psychotic symptoms.

Illusions, the most straightforward illus-

tration of the split, are the misperception of real, external sensory stimuli. Examples are the rustling of leaves being heard as the sound of voices or a slamming door being heard as gunshots. Hallucinations are perceptions without external sensory stimulation, although they have, for the patient, the immediate sense of reality of a true perception. Auditory hallucinations are the most common and often the voices are accusatory, degrading, or harassing. Psychoanalysts have studied such hallucinations and felt them to be manifestations of the individual's psychic dynamics; that is, through sensory distortion, patients are expressing their pathologic selfperceptions. For example, guilt feelings may be misperceived as an accusing voice.

The bioelectric experiments verified the movement of energy within the body. In health, this energy movement feels like gentle, warm, or breezy streamings. In psychosis, this movement may be misperceived or misinterpreted, causing tactile hallucinations such as harsh electrical or tingling sensations. Sometimes, somatic hallucinations, such as the sensation of "snakes crawling inside my abdomen" are experienced. Sensations of bodily change and hypersensitivity to sound, sight, and smell are reported.

Similarly, many delusions are misperceptions of the body's energetic status. A somatic delusion that "my brain is rotting" expresses the deadness of severe chronic ocular armor. Delusions of being controlled by outside "forces" (such as the housewife who believed that sexual feelings were being put into her body by the man next door) are always the result of a severe disturbance in both contact with the environment and contact with inner drives and wishes. The lack of core contact may be delusionally expressed in statements such as, "There is no need to eat; I have no insides."

These symptoms all result directly from the sensory-perceptive split. Other psychotic symptoms are secondary to the split. They arise in thinking and communication, aspects of cognitive function which are secondary to and dependent on the underlying coordination of sensation and perception. Loose associations, incoherence, overly abstract or overly concrete speech, neologisms, and the loss of the meaning of words are referred to as "formal thought disorder." These are all common secondary manifestations of the severe disturbance of unitary ocular functioning.

The degree of splitting varies widely amongst ocular characters. There is, therefore, a spectrum of pathologic symptoms and traits; the psychotic symptoms mentioned above are the extreme. Many ocular characters never become psychotic. The traits that result from "milder" failures of sensory-perceptive coordination will be described shortly; however, the difference between the healthy person and the ocular character cannot be overstated. In health, the free-flowing orgone energy establishes a rhythmic, pulsatory pattern of expansion and contraction. The individual feels a high degree of personal contentment, is capable of satisfying interpersonal relationships and is "comfortably at home" in the world around him. Ocular characters are personally insecure, feel alienated from others, and tend to feel lost and confused in the outside world.

The degree of ocular segment integration is reflected in the appearance of the eyes. In health, the eyes are open and bright, and respond to the environment with movement and appropriate emotional expression. Indeed, in healthy people, the eyes are a mirror of the emotional state of the organism at any particular time. Ocular characters show a contraction and immobilization of the muscles around the eyes, forehead, and at the base of the occiput. Occipital muscles may be taut cords. The forehead and eyebrows may be stiff, and the forehead often appears flat and shiny. The eyelids frequently droop, or there may be a "squinty" look. Flesh at the sides of the nose is often smooth and waxy. Bagginess or a dark coloration is often prominent beneath the eyes.

There may be little eye movement. The ocular character usually makes poor eye

contact when speaking with another person; occasionally, he tries to compensate for this, which may result in a drilling stare. The expression in the eyes is often an empty, vacant, "staring into space" gaze. Anxiety, suspiciousness, hate, or pleading may be a fixed expression, never changing with alterations in mood or events. Markedly dilated pupils are a manifestation of deep anxiety.

Developmental Aspects

Recent research indicates that sensory-perceptive coordination occurs very early in life, probably in utero and in the months after birth. (Sophisticated aspects of perception take years to mature, but the basic perceptual function is acquired quite early.) For reasons not fully understood, Reich believed that infants who will become ocular characters did not develop this integration in the crucial early months of life.

Development is a maturational process comprised of many stages. Later stages supercede and integrate previous stages; deficits in one stage will interfere with ensuing stages. Therefore, just as a damaged foundation weakens a skyscraper, the deficits in integration impair the developing infant. Also crucial is the fact that all development requires a continuous interaction between the infant and his environment. Here, the future ocular character is further handicapped because the incomplete integration causes him to misperceive the environment; maturation is compromised by "erroneous input" from the outside world. Finally, psychologic development generally follows biologic development. Self-concept, the capacity for interpersonal relationships, emotional expression, and mechanisms of defense develop progressively through the years. All rely on the underlying biologic foundation of sensory-perceptive coordination. As we shall see, ocular character have many problems in these diverse aspects of their lives.

Therefore, ocular characters are doubly handicapped, both by the original and still present ocular segment armor and by the developmental deficits and fixations that have derived secondary to the early split.

Ocular Character Traits

There is no one pathognomonic personality trait associated with the ocular character. Rather, a wide range of qualities and attitudes is seen, so two ocular characters may appear at first glance to be totally different. The diagnosis of an ocular character is made by the presence of a constellation of findings. Since any of the features discussed may be present in any other character type, the more intensive the clustering of those specific traits, the greater the likelihood of primary ocular block, and the fewer traits present, the greater the likelihood of another character type with a secondary ocular block. Also, there is a wide spectrum of pathology for each trait discussed below. The chronically hospitalized schizophrenic is an ocular character at the more disturbed end of the spectrum. Later, we will illustrate the healthier range with a case history.

Self-Concept

The personal identity and self-esteem of every ocular character is disturbed because the early armoring prevents core contact during the years when identity formation occurs. Hence, the child grows up feeling frail and vulnerable. As an adult, he lacks confidence and is insecure. This generates a craving for security and support (which the therapist can feel in the first few encounters) and a fear of isolation and abandonment. The disturbance in identity frequently includes an underestimation of his own talents, abilities. and potential. Ocular characters reinforce their sense of helplessness by dwelling on failures and shortcomings, while overlooking achievements

Toward the more disturbed end of the spectrum, personal identity is fragmented and tenuous. Having not obtained object constancy, the patient does not perceive himself as a distinct, individual entity. He is psychically always in danger of becoming engulfed by others or "losing myself" if separated from someone important. Thus,

both intimacy and separation provoke panic, and the terror of abandonment is onmipresent.

A sunken self-esteem is typical of ocular characters. For many, it is as if they go through life with a scale, weighing each event to see if their self-worth should be up or down. Setbacks generate self-taunting. "See, you really can't do anything, can you?" Less well-integrated patients fluctuate between a grandiose omnipotence and bitter, vicious self-condemnation. (This may reach psychotic proportions in delusions of being "Jesus Christ" or "the Devil.")

The false superiority precipitates crushing disappointments as the person's acts and accomplishments seldom live up to the expectations. Feelings of worthlessness were expressed by one patient who told her therapist that whenever he asked her in from the waiting room she felt she was a dog being brought in from the backyard. Patients are prone to feeling "bad" and beyond redemption for minor indiscretions. This appraisal may be unassailable by a supportive, rational explanation of what solid, decent citizens they are. This relentless struggle with self-esteem and personal worth is very indicative of primary ocular armoring.

Interpersonal Relationships

Successful interpersonal relationships require both a set of social skills that are learned during infancy and childhood, and the capacity for full contact with the environment as an adult. As previously noted, the early lack of coordination of sensation and perception interferes with the learning process and the adult ocular armoring prevents full contact with the environment, so that disturbed relationships are inevitable for the ocular character. Most patients feel a deep sense of alienation and isolation from everyone. This may be so much a part of their "world view" that they don't complain of it early in therapy. It has been said they are "allergic" to people or harbor an "antihuman bias." Some ocular characters are reclusive and limit social contacts to essential

everyday tasks. Others are shy and have only one or two friends. Even those with more friends and mates still tend to feel alone, misunderstood, and "different".

Ocular characters relate all social experiences to themselves; they "take everything personally" and cannot appreciate another point of view or where the other person "is coming from." This is not necessarily a lack of caring for others, but rather an inability to understand or appreciate others' feelings or thoughts due to the ocular segment armoring and resultant impairment in contact. An example of this self-referential thinking occurred when an eighth-grade English teacher began working at a middle school where the senior students had become irresponsible and wild after three years of overindulgence. When she couldn't control the students' behavior, the new teacher became overwhelmed with a sense of personal failure and "weakness." Despite explanations from her therapist and fellow teachers about the problems at the school, she was unable to "see" other aspects of the problem and belittled herself for several months.

The ocular character is very sensitive to even the slightest sign of hostility or rejection from the environment. The greater the disturbance in contact, the more this sensitivity approaches paranoia. The patient becomes "the victim," constantly "screwed" and mistreated. Not able to see his role in disturbed relationships, he places full responsibility on the maltreating others. When a negative sign is perceived, the ocular character generally withdraws from the "suspect" person, thereby avoiding a troubling situation or conflict. When one asks about the withdrawal, it becomes clear that the patient fears conflict will have dreadful consequences and a part of his life will unravel or collapse. He may believe, for instance, that to criticize a mate even gently will cause abandonment.

Thus, alienation, sensitivity and self-reference underlie the social relationships of ocular characters; many different social patterns result. Some patients have conflictual, battling relationships with family, friends and

employers. Others may be passive and dependent on one or two people but show considerable ambivalence toward them. Some appear at ease with acquaintances but become guarded and distrustful in potentially intimate relationships. In general, the contact impairment results in few close friends, not trusting people, and trouble getting along with others.

Emotional Expression

A wide variation in the capacity for emotional expression is seen amongst ocular characters. At one extreme is the severe reduction in the intensity of feeling known as flattening or blunting; these patients are apathetic and indifferent. However, many ocular characters are lively and perceptive. Nevertheless, the split causes misinterpretation or confusion about their feelings, which results in a frightened, anxiety-ridden aliveness. Frequently, patients see themselves as skinned rabbits or transparent fish, thus conveying both their vitality and vulnerability. Warm, positive feelings may be sporadic, since many patients fear such feelings leave them too "exposed." A chronic anhedonia may predominate, and the patient complains, "Life is an endless trial." Often, the lack of integration manifests as a disturbance in the modulation of emotional expression; loss of subtle gradation of feeling tone causes the emotions to appear exaggerated or artificial at times. Inappropriate affect (i.e., when the feeling is discordant with the verbal content) is also an example of incomplete integration. An example is the patient who laughs giddily while describing the death of a loved one.

Most ocular characters cannot be effectively aggressive. In the most fragile patients, even being aware of feeling angry may lead to panic and psychosis. A few patients lack sufficient armor to control their aggression and are prone to dangerous, destructive outbursts. Most ocular characters fall between these two extremes. They demonstrate poor judgment in that they exaggerate their own destructive potential, underrate their ability to control it, and exaggerate the dangerousness of the anger of others. Excessive inhib-

ition follows which blocks healthy aggression, and functioning becomes impaired. The trapped anger accumulates and eventually erupts in an outburst of temper, which often causes the patient embarrassment and guilt. This then spawns greater inhibition of all aggression, and the cycle repeats. Clinically, there is often a stark contrast between the patient's actual timidity and his personal perception of impending destructiveness. Even patients capable of considerable assertiveness frequently have difficulty in competitive situations. They don't know when to be passive and when to be assertive. Their behavior may be markedly inconsistent; at one time, they are obsequious, later, they become pushy and intrusive.

Cognitive Functioning

The severely ill, often hospitalized, schizophrenic is usually unable to work at all. His cognition is riddled by delusions, loose associations, bizarre thoughts, and ideas of reference. Less impaired ocular characters often achieve less occupationally than expected, given their intelligence and education. But, many ocular characters accomplish a great deal occupationally and show no deficits in concentration, attention, conceptualization, abstraction, or creative thinking. However, most will experience some blurring or confusion when anxiety emerges strongly. Then, attention is diminished, there is difficulty in shifting the focus of thought, and inappropriately concrete or abstract ideation may occur. At these times, the patient appears to be "locked in" to a rigid, stereotypic thinking pattern. Obscure events are accentuated, and central issues may be overlooked. But, none of these impairments may be so severe as to grossly interfere with day to day occupational functioning. Ocular characters are found in all professions and occupations.

Psychologic Defenses

The entire range of ego defenses, including repression, negativism, sublimation, and intellectualization, appear. An aspect of the

defensive network commonly seen is the patient's denial of any awareness of his inner drives in even elementary areas of his behavior. He may look quizzical when asked what he felt or wanted in a particular situation. This lack of "insight" indicates ocular blocking.

Projection is of central importance. This defense is biophysically based in the sensoryperceptive split, which causes an inability to fully distinguish between internal and external sensations. Also, projection is well suited for use in interpersonal relationships, which are the province of greatest anxiety for the ocular character. In severely disturbed patients, projection generates psychotic delusions and hallucinations. In out-patient practice, projection frequently is more subtle. An example is the mother who had ambivalent feelings toward her young children. She attributed her unpopularity in the neighborhood to other mothers being neglectful of their own children and envying her for being such a good mother.

A less often recognized aspect of projection does not involve ideas of a "conspiracy" or feelings of others being "against me"; ocular characters may simply project their own assessments and judgments of situations onto others. They do not realize that another person might view an event from a different perspective. This creates interpersonal conflict and increases distrust when someone else, acting on his own evaluation of a situation, behaves in an incomprehensible fashion. The patient attributes malicious motives to that person because he thinks, "I couldn't do such a thing."

Similarly, an ocular character may project his disturbed self-identity and self condemnation, so he cannot conceive of loved ones or the therapist being other than critical of him, too. It is projection that causes distrust of expressions of affection toward him; since he is unlovable, the other person must have motives which are suspect. All ocular characters distort their relationships with people through projection. This appears in the therapeutic relationship where the or-

gonomist's attitude of friendly neutrality allows the patient plenty of room "to read meanings into" the therapist's words, gestures, and silences. The amount and frequency of projection that occurs gives the therapist a rough measure of the degree of ocular splitting.

Response to Emotional Stress

As noted earlier, there is no single pathognomonic ocular character trait. However, under severe emotional stress all ocular characters contract in the ocular segment with a resultant intensification of the split between sensation and perception. Just as the hysteric flees, and the phallic becomes aggressive, the ocular character loses integration when threatened. When this loss of coordination occurs, an exaggeration of any of the previously discussed characteristics may occur. Confusion may suddenly appear with accompanying loss of clarity of thoughts and/or feelings. In desperation, either projection may expand to shore up defenses, or the self-esteem may sink lower. Emotional and physical withdrawal and isolation is a common response. Psychotic delusions, hallucinations, and illusions are the extreme manifestation of ocular contraction and splitting.

Knowing how a patient psychologically experiences and expresses this severe emotional threat also helps to diagnose the character type. The central psychologic conflict of the ocular character is a struggle to maintain his very existence, to remain viable and intact in the fact of anxiety-provoking internal and external pressures. Other character types fear losing a loved one, losing respect and approval, or losing control. The fear felt by ocular characters is more primitive and terrifying: they fear disintegration.

Just as the phallic fears loss of potency because his foothold is shaky at the genital level, ocular characters fear disintegration because of the unstable coordination of sensation and perception. In psychotic patients, this life and death struggle may present as delusions of mass destruction, impending cataclysm, or sheer panic. Better integrated patients may avoid psychosis, but their anx-

iety levels are usually very high. These patients express fears of "coming apart" and their behavior is shaped by a desperate attempt to preserve inner equilibrium and a sense of well-being.

Clinical Example

The patient is a 30-year-old, single male who is a successful middle-management executive with a major corporation. He works in close contact with a group of professionals whose responsibility it is to assess the cost effectiveness of multimillion dollar engineering projects both within the United States and abroad. He has had a steady girlfriend for the past five years and was socially popular throughout his college years. He has never been psychotic, and never previously sought psychiatric treatment. He presents with the complaint, "I feel stagnant and unable to develop myself." He notes a lack of direction and "a lack of unity in my feelings and actions." There is nothing bizarre in his appearance, manner, thinking, or speech. His affect is anxious, not flat.

The patient's complaint of disunity between his feelings and actions is an accurate description of his lack of full integration. The split is not so severe that panic and psychosis have resulted; the diagnosis of ocular character is made by a clustering of character traits, which became apparent during the initial evaluative sessions. He demonstrated a marked disturbance in his identity. He said, "I'm flawed," and complained of not being "equipped" for life. He perceived of himself as lacking size, strength, and power. In an early dream, all the people he knew at work were playing ice hockey; he was the puck being batted to and fro. He focused attention on his failures, neglecting to mention many occupational successes and a promotion.

His interpersonal life centered on his girlfriend. He felt very dependent on her and feared abandonment. She had several habits that annoyed him, yet he couldn't bring himself to voice any of his complaints, even in the most tactful fashion. The mere thought of confrontation precipitated acute anxiety, confusion, and rambling elaborations on how

"such boldness" would inevitably lead to her walking out on him. The result was an interpersonal paralysis. He couldn't tolerate intimacy with or separation from the girlfriend. No growth or development had occurred in the relationship for four years.

The patient's affective life was similarly disturbed. He was chronically anxious and restrained, forever fearful his "flaw" would show through to others. He complained of "stored rage" and felt his anger was dangerous. He frequently recalled an incident in seventh grade when he became angry and shoved a girl against a wall. Although no injury had occurred, from that time on he had progressively inhibited his aggression. By the time he began therapy, he was passive toward all authority figures. He was unable to express any negative feelings about therapy for fear the therapist would "stop giving me summaries, insight, or perhaps ask me to leave." He was similarly timid and passive toward supervisors at work. He disagreed with them on several points but became acutely anxious when encouraged to tactfully verbalize his ideas. He was "too small" compared to the "large and powerful" bosses, saying, "They wouldn't change anything, or they might degrade and humiliate me; they might even attack me physically."

Classification

The classifiction of ocular characters is controversial. Elsworth F. Baker describes three subtypes: voveurism, essential epilepsy, and schizophrenia (2). The voyeur prefers watching women undress to genital sexuality. His aggression is inhibited to the point of poor occupational functioning, and he is submissive. He experiences sensations of brain deadness, and Baker described the eyes as having a hungry expression. In essential (idiopathic) epilepsy, according to Baker, an increase in energy is discharged into the musculature and the epileptic fit serves as an extra-genital orgasm. Ocular armor predominates, and opening the eyes or rolling them up may induce a seizure. As an adult, the

epileptic may be irritable, selfish, impulsive, and asocial.

Baker lists five criteria for the schizophrenic diagnosis. First, sensation and perception are split, as described throughout this paper. Second, the chest is soft but does not move perceptibly in breathing. Third, respiration is limited, with minimal respiratory volume. Fourth, there is a severe throat block, producing a soft, weak voice and restricted expression. Finally, the energy field surrounding the person is widespread and seems to have no boundaries. There appears to be a relationship between armor in the ocular segment and the nature of the field; the greater the ocular armor, the more diffuse the field.

The diagnostic criteria for schizophrenia have been particularly controversial since 1980 when the American Psychiatric Association published the third edition of the Diagnostic and Statistic Manual of Mental Disorders (DSM-III) which attempts to provide clinicians and researchers with a common language. The criteria for the diagnosis of schizophrenia in DSM-III require the presence of certain psychotic features. "At some phase of the illness Schizophrenia always involves delusions, hallucinations or certain disturbances in the form of thought." (3:181). Illnesses without overt psychotic features, such as latent, borderline, or pseudo-neurotic schizophrenia, are specifically excluded by DSM-III. In addition to the requirement of psychosis, DSM-III specifies that schizophrenics must demonstrate a deterioration from a previous level of functioning in work, self-care, or social relationships and have continuing signs of severe illness for at least six months.

Thus, DSM-III criteria and the previously used orgonomic criteria for schizophrenia define two different groups of patients. Therefore, it is appropriate for orgonomists to reconsider the orgonomic criteria for making a diagnosis of schizophrenia. All patients who fit the criteria for schizophrenia in DSM-III are ocular characters. But, many patients with primary ocular armoring and

with the character traits discussed in this paper do not fit either the DSM-III or the earlier orgonomic criteria for schizophrenia. As a result, some orgonomists argue that many patients previously diagnosed as schizophrenic should be simply called "ocular characters" and reserve the term "schizophrenia" for patients who fit the DSM-III criteria. This viewpoint asserts that the two groups are fundamentally different characterologically and should be distinguished diagnostically. Others maintain that both groups of patients are schizophrenic but simply lie at different ends of the clinical spectrum. Obviously, the issue will not be definitively resolved until further research permits greater understanding and more precise sub-classification.

Conclusion

Ocular characters are individuals whose primary armoring is in the ocular segment; the split between sensation and perception results in a physiologic incapacity for unitary coordinated functioning. Since sensory perceptive integration occurs very early in life, and since it is a crucial biologic foundation for later psychologic development, the adult ocular character suffers from both his current armor and the psychologic deficits that arose secondary to the impaired development. The result is an emotional disorder of the entire organism with pervasive problems in the areas of self-concept, interpersonal relationships, emotional expression, cognitive functioning, defense formation, and response to stress. The classification of ocular characters is controversial, particularly regarding the diagnosis of schizophrenia.

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Clinical Symposia

The Clinical Symposia will appear as a regular feature of the *Annals of the Institute* for Orgonomic Science. The edited material from the training seminars of the Institute presented in the Clinical Symposia is intended to provide the readership with information regarding the theory and practice of orgone therapy.

OCULAR SEGMENT, PART III

This seminar was held at the home of Stephen Nagy, M.D. on December 15, 1985.

Courtney F. Baker, M.D.: Today, we are going to discuss the criteria used for the diagnosis of schizophrenia. Steve will start us off with a brief historical summary.

Stephen S. Nagy, M.D.: Kraeplin divided the major psychoses into manic-depressive illness and schizophrenia. He called it dementia praecox and believed that those individuals who carried the diagnosis would have an inevitable downhill course. Actually, in Kraeplin's group, this was not true; but, basically, the notion of schizophrenia as a major debilitating psychosis began with him. Bleuler, the famous Swiss psychiatrist, was actually the first to use the term "schizophrenia," and he advanced the idea that this was a major illness that affected all parts of the individual's personality. His diagnostic criteria were the four "A's" with which we are all familiar. I think it is important to recognize that, in psychiatry in general, schizophrenia is really synonomous with a psychotic illness. To my knowledge, orgonomy is the only discipline that uses the term schizophrenia to describe nonpsychotic individuals, as well as describe individuals with psychoses. In orgonomy, the presence of a severe eye block as the primary site of the armor, along with other criteria, has been used to establish the diagnosis of schizophrenia. In our terms, it does not necessarily imply that the individual is psychotic. In the DSM-III, there is a category of schizotypal personality which presents with many symptoms that we would regard as indicative of an eye block but without any formal psychotic episodes. Basically, what I want to mention is that, when we use the term "schizophrenia," we are often talking about something quite different than what classical psychiatrists mean when they use the term.

Arthur Nelson, M.D.: A lot of thinkers in conventional psychiatry have grappled with the same problem, i.e., that a person can be a schizophrenic character type without being psychotic. They have talked about borderlines, latent schizophrenia, and pseudoneurotic schizophrenia, for example.

Dr. Nagy: Although the borderline personality is described as one who is stably unstable and who may have brief psychotic episodes, many people regard them as a sub-type of an affective illness rather than as a schizophrenic illness.

Dr. Baker: Are you saying that the diagnosis of schizophrenia has traditionally meant that the person has had also to have been psychotic or have had psychotic episodes?

Dr. Nagy: Yes.

Dr. Baker: What are the criteria used to define a psychotic episode?

Douglas Levinson, M.D.: Confusion, a period of hallucinations, delusions, and loose associations.

Dr. Baker: All of them?

Dr. Levinson: Actually, the criteria are very carefully constructed and they are drawn in that way to avoid diagnosing schizophrenia in someone who has only paranoid delusions without hallucinations, because that can be found in depression, in mania, and in what is currently called a "paradisorder," which never breaks down into a full psychosis. They are also drawn to exclude people who have brief hallucinations without a lot of content to them and who have no other signs of schizophrenia. An example of this would be people who hear their name being called or who hear a voice saying "hell" or "damn" or "get out of here." No one would

argue about the diagnosis of schizophrenia in a person with delusions and hallucinations or one with very bizarre delusions, or one with classical Schneiderian delusions, like thinking that someone or a force is directly controlling your thoughts or actions or the feeling that thoughts are being put into your head by an outside force. These are sort of considered pathognomonic of schizophrenia, but it has been proven that they are not, since about one-quarter of manics, at some point in their career, have them also. Or, if someone has a combination of things like a thought disorder and a strange and very inappropriate, blunted affect, they're allowed to be called schizophrenics without having hallucinations and delusions. If a person is just very schizophrenia-like, has been ill for a long time, and has shown deterioration, has a prominent thought disorder and very blunted, inappropriate affect, but doesn't hear voices or have prominent delusions, they can be called schizophrenic even though they look very different from the person who has hallucinations and delusions.

Robert A. Dew, M.D.: So they are really vacillating between structure versus manifestation.

Dr. Levinson: The current assumption in research on psychosis is that schizophrenia probably represents five or ten different neurological illnesses and, therefore, there are various combinations that are mixed together under the same category. Everyone is aware that there is a funny mixture of things that are probably not exactly the same kind of problem, and yet there are problems no one wants to put anywhere else except in the category of schizophrenia. Then there is the idea that the schizotypal personality represents people with the same vulnerabilities but who never become flagrantly psychotic. In some ways, from an orgonomic point of view, that's a more interesting group to consider here than the straight-out schizophrenic, whom no one here would argue about.

Dr. Dew: We would probably call most schizotypals, schizophrenic characters.

Dr. Levinson: And the fact is that current researchers wouldn't argue with that, in a sense, since they use the prefix "schizo-" for that group also, because of the finding that they are found in a high percentage of families of schizophrenics, and have some of the features of that disease. Where they would argue is when orgonomy calls classic borderlines and narcissistic characters schizophrenic, since they are considered not to be directly related to schizophrenia.

Karl Fossum, M.D.: Is the current thinking that schizophrenia is genetically related?

Dr. Levinson: Well, the people who wrote the DSM-III were pretty much accepting of the line of research that schizophrenia has genetic components and that schizotypals and schizophrenia are directly connected. Most researchers in the area now believe that schizophrenia is heterogeneous and that there might be not only genetically induced types but psychologically related types, and environmental, neurological types as well. In some ways, schizotypals seem even more genetic than classical schizophrenia, which can come from drug abuse, birth trauma, etcetera. It is hard to tie borderlines in with anything, in a consistent way.

Dr. Baker: So what you are saying is that we in orgonomy are a long way from the rest of the world as far as this is concerned.

Dr. Nagy: That's why it is very important to have this kind of historical and current background, because it makes it clear that when orgonomists use the word "schizophrenia," we are talking about a beast that is very different than what the rest of the world is pointing to.

Dr. Fossum: Is there any current attempt to use biochemical criteria for the diagnosis of schizophrenia?

Dr. Levinson: No. No biochemical research has yielded any specific test that's specific for any current diagnosis.

Dr. Dew: I have a practical question about the topic we're discussing. In orgonomy, it is the recognition of the eye block and its manifestations that lead us to the diagnosis of an ocular character, or schizophrenic. How does this sort of discussion enhance our understanding of patients, or change the way in which we treat them?

Dr. Baker: You would do something different with a borderline, say, than with a schizophrenic. Even though we may have previously lumped them both as schizophrenic types, treatment would be different in both cases.

Dr. Dew: Yes, but in both cases, it is a function of what you see as the primary block. If a borderline comes in and what you are struck by is the severity of the eye block, that is the block you are going to start with generally.

Dr. Baker: What we are trying to figure out is just that—what are we seeing? If we see a borderline, are we basically looking at a person with an affective disorder with a severe eye block, or are we seeing some funny type of schizophrenia?

Dr. Levinson: The issue is not the label. The issue is, are there meaningful groupings that people see as different, and how do we separate them in our own minds, and do each of us treat them differently?

Dr. Nelson: Also, the label schizophrenia has very perjorative connotations. As Bob said, the main block is ocular, so it makes more sense to call them ocular characters and to reserve the term schizophrenia for a subtype of the ocular character.

Dr. Nagy: That's a good point. No one here would have any problem with the diagnosis in a floridly psychotic 28-year-old who had been going downhill since age 20; but, if you have a professional come in who has done quite well in his life but also has a primary eye block, is that the same illness?

Morton Herskowitz, D.O.: It is actually more complicated than that. I can think of three different patients whose eye blocks have tremendously different meanings.

One man is a functioning professional with a brilliant academic career, who can't pass his Boards because he panics. On the couch, he becomes totally disorganized but never psychotic; he just becomes function-

less. Now, if you work on his eyes very slowly and carefully, he can stay with it and will say, "Boy, I can actually see the dots on your ceiling." It takes very gentle work, but he is clearly not psychotic. But man, does he have an eye block!

Then I think of a woman who has been involved with orgonomy since Reich came to this country. She saw Dr. Elsworth Baker, who diagnosed her as schizophrenic, and she has worn that letter ever since. Dr. Baker told her outright that she was schizophrenic and it devastated her. She does have some of the features of the schizotypal and, interestingly, she also has occasional episodes of grand mal epilepsy. So, actually, she has two eye block disorders. She never makes really good contact, but she has gotten along in the world very well. She is always involved in social enterprises and, in fact, organizes things well. She has never had a frankly psychotic episode. The major manifestation of her eye block is involvement with mystical groups.

The third patient is a borderline who, when she is "on," can do everything with her eyes and they look perfectly good. But on those occasions when she goes "off," they are absolutely nowhere.

Again, these are all eye blocks but with very different meanings; so I think what we have to look into is what the variations are and what the implications of these variations are. Clearly, they should not be all lumped together.

Dr. Nelson: There are also cases when mothers look at their newborn infants and say, "This is a weird child," and the child turns out to be schizophrenic. On the other hand, I know of one child who was followed by the Oranur Infant Research Organization and was thought to be healthy at age three or four, but in adolescence was diagnosed as schizophrenic.

Dr. Levinson: That particular case illustrates the importance of correct diagnosis, because ultimately he ended his own life. This was a serious misdiagnosis, and a review of the history makes it clear that this

person had a bipolar affective disorder and was not schizophrenic at all.

Dr. Nagy: As another example of that, one of my first patients presented with a history of successive psychotic episodes. In terms of the training I had had, I thought he was schizophrenic and treated him with major tranquilizers, which helped some. After a period of time, I realized that he was a manic-depressive, placed him on lithium, and he has done very well since.

Dr. Levinson: Without the appropriate diagnosis, drug treatment may not have been offered at all.

Dr. Nelson: But the point is that, in all of these people, we would probably diagnose the eye block as the predominant feature. The severe manic-depressives have very significant ocular armor.

Louisa Lance, M.D.: Even ten years ago, classical psychiatry was confused about what was manic-depressive illness and what was schizo-affective illness. Often the diagnosis was made on the basis of lithium response.

Dr. Nagy: There are still no diagnostic criteria for schizo-affective illness, because no one can agree on it.

Dr. Baker: Isn't it still reasonable to say that, if the primary block is in the eyes, then the diagnosis is schizophrenia?

Dr. Lance: The problem is not with patients who have an ocular block that consistently dominates the clinical picture; the problem is with those types where there is severe ocular armor that fluctuates depending on the patient's level of anxiety. One of my patients who is classically a borderline functions mainly as a phallic character but, under severe stress, can decompensate and appear schizophrenic.

Dr. Baker: That means her eyes are more intact at times. But, what we have been saying is that, if there is a major block in the ocular segment and if that is where they break down when their anxiety overloads then, that is what we mean by schizophrenia.

Dr. Lance: Then you would call a borderline who did that a schizophrenic character type? Dr. Baker: That is how we have understood it.

Dr. Dew: It might be more accurate to call them ocular characters.

Dr. Nelson: Well, that is the point of this meeting: to determine if it is necessary to reclassify certain types that we have lumped under schizophrenia into a broader term, namely ocular characters who are not necessarily schizophrenic.

Dr. Baker: A manic-depressive is essentially a phallic character with major holding in the oral segment who may have psychotic episodes. We have not thought of them as being basically an ocular type.

Dr. Nelson: If they are psychotic, then the eye block is dominant. I wrote a paper for the Journal of Orgonomy some years ago that I think may clarify our thinking. Ordinarily, the armor of schizophrenics is repressed throughout the segments. If the oral block is unsatisfied rather than repressed, this leads to a character which is either schizo-affective or manic-depressive. It seems that the unsatisfied oral block is the only difference between these types and schizophrenics, i.e., it gives the character the affective stamp. Generally, most manic-depressives that we see are not psychotic, and we diagnose it by the affective component. But, when they become psychotic, the ocular blocking is dominant.

Dr. Lance: When the armor in the oral segment of a manic-depressive is loosened, the energy floods the eyes and this is why they become psychotic.

Dr. Dew: I remember the idea of people being on a spectrum, as illustrated by a paranoid schizophrenic at one end and a phallic character at the other. In the case of the paranoid schizophrenic, the ocular block may all but totally mask the phallic elements. Here the ocular block predominates, whereas in the phallic character, the phallic traits predominate. Along the spectrum, there are characters with different admixtures of ocular and phallic traits, so that we talk of a phallic with an eye block, a phallic with a severe eye block who is paranoid but not schizo-

phrenic, a paranoid schizophrenic, etc. Early in treatment, we might misdiagnose a very well-integrated paranoid schizophrenic as a phallic character and see him this way until the ocular block is exposed. The truth in diagnosis and the truth in treatment comes from recognizing the eye block and recognizing the kind of eye block that it is.

As far as I can see, the problem that the APA, and science in general, is having is the discovery of thousands of facts with no coherent way to tie them together. This creates a nosological chaos. What they are trying to do with their terminology is to recognize all these different types. I don't argue that there is a practical significance to it, but what I am concerned about is that there seems to be no core of understanding.

Dr. Nagy: I would agree with that, but I'll go one step further and say I'm concerned that, in orgonomy, we recognize the functional similarities between a number of diverse entities, but we don't pay enough attention to the diversities. In orgonomic taxonomy, there is no recognition of borderlines or narcissism, and little recognition of the affective disorders. Most of the time, if someone has primary ocular blocking, they end up being called schizophrenic regardless of what mood component might be present, regardless of how they function in the world, and regardless of a number of other important elements that I think need to be brought into our nosology.

Dr. Fossum: Perhaps a thorough description of the blocks and the characteristics of those blocks would be a more meaningful approach to diagnosis than to attach one label or another.

Dr. Levinson: Yes, I think that would be instructive for us to do here rather than use terms that actually may have different meanings to each of us, or terms that are commonly used, but may not be entirely descriptive of what we are seeing. For example, I have always balked at the way "catatonia" is used orgonomically, and I'm still not sure what it is that leads to the use of that term. Orgonomically, we don't diagnose schizo-

typal, borderline states, etc., and it would be useful to see how we can understand those subtypes and where they fit.

Dr. Baker: In addition to a severe ocular block, most of the people we call schizophrenic have a quality about them that is vague, fuzzy—the praecox feeling—that is present as long as the ocular blocking is dominant.

Dr. Levinson: There is no question that severely ill bipolar patients also have the praecox feeling, and yet they are clearly bipolar, respond to lithium, and have depressed and bipolar relatives. Borderlines can also have it. But these are different illnesses with different prognoses than schizophrenia.

Dr. Nelson: So what you are saying is that a real sick manic-depressive has a severe eye block that can become dominant at times, and that is when you have the praecox reaction.

Dr. Fossum: There is also a difference between a psychotic schizophrenic and a psychotic manic-depressive in that you feel empathy for the latter.

Dr. Dew: The manic-depressive has a basic phallic structure and the schizophrenic has a basic ocular structure. When we diagnose character structure, we are saying a whole lot about that person because it implies a constellation of signs and symptoms. And it is predictive in that it tells you that this will be their main way of dealing with anxiety and tells you how they will break down. In some character types, the ocular block is the primary block, whereas in others, such as the manic-depressive, it is a secondary block found in a person with a phallic structure. What we are attempting to do in this discussion is to refine our thinking about those patients who have been lumped into the category of schizophrenia because of the severity of their ocular pathology but have had no episodes of psychosis and do not meet the more conventional stringent criteria for schizophrenia.

Dr. Nelson: Yes, and another factor we should mention in this discussion of ocular

pathology is that, in some patients that I have diagnosed as schizophrenic, the eyes look pretty good. The armoring in them may be much deeper, actually in the brain. Then, of course, there are many schizophrenics whose eyes look terrible. The variation in the eye disturbance is quite marvelous.

Dr. Levinson: We have to describe those variabilities more thoroughly and descriptively. The use of red flag labels just doesn't convey adequate information about the patient. I have heard too many people lumped into the category of paranoid schizophrenia, for example, who, to me and others that I discussed them with, just didn't fit. There were some who were either borderline, or manic-depressive, or narcissistic personalities who happened to have eye blocks and phallic features. Some simple depressives got thrown in, also, some who might have gotten very angry or were fearful of people. These are all very different groups as far as I'm concerned. Another category that is unclear to me is the catatonic schizophrenic, and I would like us to discuss that, too,

Dr. Dew: What differentiates a catatonic from a compulsive to me, besides the degree of the eye block, is that compulsives seem to be dead, soulless.

Byron Braid, M.D.: I have a patient whose diagnosis I am not sure of. Is he catatonic schizophrenic or a compulsive? This is a professional, active, athletic man who is full of doubts and criticisms and is very perfectionistic and rigid. Often, he seems fuzzy; sometimes his eyes look okay, and at other times, they are off. He has never been psychotic but has weird perceptions. For example, one of the reasons he gave for ending a relationship was that the woman smelled funny. In fact, if he finds a flaw, that's a reason to stop seeing someone.

Dr. Nelson: You say he is fuzzy, has vague thinking at times, is rigid, perfectionistic, and ambivalent. He's a catatonic.

Dr. Levinson: I would submit that I have heard this description ten or fifteen times over the past few years and I have no idea in the world what it has to do with catatonic schizophrenia. It seems like we are describing a kind of person that we don't have another name for, and it certainly is a type of some sort, but why call it catatonic?

Dr. Baker: In people that we call catatonics, you do see similarities to other types that we call schizophrenic. For example, there is a kind of rawness that comes out. In their dreams, there seems to be little repression, and the raw impulses just come through. But they do not look the same as other sub-types of schizophrenics because of their secondary diagnosis, which is compulsive, and that gives them their special flavor.

Dr. Lance: Why couldn't this man be called a compulsive with an eye block?

Dr. Levinson: Why couldn't he be called a compulsive with a narcissistic character structure? Every "catatonic" I have heard described is a person with compulsive traits, a great deal of repressed rage, and extraordinary narcissism. That combination seems to be common to all I've heard described. They see things only from their point of view, and this is what I think of when he says, "My wife smells funny." I don't think of that as schizophrenic thinking because a schizophrenic would say, "My wife has a funny smell, and I thought that it meant she was from Mars, and I couldn't stay with such a person." That's delusional perception. What this man means is that he can't commit himself to another human being. He finds something that justifies the idea that he doesn't have to be directly committed to or dependent on anyone.

Dr. Dew: I take very seriously what has been said about differentiating schizophrenia from an ocular character. Before this meeting, I probably would have called this man a catatonic schizophrenic; but after this discussion, I think it is more appropriate to call him an ocular character with compulsive or anal traits.

Dr. Lance: Since he deals with most things in an anal way, why couldn't he be an anal character with strong ocular traits?

Dr. Nelson: This is interesting. We talk about anal types and we talk about the

compulsive, but the full term is obsessivecompulsive character. Now, anyone who is obsessing all the time has an ocular disturbance. Perhaps that is why we see very few so-called pure compulsives. What we are seeing are compulsives with a severe ocular disturbance, and this is what we have called catatonic in the past.

Dr. Baker: It seems that what we are sure of is that, at least up until now, we have been diagnosing things very differently from those in traditional psychiatry.

Dr. Nagy: For me, this seminar has been very useful in pointing out a lot of areas that are not as clear-cut as the prevalent orgonomic literature claims them to be. There are many types of ocular blocks, which cannot be lumped together. I guess that, unlike Bob, I am more of a splitter, or at least need to see the variations within a general theme. I don't have any argument with the notion of ocular character types, but I think it is clear that there are more differences within that group than has been acknowledged up to this point.

Dr. Baker: Is this topic worth pursuing?

Dr. Braid: I feel it is important to continue the discussion, especially from the standpoint of treatment. We all know you would treat a borderline very differently than a psychotic schizophrenic.

Dr. Baker: Have we come to any agreement on the criteria that should be used in an orgonomic framework in establishing the diagnosis of schizophrenia? *Dr. Nelson:* We have some agreement on the fact that there are different types of ocular characters, some of which are called schizophrenic.

Dr. Levinson: I think it would be useful to go through the sub-types on a case-by-case basis, using more descriptive terms to see if and how they differ from what we have previously lumped together under the heading "schizophrenic." Where do the schizotypal, borderline, and narcissistic characters fit? They have some things in common with what we have called schizophrenia, but they also have some very important differences.

Dr. Nelson: Yes, we should take a fresh look and carefully examine our criteria.

Dr. Herskowitz: This approach at reclassifying ocular character pathology will give us much more information about our patients than just calling them all schizophrenics because they have a primary eye block.

Dr. Levinson: It becomes difficult to do this in a practical sense without having an actual case to discuss.

Dr. Lance: Since we present things as we see them, it would be useful to bring in an actual patient that we saw and described in a particular way, present him or her to the group, and have someone other than his or her therapist interview the patient. Then we would all have seen the same patient, have the same information, and could discuss the case to see where we agree and where we disagree.

To be continued.

Notes from Afield

Notes from Afield is intended as a forum for the presentation—in brief synoptic form—of findings from other sciences that bear more or less directly on any aspect of orgonomy. Readers are invited to contribute such material, citing the author, title, source, and date of publication. In the case of books or excerpts from books, the name of the publisher should be included. Contributors may also, if they wish, provide a commentary indicating the relevance of the information to orgonomy. The editors reserve the right to alter, revise, or add to such contributions as they deem necessary.

THE ORAC: TESTS ON HUMAN SUBJECTS

Although the editors have not yet read the actual paper, we present the following abstract which was received from West Germany. It describes what appears to be very serious and well-conducted work in a vital area of orgone biophysics. At the authors' request we are reproducing the abstract here in its entirety, unedited.—Ed.

THE (PSYCHO-)PHYSIOLOGICAL EFFECTS OF THE REICH ORGONE ACCUMULATOR

Abstract by Stefan müschenich and Rainer Gebauer

The above-mentioned dissertation contains an experimental investigation of the (psycho-) physiological changes in volunteer test subjects during sessions in a Reich orgone accumulator, conducted at the University of Marburg, West Germany.

Proceeding from clinical observations as well as from further research work in the biological and physical fields, the Austrianborn physician and psychotherapist Wilhelm Reich postulated a specific bioenergy manifesting itself in the living organism, and called it "orgone." This hypothesis was based on extensive biophysical studies conducted by Reich between 1934 and 1957 at the universities of Oslo and New York and in his own research laboratories. Steps in this development were experiments on changes in endosomatic skin potential due to certain stimuli, the description of energy-carrying vesicle-like structures ("bions") during the

microscopic observation of disintegrating biological slides, and investigations of hitherto unexplained atmospheric energy phenomena that play a part in forming weather conditions. Finally, Reich claimed that the orgone was a universally existing kind of energy, and he attributed to it a specific (psycho-)physiological effectiveness on the human organism.

About 1940, Reich published the construction plans for an apparatus that was able to concentrate this energy within its interior. He postulated that spending some time in this so-called "orgone accumulator" produced certain psychic and somatic reactions. Later he used the device for therapeutic purposes in the treatment of some syndromes. An orgone accumulator may be described as a closet-like structure or box, each of its walls consisting of a number of alternate layers of organic material (for the exterior) and metal (for the interior).

In the theoretical part of our dissertation, we first discussed a choice of empirical studies published by various scientists who dealt with the physical aspects of the atmosphere within the device. The phenomenon of a constantly increased air temperature in the accumulator (the "T_o-T" effect), the observation of a delayed electroscopic discharge rate, and processes connected with alterations in air humidity and water evaporation rate are of special interest in this context.

Furthermore, some medical case histories were demonstrated to illustrate the effects of the orgone accumulator that were conducive to health during the therapy of various diseases. The studies mentioned were described

in their topical and historical connection with Reich's research work and concepts. In doing so, we critically discussed the scientific validity of the theories involved.

The main effort of our own experimental work was to investigate the (psycho-)physiological effects that are attributed to orgone accumulator sessions. Reich claimed that body temperature rose during ORAC sessions and he described a general vagotonic activation due to sitting in the device for a certain space of time. Considering the contents of orgonomic publications and the results of our own pilot test, we decided to explore the systematic changes in core temperature, skin temperature, and heart rate (ECG). As far as we know, the two last mentioned parameters have never before been evaluated in a scientific manner.

We conducted a long-term study with 15 volunteer subjects, each of them carrying through 20 experimental hours. In this experiment, the physiological variables mentioned above were continuously recorded during the sessions with the help of electronic devices. Ten persons undertook ten 30-minute sessions in an eight-fold coated orgone accumulator built according to Reich's instructions. Besides, they carried through ten 30minute sessions in an almost identical-looking control box. This dummy had been constructed by us for purposes of comparison. It consisted only of organic matter, but concerning its size, shape, and insulating properties, it did not differ from the original box. Five additional subjects conducted all their 20 sessions in the same box: three persons used the orgone accumulator every time, while two subjects used only the dummy.

Before each session, the subjects sat in a comfortable relaxation-chair for 15 minutes. By this provision, we wanted to establish a standardized psychophysiological initial level. During this space of time, the physiological data mentioned were already measured.

Firstly, by this means a comparison between the physiological reaction patterns in the orgone accumulator and in the control

box was made possible. Secondly, one could relate the data recorded during the sessions in one of the two boxes to the activation standard previously measured in the relaxation-seat. The entire investigation was conducted as a "double-blind-study," which means that neither the volunteer subjects (who had been chosen at random) nor the persons that gave the instructions and recorded the data knew anything about the experiment they were taking part in. The clothing of the subjects, the positions of the two boxes, the sequence in which the two devices were used, and the other experimental modalities were standardized or balanced out. In contrast, for example, to the medical case histories mentioned above, we took into consideration psychological sources of error, and artifacts caused by superimposition effects. Intending to control these factors, we had the persons fill out a questionnaire we had designed after each session, which revealed information about their psychophysiological sensations and moods during their stay in the boxes. This exploration, as well as the fact that the subjects were absolutely uninformed, was to eliminate falsifications produced by suggestion (e.g., caused by manipulation through the conductors of the study) or autosuggestive factors.

In this way, we evaluated the subjective quality of potential physiological changes. Additionally, the recorded ECG data conveyed information about the psychic and emotional excitement of the participating persons. Besides, meteorological and physical variables were continuously measured. They were to be correlated with the psychophysiological data.

The investigation gave the following results: All of the (a priori formulated) hypotheses, which claimed that there were no greater psychophysiological alterations between relaxation-chair and orgone accumulator than there were between relaxation-seat and control box, could be rejected with a statistical significance on the 1%-level. This means that one may proceed with a probability of 99% on the assumption that,

compared with the initial standard during the stay in the relaxation-chair, the physiological data recorded in the orgone accumulator were subject to greater alterations than the data recorded in the dummy.

Both of the body temperature variables showed a distinct increase during the accumulator sessions. These facts are in accordance with Reich's predictions of a rise in core temperature and an increase in parasympathetic activation produced by orgone accumulator treatment. The interpretation of heart rate pattern, however, is more difficult. While one would expect a decrease, the heartbeat frequency revealed a clear increase between the initial level and the stay in the accumulator. These problems may probably result from the fact that the ECG data showed a relatively high statistical variance and were much more sensitive to accidental external influences and momentary psychic states than the more stable temperature parameters. Further follow-up studies will explore to what extent a possible vagotone ECG effect may have been superimposed by cognitive processes, nervousness, or anxiety. Still, we can conclude that the assumption of vegetative changes during orgone accumulator sessions was strongly confirmed by our data. The impression one gets from the results of the first 10 subjects was corroborated by the data of those five persons who used only the accumulator or only the dummy every time. The number of these last-mentioned cases. however, is too small for a statistical test of significance.

Some further interesting effects are worth mentioning, too: for example, one person seemed to be "resistant" to the orgone accumulator effects, while another woman proved to respond extremely sensitive to the accumulator. Not only the objective physiological results but the subjective sensations (expressed in the questionnaire) of these two persons justified this hypothesis. Besides, the "ORAC-resistant" subject was the only one who said that he felt better in the dummy than in the orgone accumulator.

All the other persons preferred the accumulator.

Generally, it can be said that the questionnaire data corresponded well to the recorded physiological changes. In the original box, the volunteer subjects noticed more perceptions of warmth, prickling and tickling on the skin surface; additionally, they connected more pleasant cognitive associations with the orgone accumulator than with the dummy.

In our study, a correlation between psychophysiological alterations and meteorological/physical processes was corroborated. During late spring and early summer months, the somatic reactions were stronger than during the colder period. Especially the air pressure outside the building seems to be quite a good predictor for the physiological pattern in the accumulator. The phenomenon of a constantly positive To-T difference was statistically confirmed. The total of the meteorological data revealed that the air temperature measured in the orgone accumulator differs from that recorded in the dummy on the 1%-level. As a conclusion, it can be stated that the results received in our investigation furnish evidence for the assumption that the physical properties of the orgone accumulator and its psychophysiological efficiacy on human organisms, postulated by Reich and his associates, factually exist. Various, more natural-scientific oriented follow-up investigations are expected to determine whether the hypothesis is justified that a hithero unkown biophysical energy (the orgone) is the causative factor of the phenomena described. Additionally, a more extensive study might clarify one or other effect that could not be fully explained by our experiments.

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NOTE:

Photocopies of the entire dissertation can be ordered from the authors for \$45 U.S. (our expenses for 420 photocopies, binding, and postage). The same paper is available with a set of 30 photographs illustrating the text for \$65. These photographs document, for example, changes in the Reich Blood Test due to ORAC treatment of the medical cases, and they are, of course, much clearer than the photocopies. Orders and remittances should be sent to one of the authors listed below, and checks should be made payable to one of the following accounts.

Stefan Müschenich, stud. med. Fischteich 26
D-3550 MARBURG-Gisselberg Fed. Rep. of Germany (west) postal check account:
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ECHOES

Lest anyone thinks that the kind of irrationality Reich encountered is not still at work in the world, we offer the two reports below. As always, it is both distressing and fascinating to see this kind of reaction to anything which even smacks of the orgone energy.

JOSEPH NEWMAN'S ENERGY MACHINE

Recent events demonstrate that the emotional plague is alive and well. A special report prepared by Representative Robert Livingston (R-Ala.) and reprinted in *Human Events* (1) outlines the battle that inventor Joseph Newman has had with the U.S. Patent

Office in his attempt to patent his revolutionary energy-generating device.

Newman claims to have discovered a new method for converting electromagnetic potential energy into actual energy. A model of the device produces up to 25 times as much energy as is supplied to it by a battery pack. Newman claims that the machine permits a conversion of mass to energy at nearly 100% efficiency, compared to 1% for conventional nuclear reactors. Newman does not claim that the device makes something from nothing; he says that, while the device would run for a very long time, it would not run forever, since it would eventually use up the matter that it uses as fuel.

Despite the fact that over 30 reputable engineers and scientists have tested the device and attest to the fact that it works, the U.S. Patent and Trademark Office has rejected his application for a patent, claiming that the device could not work because it "smacks of perpetual motion." It is policy of the Office to reject patents for "alleged inventions of perpetual motion machines." Newman first applied for a patent in March 1979, subsequently appealed his rejected application, and in January 1983, filed suit against the Patent Office. To evaluate the device, the judge on the case appointed a Special Master, who tested the machine and found that it produced more energy than was put into it. The Special Master recommended that Newman be granted a patent. Federal law states that a court must accept the findings of a Special Master unless they are "clearly erroneous." The judge on the case refused to accept the Special Master's recommendation, despite having no evidence to suggest that his findings were in error, and ordered Newman to turn his prototype over to the National Bureau of Standards (NBS) for testing. The judge's order prohibited Newman or his representatives from attending any of the tests, allowed the testing to be done "at the discretion of the NBS." and authorized the NBS to "disassemble or destroy" the device. An appeals court ruled that the judge had exceeded his authority

with these orders, and required that the NBS submit a testing program, make the tests within 30 days and allow Newman to be present, and it prohibited dismantling or destroying the invention. Newman consented to these new terms, and, when no tests had been performed in 30 days, attempted to retrieve his machine. The judge impounded the device and gave NBS until June 26, 1986 to test the invention. Newman contested this extention of time and requested that the judge be removed from the case because of personal bias.

Representative Livingston points out that Patent Office officials are denying Newman his patent on grounds that the invention does not work, without providing any evidence for their claims and while ignoring the findings of the Special Master and over 30 other scientists. He points out the judge's "surprisingly arbitrary and high-handed" behavior, and notes that the testing program outlined by the NBS would cost over \$50,000, for which no funds have been appropriated by Congress. There is no legal authority for the NBS to test devices for the Patent Office, and in patent history, this is apparently the first time that the NBS has ever been requested to do tests for the Patent Office. Rep. Livingston and several other representatives are introducing unprecedented private legislation to give Joseph Newman a patent for his revolutionary device.

Reference:

1. Livingston, Robert: "Inventor Battles Arrogance of Patent Office," Human Events Vol. XLVI, No. 23, June 7, 1986, p. 12.

Stephen S. Nagy, M.D.

A BIOELECTRIC CIRCULATION: ITS FUNCTION IN HEALTH AND DISEASE

An article written by Gary Taubes in the April, 1986 issue of *Discover* Magazine presents a brief account of the life and work of

Swedish physician Bjorn Nordenstrom. Nordenstrom, who has distinguished himself in the fields of radiology and medicine, had by 1960 risen to the prestigious position of head of diagnostic radiology at the Karolinska Institute. In the 1950's he had demonstrated the practicability of percutaneous needle biopsy.

Late in the 1950's, he became interested in a peculiar halo-like opacity he found in the X-rays of certain lung tumors, a "corona," as he called it, which surrounded the neoplasm. Using his biopsy technique, he was unable-after nearly ten years of work-to find a significant difference between those cancers with and those without a corona. He then struck on the idea of using the needle simultaneously as an electrode to determine if there was a bioelectrical potential between the tumor mass and its environs. Then he discovered a correlation between the presence of a slowly oscillating potential and the corona, particularly if the tumor had central necrosis.

Thus began an odyssey that has continued to the present. By the late 1960s, he had become totally absorbed in this work, which drew him away from his radiology practice into other far-flung disciplines. He made measurements in freshly drawn blood to see what would happen as it broke down, and found the same oscillations in potential. He was later to conclude that any injury produces a continuously fluctuating voltage until a state of electrical equilibrium is reached, a process which is connected to healing. More remarkably, he found that the injured and dving cells were releasing the energy that produced these potentials. Still later, he discovered that blood vessels acted as insulated cables that carried a current via the blood between the tumor and the adjacent tissue. He found that negatively charged leukocytes were also drawn into the tumor by the positive charge in its necrotic core via the interstitial fluid, which also formed part of the circuit. He then found a relationship between natural healing and a defense against the tumor whose common elements were the potential produced by the injury or cancer and the bioelectric circulation through vessels, blood, and interstitial fluid.

Since these currents were part of a natural defense, he reasoned that, by increasing the potential between the tumor and the adjacent tissue, he might enhance the process by which the neoplasm was destroyed. This turned out to be the case. Using needles as electrodes and a direct current source, he was able to induce tumors to shrink after a single hour of treatment. The process of tumor regression would go on for months afterwards—often to the point of disappearance and, in some cases, his patients remained well for years. Others, of course, had poor responses or recurrences. This process of electrical enhancement had the effect of dehydrating the tumor by inducing a flow of water onto the surrounding tissue, at the same time bringing in the blood's formed elements, which destroyed the tumor cells. He was only allowed to treat inoperable usually hopeless-cases, and often achieved surprising results. He treated 80 without a fatality.

Thus far, Nordenstrom has received very little peer recognition for his work. His colleagues either failed to understand it or expressed little interest in it. There was no response to three papers published in 1971, 1974, and 1978. In 1979, he began a book describing his work, only to find that when it was completed in 1983, no one would publish it. He published it himself at great expense, but of the 2,000 copies printed only 400 were bought. Others have remarked on the carefulness and originality of his work. On one occasion, after a lecture in which the audience waxed enthusiastic, only 5 of the 62 present purchased the book. No one has argued against the validity of his experiments or the underlying premises, but at the same time, neither has anyone undertaken to repeat them. Others are skeptical, suspicious not only of the broadly interdisciplinary nature of his research, but by the very number of phenomena he claims are explained by it, e.g., the effects of acupuncture, the diapedesis of blood cells into tumors and sites of injury, etc.

Nordenstrom resigned from his position at the Karolinska Hospital in 1979 in order to devote himself entirely to his research. Now 65, he is currently engaged in work utilizing his techniques to improve healing of fractures.

Reference:

Taubes, Gary; "An Electrifying Possibility," *Discover* Magazine, April 1986, pp. 22-37.

R.A. Dew. M.D.

Commentary:

Apart from the similarities in Nordenstrom's story to Reich's, there seem to be remarkable parallels in their work. It appears to us that Nordenstrom, coming from another direction entirely, has come across the orgone energy. Having not yet read his book we do not know if he is aware of Reich and, also, we cannot say to what extent their work converges. Nevertheless, the similarities to Reich's work in the study of bioelectric skin potentials are unmistakable:

- He finds a source of a bioelectric potential, but one below the skin surface, i.e., between a tumor or injury site and its environs.
- He discovers and confirms a heretofore "unknown" function of the blood vessels and interstitium; that is, for the circulation of energy.
- 3. He recognizes that the source of the energy from the injury site is dead and damaged tissue.
- 4. He postulates and demonstrates that, by building up potential at the location of the injury or tumor, healing is enhanced as elements of the blood are drawn to the site.

Reich ultimately regarded the bioelectric potentials as a reflection of organotic charging at the skin surface, which implies movement between core and periphery. He said the energy moved through the autonomic nerves and blood vessels but was not restricted to anatomic pathways, that it moved across innumerable fluid/membrane barriers. Nordenstrom seems to have proven this in his demonstration of a bioelectric circulation through vessels and interstitium. Reich made use of a "body own" energy to deal with diseased tissue and injuries, but applied it from an external source, e.g., the ORAC. Nordenstrom apparently excites what energy is already there by delivering low D/C currents by means of electrodes. Both say-each in his own way—that the induction of charging process gets energy moving. Orgone therapy also gets energy moving by breaking down armor. We are also reminded of the bion migration experiment in this connection. Introducing a current into a bionous suspension causes the vesicles to move from one electrode to another in a direction dictated by charge.

We also find it interesting that some of Nordenstrom's tumors exhibit no potentials. One wonders if he found a correlation between treatment failures and an absence of potential. This would suggest to us that there is insufficient difference in vitality, i.e., charge between the tumor and the tissue that surrounds it. Hence, the inducing current would have little effect.

ON THE VEGETATIVE ANTITHESIS

The concept of the vegetative antithesis is the heart of Reich's understanding of the diseased psychosomatic structure, i.e., the biopathy. Conventional scientific work has indirectly confirmed many of the essentials of the theory, primarily in its investigation of diseases, e.g., pathophysiology and drug therapy. Notable among these are recent advances in the drug therapy of cardiovascular disease and hypertension. I refer to the use of beta-adrenergic blockers and calcium channel blockers in these conditions.

Actually, beta-blocking drugs have been used extensively in this country for nearly 20 years and even earlier in Europe. These

components work at the beta receptor sites of the sympathetic autonomic nervous system essentially by interfering with neurotransmission. Beta receptors are distributed in adipose tissue, the heart, kidneys, liver, bronchi, and arteries; therefore, the drugs have been tried in a broad range of conditions, including migraine, thyrotoxicosis, essential tremor, and even anxiety states. Their greatest success has been in the treatment of angina pectoris, the reduction in the incidence of sudden death in the post-myocardial infarction patient, supraventricular cardiac dysrhythmias, and in all varieties of hypertension. These benefits are a de facto confirmation of Reich's assertion that sympatheticotonia due to deep anxiety forms the basis of these disorders.

In addition to the antithesis between parasympathetic and sympathetic nervous system functions, Reich also pointed out the corresponding antithetical relationship between potassium and calcium ions, i.e., that the actions of the calcium ion is in certain ways analogous to the sympathetic system. More recently, the family of drugs called calcium channel blockers has come into general use. These agents act at the cell membrane, where they are presumed to interfere with the ingress of extra-cellular calcium ions through specific channels in the membrane—hence, the name. The main effects on the cardiovascular system are related to calcium's normal physiologic function of inducing elecrical depolarization and contraction of smooth and cardiac muscle cells. Thus these drugs cause peripheral vasodilatation, decreased myocardial contractility, and depression of electrical conduction in the heart. These are all sympatholytic effects. Again, the inference is that excessive sympathetic tone is the anlage for the biopathy, that calcium ion influx is functionally identical to excitation from the sympathetic nerves, and that together they mediate the contraction phase of normal biological pulsation.

R.A. Dew. M.D.

The Amateur Scientist in Orgonomy

This column is intended to encourage "hands-on" experience with various aspects of Reich's biological and physical laboratory findings, particularly for interested readers with limited means or access to sophisticated equipment. Each issue will feature an experimental research project that illustrates basic organomic findings using only modest equipment and expertise. Readers are encouraged to submit their own projects, including a brief theoretical background, a detailed practical description, references for further reading, and relevant diagrams or charts. It must be a project actually carried out as described rather than a theoretical design.

Orgone Energy and Plant Life

by JUTTA ESPANCA

I. History

After reading my first book by Reich, The Function of the Orgasm (1), over 10 years ago, I was filled with excitement and a great curiosity to experiment with the orgone energy. Having been born on a farm and being at present a gardener without any scientific background, I went the only possible way of trying it on my plants, by using bionwater on my houseplants, often with amazing results. I found instructions for the preparation of bionwater in Reich's chapters on Experiment XX in his book The Cancer Biopathy (2). I boiled garden soil for one hour in tap water and poured the water when cold into bottles and watered the houseplants with this highly potent water (which usually turned from a dirty brown to a golden yellow after boiling). Then, after having found a small garden of about 100 square metres on a friend's farm right outside of town, I also soaked seeds in bionwater and planted them in the garden; finally, inspired by Loretta Lane's article "The Effect of the ORAC on Growing Plants" (3), I began to construct small ORAC's for the irradiation of seeds. For soaking seeds, I filtered (with a coffee-filter) and sterilized the bionwater. In some cases, mostly out of curiosity, but also to keep it free of rot bacilli, I froze it before using it. After thawing, the former clear, yellow water had developed fine, brownish flakes that usually staved together when the water was moved, as though unseen forces were uniting them, while the yellow water around them remained clear. When seeds were soaked in the formerly frozen bionwater containing these flakes, they often sank down to the bottom and stayed close to the flakes as if they were attracted by them, while the control seeds in normal tap-water were swimming on the surface.

I have been doing strictly controlled outdoor experiments for around five years now. In these experiments, I have concentrated more and more on the irradiation of seeds. both in the ORAC and recently also under the pyramid (4). The reason for this is that, as a result of the outcome of many experiments with bionwater and ORACs. I came to the conclusion that, in the long run, the ORAC was more effective than the bionwater; plants of seeds treated in the ORAC usually lived longer than plants of seeds that had been soaked in bionwater.

After being irradiated in the ORAC, seeds are germinated on the balcony of my apartment in town, along with untreated controls; then the small plants are transplanted in the garden, and their entire lifespan is observed, including counting and weighing of their fruits. After irradiation of the seeds, the plants receive no further treatment with orgone energy. I found experiments that study the entire lifecycle of the plants more satisfying than short-term experiments, like those involving only sprouts, because it is very exciting to see how an ORAC treatment of the seeds for just a few days can influence the total development of the plants to such an extent that their vitality, productivity, and longevity are increased.

Even though my experiments have been conducted on a very modest scale because of lack of space and other limiting conditions, the following observations, made on the cases with a positive outcome, emerge from five years of controlled experiments, mainly with tomatoes, paprikas, and aubergines (egg-plants):

- In these cases, the plants of seeds treated in an ORAC were stronger, higher and fuller, with more branches and darker green leaves than the control plants;
- 2. The roots of the ORAC plants were better developed than those of the controls;
- 3. The fruits of the ORAC plants were especially well developed and tasty;
- 4. The ORAC plants showed a greater resistance to illness and fungus.

Certainly, everything is still in an early experimental stage, and not all experiments had a positive outcome; yet it can be stated that, so far, the results obtained were more positive than negative.

II. Background

With the invention of the ORAC, Reich has presented us with a device applicable to the most varied fields of research. The basic function of an ORAC, as described in detail in Reich's booklet The Orgone Accumulator, It's Medical and Scientific Use (5), is to collect and concentrate the atmospheric orgone energy through a special arrangement of materials. The concentrated energy can then be used for scientific purposes, especially to charge living organisms with orgone energy. Any living organism, placed inside an ORAC, will constitute the stronger or higher energy system and absorb orgone energy due to the organomic potential from low to high.

This process is also taking place when we irradiate seeds in an ORAC. Through the treatment in the ORAC, the orgone charge of the seeds is increased; in fact, I have often noticed that formerly dry and withered seeds

became firmer and fresher when charged in an ORAC. This higher charge of the seeds certainly finds its reflection in the plant's development; James DeMeo proposes in his article "Seed Sprouting Inside the Orgone Accumulator" (6), that "the energetic charge in a living organism appears to determine its growth."

III. Introduction

The following report is based on an experiment with a special tomato from Montana called Ping Pong tomato, which was conducted during the spring, summer, and autumn of 1985. The very sweet fruits of this tomato variety are the size of a ping pong ball and turn a lovely dark pink when they have ripened. The tomato seeds used in this experiment originated from the two Ping Pong tomato groups of the 1984 experiment that was reported in Offshoots of Orgonomy No. 11 (7). In the Fall of 1984, one very ripe and well developed fruit was chosen from group O (plants of seeds that had received ORAC treatment) and group C (control plants of seeds that had received no treatment); both fruits were of the same size. The seeds of each fruit were removed, rinsed under running water in a sieve until clean and dried on two small dishes in the shade, on the balcony. Then, they were kept in separate paper containers.

For this new experiment, the two sets of seeds were each divided into two groups:

Set 1: ORAC seeds (of fruits from 1984's group O) were divided into a group designated as O-O, which were to receive ORAC treatment; and a group designated as C-O, which were not to receive any treatment, being used as a control.

Set II: Control seeds (of fruits from 1984's group C) were also divided equally into a group designated as O-C, which were to receive ORAC treatment; and a group designated as C-C, which were not to receive any treatment, being used as a control.

The experimental setup consisted of a 7-fold ORAC, in which the seeds of groups O-O and O-C were treated for a period of

12 days. Plants were measured twice, before the transplantation to the garden and at the height of their growth. Fruits were harvested twice a week, counted, and weighed.

Readers who are interested in repeating this experiment but have no access to this particular tomato may use other tomato varieties. It may be necessary to use only two groups, the treated and controls, as seeds from a previous experiment may not be available. If only two groups are used, try keeping seeds from each group in the manner explained above and repeat in the following year with four groups. It might also be interesting to use different kinds of tomatoes simultaneously to determine their specific reaction to the ORAC treatment. Readers may also try using shorter ORAC treatments. In my experiments, treatment of seeds usually lasted 12-14 days, but recent results indicate that shorter periods of 1-3 days seem to be as effective or even more effective than the longer treatment. One may also vary the number of layers in the ORAC. I have experimented with three to seven layers; but, so far, the best results have been with the five-layer ORAC.

IV. Materials

1. Orac construction

For the construction of the ORACs, I use several tin cans of different sizes, each wrapped in plastic and fit one inside the other. I have experimented with three to seven layers, but so far, the best results have been with the five-layer ORAC. In this particular experiment I used seven tin cans; the smallest was about one inch long, \(\frac{1}{2} \) inch wide, and approximately \(\frac{1}{2} \) inch high, which I constructed myself from a piece of thin tin, so the can would fit the size of the tiny seeds. The other cans used were commercial food cans, each circa 3/4 inch larger than the other, the largest being about five inches wide and five inches high.

The plastic used came from commercial, translucent plastic bags that one finds in every food store as part of their

supply. They can also be bought in every supermarket as bags for deep freezing.

2. Soil

The soil that was used throughout the experiment came from my garden, which is a well-composted, loamy soil. Prior to planting in the garden, approximately four pounds of a mixture of plant and manure compost was applied to every planting hole.

3. Seeds

The seeds used in this experiement, called Ping Pong tomato, came from a private gardener in Montana and were given to me by a friend. If this tomato is not available, any other kind can be used instead; in experimenting with various kinds of tomatoes, I noticed that all of them responded well to ORAC treatment.

The seeds of any tomato variety can be dried and stored easily. The procedure has been explained in the Introduction. Make sure to select big, healthy, and well ripened fruits from healthy, productive plants. When picked, let the fruits become dark red before scratching out the seeds to rinse them. It is useful to dry them on water-absorbing paper like a paper towel. Store them in small paper containers in a dark, dry place and be sure to label seeds with their variety name, the year grown, and from which experimental group they stem.

Readers interested in experimenting with special tomato varieties may obtain the seeds from either of the following places:

Seed Saving Project
Sustainable Agriculture Program
Dept. LAWR
139 Hoagland Hall
Davis, California, 95616
Seed Savers Exchange
Kent Whealy-Director
203 Rural Avenue
Decorah, Iowa, 52101

4. Other equipment

Additional materials include one large clay pot (as used in this experiment) or four small clay pots, one for each group; one large wooden box (52 inches long, 8 inches wide and 8 inches high). All containers have the same garden soil. You will also need a scale for weighing the harvest and a tape measure to measure the height of the plants.

V. Procedure

On March 14, 1985, five Ping Pong tomato

seeds of the 1984 group O and five seeds of the 1984 group C were placed in a seven-fold ORAC constructed from tin cans and plastic. The seeds were placed directly inside the tiny tin box, as paper could absorb too much orgone. Five seeds of group O and C respectively were put in a paper container as controls.

The experiment consisted of the following:

Set I:

Group O-O = 5 of the 1984 ORAC seeds to receive ORAC treatment in 1985 Group C-O = 5 of the 1984 ORAC seeds to receive no treatment (controls)

Set II:

Group O-C = 5 of the 1984 control seeds to receive ORAC treatment in 1985 Group C-C = 5 of the 1984 control seeds to receive no treatment (control)

The seeds were treated for a period of 12 days. The ORAC was put into another bag of the same plastic and kept hanging outdoors on the balcony. On March 25, 1985, all seeds were planted in a large clay pot, filled with garden soil. The top surface of the soil was divided into four equal parts and the seeds of each group sowed into one of those quarters. For watering, 1/4 of a litre of tap water daily was carefully sprayed over each group with a small watering can. Germination occurred equally in all groups around April 3; all five seeds in all four groups germinated. After germination, all plants received two transplantations to strengthen the root system. On April 4, 1985, the seedlings were transplanted into a large wooden box on the balcony; at this time, the main leaves had reached the size of about one inch. Second, when the plants were about 10 inches tall (May 27, 1985), all of them were transplanted directly to the garden.

Table I shows the height range of plants before transplantation, measured from the soil to the "top central growing section" (this is known technically as the highest node, the highest point at which leaves originate):

Table I		
Group O-O	26-30 cm	
Group C-O	21-26 cm	
Group O-C	22-26 cm	
Group C-C	19-22 cm	

As there is no rainfall during the summer months in Portugal, all plants of the experiment were watered with tap water, applied with a garden hose. As young plants, each plant received ½ minute of watering with the hose, which is approximately five litres per plant. After becoming full grown, one minute of watering was applied twice a week. The extremely high temperatures of the Portugese summers plus the low atmospheric humidity make such a great amount of water per plant necessary.

All plants received strictly organic treatment; that is, no chemical fertilizer or chemical pesticides and fungicides were applied. The plants themselves received, prior to flowering, three applications (one litre per plant each time) of a liquid plant manure made of fermented stinging nettle and tomato leaves and diluted 1:20 in water. As a preventive provision against illness and fungus, all plants were sprayed several times with a tea

of Horsetail that was prepared by boiling four ounces of the dried herb in one gallon of water for 20 minutes.

VI. Observations

After germination, the seedlings in Set II (groups O-C and C-C) were the strongest; but after the first transplantation, the plants of group O-O of Set I became particularly strong and well developed. Before the second transplantation, the roots of the plants in groups O-O and O-C were obviously especially well developed, whereas the roots of the plants in groups C-C were the weakest of all four groups. Outdoors, in the garden, all plants grew very well; there was no loss due to transplant shock in any group. The first buds on the plants in all groups appeared around June 11, and the first fruits, around June 25. Harvest began on July 8, 1985 and ended on December 9 in all groups.

Soon after the transplantation in the garden, the plants of group O-O developed especially well, became very strong and fuller than the plants of any other group. It was also clearly evident that the fruits in this group were more highly developed and bigger. Plants of group O-C were big and strong, too, but never reached the height and fullness

of the ones in group O-O. With regard to the controls of both sets, the plants of group C-O were stronger and fuller than those of group C-C, but within a few months, there was not much difference in the height of the plants of these two groups.

Around August, the plants in all groups were considerably dried out due to the very high temperatures. However, the plants of group O-O remained the greenest. In September and October, all the plants became green again, grew vigorously until the harvest was terminated, and developed many new fruits

Table II shows the height range of the plants in October, measured from the soil to the top leaf of the main stem of the plant:

Table II		
Group O-O	2.00 - 2.50 metres	
Group C-O	1.55 - 1.80 metres	
Group O-C	1.80 - 2.20 metres	
Group C-C	1.50 - 1.80 metres	

Finally, Table III below shows the harvest results, with Set I on the left and Set II on the right. There were five plants in each group.

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	Set I		Set II	
	O-O	C-O	O-C	C-C
Total yield (kg)	10.535	4.795	6.285	5.030
Total No. Fruits	433	229	306	245
Ave. Wt. Fruits (gm)	24.33	20.93	20.52	20.53
Ave. Yield per plant (gm)	2109.00	959.00	1257.00	1006.00
Ave. No. Fruits per plant	86.6	45.8	61.2	49.0

Summary

In this experiment, for the first time, the seeds of a previous experiment were tested. In the beginning, seedlings of Set II appeared to be the strongest, but soon the plants of group O-O began to develop better and became the tallest, strongest, and fullest plants of all the four groups. Also clearly

noticeable were both the dark green color of the plants in this group and the more fully developed roots and fruits, an observation that has been made again and again in regard to ORAC-treated plants.

In the beginning, also, the controls of Set I were stronger and fuller than the controls

of Set II, but there was not much difference in the plant height and the yield of those two sets; in fact, the harvest results show that the average yield in group C-C was even a bit greater than that in group C-O.

When all the plants became quite dry during the hottest summer month, August, the plants of group O-O exhibited greater resistance and vigor, and remained greener than the others. Also, after all the plants had recovered and became green again, the plants of group O-O remained the tallest and strongest until the end.

In Set II, the ORAC-treated group O-C plants didn't differ much at first from the plants in both control groups except that they were fuller, having more branches and more fruits; but, beginning in September, they, too, grew stronger and more vigorous than the control plants. The fruits of this group were about the same size as the fruits of the control groups, but the plants' production was better.

There was a small decrease in the average yield per plant in this 1985 experiment compared with the harvest results of 1984, which might be due to the fact that, this time, all of the groups were planted along the fence where the soil is inferior to the soil in which the plants were grown in 1984. However, the great difference between Set I and Set II in the harvest results seems to indicate that the

beneficial effect of orgone irradiation not only produces higher productivity and resistance to detrimental influences, but that it also has an enhancing influence on the seeds of the plants. Nonetheless, as this was the first controlled experiment of its kind, many more experiments are needed to prove the validity of this observation.

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The First Relationship—Infant and Mother

by DANIEL STERN

Harvard University Press, Cambridge, Mass., 1977. 149 pages. In the Developing Child Series, edited by Jerome Bruner, Michael Cole, and Barbara Lloyd \$3.95.

If we survive as civilized creatures, our times will be remembered as well for the scientific discovery of the infant as for the energetic uses of the atom, the exploration of space outside our world, and genetic engineering. In the Developing Child Series, which seeks to inform us of these childhood discoveries, Daniel Stern has contributed The First Relationship-Infant and Mother, an enlightening book. It is based on his and others' research into the mechanisms that comprise the development of the process of socialization in the infant's first six months. As orgonomists, we intuited the correctness of Reich's theory of self-regulation in child-rearing; the underlying assumption of self-regulation is that Nature knows what it (Nature) is about. Now, with a pioneer generation of infant researchers, we can not only confirm our trust in natural processes, we can begin to comprehend them.

We view a behavior that is as old as the species: An infant turns to her caretaker (whom, for the sake of simplicity, we shall hereafter call "mother"). We note the possible responses. One of the most frequent is a look of mock-surprise accompanied by a prolonged high-pitched sound. The sound is exaggerated in both frequency and duration from most other usual sounds. Or the mother may frown, or smile, show a look of concern. or remain neutral-faced, expressionless. The mock-surprise look is similar to the instantaneous facial expansion that universally signals a readiness for social interaction in adult society. The smiling and concerned faces are both enhancements of normal facial features which, it is hoped, will prove interesting enough to the infant to keep her engaged. The neutral face, of course, signals to the child that mother does not intend to interact. The stereotypy of all these faces (except neutral) separates them out from the "background noise" of all ordinary faces.

If we examine the vocalizations from mother to child, we discover that syntax is simplified, utterances are short, there are many nonsense sounds, and the sounds of words are transformed to make them softer (e.g., "pwitty wabbit"). The pitch is often raised and the intensity varied in an attempt to be as intriguing as possible. Pauses are elongated, to separate sounds from silence, and later to provide room for a reply. The mother often "choruses" the infant's vocalizations; this may be a bonding mechanism. It is clear that these unwitting patterns of maternal vocalization maximize the effect of utterances.

Like vocalizations, the gaze of infants and mothers differs from the adult form. In adults, there is practically no mutual silent eye contact that lasts for more than ten seconds, unless the participants are going to fight or make love. Mothers and infants frequently gaze at one another for more than thirty seconds. With adults, the speaker looks at the listener when he starts to speak, then intermittently to check on the listener's attention, and then at the end, to give up the floor. The listener looks at the speaker most of the time. During play, mothers and infants gaze and vocalize simultaneously about 70% of the time. There is the same percentage of gazing during feeding, but the gazes are shorter. However, during feeding, there is less gazing with talking because this would invite to play.

The appearance of the mother's face is the supreme attention-getter. The mother inter-

poses a face to punctuate questions, to mark intervals in the blow-on-the-bellybutton game, etc.

With adults there is an intimate distance beyond which one does not intrude, which varies with culture. This distance is disregarded by mothers. The meaning of this break in the barrier is unclear. Does it prepare the infant for acting intimately within the barrier, or for breaking the barrier when necessary later in life? As we shall see later, the newborn has a short focusing distance, so at least in the beginning, all interactions must occur at short range.

In experiments in which mothers were instructed to react with sometimes alive and sometimes deadpan faces while gazing, regardless of the infant's signals, the infants reacted with distress and aversion, and made repeated attempts to get the mothers to "behave."

What we have called a "naturalness" of caretakers with babies, we now understand is not merely an ease in handling or caring for infants but a readiness to read all of the infant's signals and to respond to the infants with an armamentarium of appropriate and effective maneuvers. The characteristics that distinguish infants from adults in all mammalian species (big eyes, widened cheeks, etc.) serve as releasers of behaviors in the mother that ultimately promote socialization.

Infants vary in their eliciting powers their gazes, movements and gestures. One of the most potent eliciting behaviors is the face presented with open mouth, tongue thrust forward, and head thrown back. This infant behavior evokes responses in providers from mid-childhood ages through old age. Thus, in the first six months, the infant is equipped to elicit stimulation from a wide age group. In another age-related experiment, boys and girls were presented with a series of pictures of infants and adults. Starting at ages 12-14 the girls preferred the infant pictures, and at 14-16 the boys started to prefer the infant pictures, though the response was weaker than that of the girls'. At about age 6, both boys and girls begin to use the

adult response repertoire when dealing with infants. An interesting observation is that this repertoire usually does not enter much into doll play, which is more task-oriented than social interaction. The initial social interplay may be delayed in deformed or unattractive babies.

The infant has a considerable repertoire of his own. Initially, he can see only objects about 8" from his eyes. This helps to filter out the extraneous scenes and helps to keep him concentrated on his mother. Picture tests indicate that he prefers full faces and upturned mouths. At six weeks, he can command his mother's attention by widening and brightening his eyes. By the end of three months, his focal distance is about as wide as the adult's; he can track and accommodate. can turn away or turn off. (These organizational stages later are represented by various degrees of pathology in ocular-stage armoring). The relative maturity of eye-functioning at 3 months is only equaled by the skill at sucking and head movements.

At 3 months, mother and child have almost equal control in manipulating the environment through eye signals and gazing behaviors. The infant can now determine how much of the world he will see.

At 6 months, the infant's interest shifts from faces to objects. He has now developed sufficient motor skills to reach for and manipulate objects. His attention turns from learning the basics of human interactions to learning the nature of things.

While he was learning the social uses of the eyes, the infant was also discovering the ways of head movements. In head-on viewing, foveal vision is employed, form and pattern are perceived clearly. When the head is averted from 15°-90°, peripheral vision is employed. Here, only movement and changes of facial expression can be perceived. With greater than 90° aversion, nothing can be seen. Each head position relates to a different sensorimotor experience. Head aversion expresses distaste, whether of a face or a food. Head-lowering breaks off eye contact and may evolve to surrender.

The author states that, during the first two weeks, the infant smile is purely reflexive, indicating nothing more than physiologic excitation and discharge within the brain. The fact that the infant smiles in his sleep as neuronal discharges are simultaneously revealed on tracings supports this argument. However, mothers insist that, even at this age, the smile is reactive, and mothers have often been proven correct in the past. At three weeks, the smile is clearly exogenous. At three months, the smile is produced to elicit a maternal response. At four months, it is integrated with other facial expressions to indicate more subtle feelings. These time markers are probably innate because they appear in all cultures and in blind babies. After four to six months, the smiles of the blind become muted. The laugh, also, is time-regulated and is even reported in feral children.

There is a patterned sequence of displeasure. It goes from sober-faced to frown, to partially closed eyes, to raised flushed cheeks, to retracted lips and open mouth as the breath begins to catch, to an actual cry. This pattern becomes a response to external events earlier than the smile. It may begin before three weeks and is ripe by three months.

Gazing, head movements, and facial expressions are first organized separately. With maturity, they become integrated into innate patterns. The integration is an organization of a higher order. The mother perceives the grouping as a gestalt; whether her perception of the gestalt is innate is unknown. By three months, the infant is well equipped to engage or disengage from his caregivers. By six months, he is ready to interact with the adult world.

Just as there is hunger for food, there is an infantile "hunger" for perceptive, cognitive, and sensorimotor stimulation. By three months, the infant's cognitive functions take precedence over the simple reception of a sensory stimulus. The infant can avoid overload by employing built-in avoidance behaviors. At the third month, the infant begins to perceive discrepancies in presented stimuli, confirming that there is an internal schema in play. The infant gets bored at the constant repetition of the same stimulus. Mothers must alter the stimulus to maintain attention. Greater degrees of discrepancy from the original stimulus now command greater attention up to a maximum threshold, which precipitates the avoidance response. At this threshold point, the stimulus and the internal schema have been stretched to their limits.

In the first three months, an internal clock governs whether the infant will be drowsy, inactively alert, active, or fussy. By the third month, external events play an increasing role, and attention can be maintained for 15 minutes or more. Excitement or arousal now enters the picture. Unlike attentiveness, there is no self-regulating turn-off mechanism for excitement. It can only be discharged by physical fatigue, or by wailing and flailing.

Freud assumed that all stimulation caused internal tension and that pleasure was the experience of the discharge of that tension. The fact that the infant clearly seeks more stimulation and is often unhappy when it is withdrawn belies Freud's thesis as stated. However, a rise and fall of tension is clearly related to affect. The endogenous smile of the sleeping neonate appears when there is a rise of subcortical excitation followed by a fall below a postulated threshold. It is assumed that later, in the awake state, an affective experience is produced when there is an increase in excitation followed by a sudden decrease. When a sound increases in intensity and is cut off abruptly, it produces the loudest laughter of all sounds. The direction of affect depends on many factors and is still, to some extent, indeterminate.

To maintain stimulation, attention, excitement, and affect in the infant, the stimulus must be neither too weak nor too strong, too familiar (boring), too unusual (not comprehended well enough to provoke to attention), or too repetitive (dull). This calls for a sensitive mother who is able to have fun, and a baby who is in the mood for fun. The

mother must be able to play with her faces, sounds, and gestures—then she can play with her baby; she must be affectively alive. The healthy infant responds to her with appropriate gestures to keep the game going. The mother's aliveness enlivens her baby. In this atmosphere of continual flux, play is the prototype of all human social interaction. By steadily expanding the parameters of play, the mother widens the infant's ability to relate socially.

In the first six months, play involves no toys or artifacts, only interpersonal moves. The engagement begins with a meeting of eyes. The infant chooses to maintain the meeting or to call if off. If the infant engages, the mother first proceeds to stimulate at a regular rate, which provides the predictable stimulus from which the infant can form expectations. This temporal patterning probably matches innate infant time preferences, just as the human face corresponds to its visual preferences. Each engagement is played out with a limited stimulating repertoire, as if to focus on the "topic" at that time. Engagements are punctuated with pauses for regrouping. The infant usually signals for time-out. The reengagement is usually a repetition of the previous run with a slight variation.

The conglomerate of child-mother interactions over time gives rise in the infant to an internal representation of the mother, which is a fundament of relationship. At about nine months, the infant begins to manifest weariness or distress in the presence of strangers. At about one year, distress at separation from the mother may occur; the reactions vary widely in intensity in different infants. Now, too, the reunion with the mother is palpable. At this point, it is asssumed that a tangible attachment to the primary caregiver has been established. Though it is obvious that there are affective responses to inanimate objects, e.g., a favorite toy, at this age, it is assumed that the reactions to objects are qualitatively different from those to "mother," Brazelton has observed that the responses to objects are more jerky, and Sylvia Bell reports that the timetable for responding to objects differs from that of reacting to humans.

Reactions to objects combine motoric and proprioceptive experiences in handling the object and the resulting sensory input, e.g., the movement and sound of the rattle as it is shaken. These, experienced repetitively, produce a schema of the object in the child's mind. With increased experimentation, there is integration of separate schemata so that the rattle as seen, handled, shaken, and heard becomes associated with some other object. Thus, an object relation is formed as a sensorimotor schema.

The relationship to humans is more complicated, more plastic. The mother may smile to answer his smile, or she may not. This variability in human response contains the seed of the ultimate separation of the infant "self" from "others", while at the same time, the internal representation of the "other" is being enhanced. Moreover, the excitation of the human interaction is capable of causing affective responses ranging from iov to sadness, which objects cannot elicit. With increased experience, interpersonal representations, like object schemata, become linked in higher order representations. Each new event with mother adds to her representation or confirms what is already represented. These internalized representations act as a relationship within the mind. The consistency of the relationship provides for solidity, whereas the variations add to the subtlety and sophistication in relating. In adult life, affective components can be unjoined from sensorimotor components of representations. This often happens in therapy when deep emotion is experienced with no awareness of associated events. Whether this can occur in infancy at the stage of early representation formation is unknown. What is known is that the representations of mother are always changing, reintegrating, enlarging.

It is clear that the firm establishment in the infant's mind that communication is possible, that messages are comprehended "out there," and that responses will be adjusted

to meet one's needs is the desideratum. Stern notes, "Avoidance of eye contact and the face to face position is considered the most persistent and consistent feature of childhood autism. Furthermore, it has been anecdotally reported that in some cases of later autism or childhood schizophrenia this kind of visually turning-off and away from the human environment can retrospectively be traced to the first half year of life."

The infant's gaze aversion is perhaps, along with sucking, the earliest self-regulating mechanism. Failure to respect it is intrusive. Likewise, mother's attempt to accentuate the stimulus when an infant changes from a smile to a sober face deprives him of awareness that his facial attitudes are of any communicative value. When the mother overstimulates, particularly when she is insensitive to the infant's response, the infant often becomes glassy-eyed and stares blankly; or he may go limp (the prelude to a passive response to life?).

Mothers who are depressed, whose affect is flat, who are inhibited, preoccupied or resentful may be unable to rouse sufficient energy to excite their babies, or may be insufficiently responsive to the babies' cues. Mothers hypersensitive to rejection by their infants may, upon a particular aversion response, terminate the interplay prematurely instead of seeing the aversion as a readjusting period. Or the mother may simply have a limited repertoire, or the infant may be impeded and unresponsive, so there is no feedback loop.

Some emotionally maimed mothers only become animated when an infant mishap has occurred, thereby possibly laying the groundwork for hypochondriacal or masochistic behaviors in their children.

Though hundreds of film strips of maternal dyadic relationships have been analyzed, the author is aware that this new knowledge is only a preamble to what there is to be learned. There is a need to document large sample patterns from different segments within the culture and from disparate cultures. One fascinating thing that has already

been learned is that one's predilection to impose intellectual restraints on relationships that do not seem to be working on the natural level may be a grievous error. Many relationships that appeared to be a bad fit at first evolved to better adjustments with give-and-take over time.

Now that we are becoming apprised of detailed processes of infant development, we must be struck anew with the power of Reich's clinical acumen. He was the first and the only psychiatrist of his time to recognize the crucial significance of eye functions in the mothering process. He was unique in relating eye segment pathology that originates at this earliest time of life to the severe character disorders and emotional pathologies that ensue. And he was no less aware of the significance of playful liveliness in social interactions as well as in the processes of learning and scientific discovery.

Reich, when confronted with accusations that he skipped from place-to-place in his work—from psychiatry to biology to physics, etc.—declared that he was setting up many foundations, that the doors, windows, and roofs would be filled in by those who followed. It is interesting to note that, in the field of infant research, the doors and windows that are beginning to appear are consistent with Reich's foundations. And the workers are not orgonomists; they are possibly not even familiar with Reich's formulations of child development.

For orgonomy, there is something to be derived from this new knowledge. It is clear that, in dealing with patients and their characters, we are not only dealing with armoring that resulted from emotional trauma, but we are also dealing with developmental deficits from eyes never sufficiently enlivened, from laughs never elicited, from energy never turned on. Perhaps the grain of truth in the assertion that it is not the particular therapeutic modality but the therapist who helps the patient resides in the ability of some therapists to energize functions that mothers never broached.

Morton Herskowitz, D.O.

The Freud Controversy

The Assault on Truth: Freud's Suppression of the Seduction Theory

by JEFFREY M. MASSON Farrar, Strauss and Giroux, New York, 1984. Cloth, \$16.95

In the Freud Archives

by JANET MALCOM
Alfred A. Knopf, New York, 1984. Cloth, \$11.95

The Complete Letters of Sigmund Freud to Wilhelm Fliess, 1887—1904

edited by JEFFREY M. MASSON Harvard University Press (Belknap), Cambridge, Massachusetts, 1985. Cloth, \$25.00

This began as a review of only one book, The Assault on Truth, which, despite some interesting conjectures, seemed so one-sided. and so polemical in tone, that I felt a need to pursue the story from the beginning. The beginning is found in the above-cited edition of the complete letters of Freud to Fliess, underscoring the word "complete," and noting that a compressed edition was released in 1950 under the editorship of Ernest Kris. Marie Bonaparte, and Anna Freud, entitled, The Origins of Psychoanalysis. Along the way, I also came across the Malcom book. Though I would regard it as serious literature, rather than journalism, it is nonetheless, important to the presentation of the story as it finally emerged.

The position taken by Masson in *The Assault on Truth* is that Freud, who originally held that the formation of hysterical neurosis was dependent upon the occurrence of actual sexual trauma (that is, that real, identifiable events, not fantasies, were the underpinning to later symptom formation), later gave up this idea, not because of scientific proof that this was an incorrect position, but because Freud was suffering from "moral cowardice."

Masson documents Freud's early experiences with the diagnosis and treatment of hysteria, while studying in Paris with Charcot. At that time, he came into contact with the work of Ambroise Tardieu, professor of

legal medicine at the University of Paris, who published an influential paper documenting the sexual abuse of children, based on autopsy information gleaned from "accidental" deaths. Of great interest is that Tardieu apparently observed and put into print a great deal of the material on child abuse that is only now becoming popularized and accepted. Masson makes a special note of Tardieu's observation (in his Etude Medico-Legal sur les Attentats aux Moeurs, 7th ed., Paris, 1878) that these children had a need to keep the truth away from others, and that the evidence of what had happened to them was most apparent in their eyes: "Their features reveal the deepest sadness; they are timid and apprehensive, often they look dazed and the expression in their eyes is lifeless."

Masson points out one other item of interest with regard to Tardieu: his awareness that society at large, and the medical world in particular exhibited a need to deny the reality of these events. Freud also attended autopsies, conducted by Brouardel, specifically focussing on violent sexual assaults on children. It seems quite plausable to think that Freud's early thesis of hysteria being connected to real sexual trauma had its origins in this visit to Paris.

The next phase examined by Masson is the relationship between Freud, Wilhelm Fliess, and their mutual patient, Emma EckBOOK REVIEW BRAID

stein. Masson contends that it is only in the then unpublished exchange of letters between Freud and Fliess that the relevance of this relationship to the seduction theory and what transpired afterwards comes to bear. Eckstein was possibly one of Freud's earliest analytic cases, having come to him for a variety of physical ailments that kept her confined to bed. Freud and Fliess shared an interest in sexuality and the manifestations of anxiety symptoms. Freud's major interest was in the psychology of the neuroses, and Fliess's in physical symtomatology. Fliess and Freud both felt, early on, that masturbation was a major cause of neurotic symptom formation, with Freud theorizing about psychological displacements, and Fliess theorizing that there was a shift from the genital to the nose, and that the appropriate treatment was nasal surgery. He delineated various genital points on the turbinates. Freud apparently accepted Fliess's thesis, and, referred Emma Eckstein to Fliess for nasal surgery, which went very badly and almost killed Eckstein. It is clear from the documents that the cause of the near fatality was the fact that Fliess left half of the iodoform gauze in the nasal cavity when he removed the packing, and that it caused serious infection and tissue breakdown. Masson claims that, because Freud was emotionally tied to Fliess, they being the closest of friends, he was unable to accept the possibility that Fliess could make a mistake, and consequently expressed the thesis that Eckstein's bleeding was due to "unconscious longing" rather than to an iatrogenic error. It is clear that the relationship between Freud and Fliess was more than colleagueal, at least from Freud's standpoint. He felt isolated from the rest of the medical community, had been accorded little acceptance for his emerging ideas about sexuality and the neuroses, and Fliess was the one individual to whom he could tell all. Masson posits that Freud could not tell Fliess his doubts for fear of alienating the one person who, on the surface, accepted Freud as he was.

In the situation concerning Emma Eckstein, Masson contends that Freud evaded the responsibility of dealing with the fact that her bleeding had nothing to do with periodicity or hysterical longing but rather to Fliess's surgical error. He contends that Freud did not do so out of a need to protect Fliess. It can be seen differently, not to absolve Freud of responsibility, but in the sense that Freud's "subterfuge" was due to his need to run away from a truth, rather than risk the loss of a relationship. Given the historical material presented in this volume, there seems to be some merit to this idea. Its relevance to orgonomy lies in the issue of the need to maintain illusions and indulge in self-deceptions in order to avoid facing the imperfections of those close to us in important ways, a recurrent theme in both the early and recent history of orgonomy.

From the material at hand, it appears that Freud had severe doubts about theories advanced by Fliess, but his doubts were couched in the mildest of questions so as not to give offense. On several occasions, he went out of his way to defend Fliess's name to the medical community, which was questioning the nasal reflex theory. Another of the unusual ideas advanced by Fliess was the theory of periodicity, in which Fliess advocated the existence of "critical dates," which in females was supposedly always tied to the number 28, and in males, 23. Fliess apparently clung strongly to this mystical idea for the remainder of his life; and Freud, for his part, appeared to accept the validity of this line of reasoning, which gives us some insight into Freud's capacity for mysticism, a trait he was wont to deny. Masson contends that Freud ultimately gave up the seduction theory (that the etiology of neuroses was based in real events) in favor of the idea that what he was hearing from his patients were fantasies, and that this new position came not out of scientific reasoning or data, but out of a need to keep his relationship with Fliess intact. Freud's letter to Fliess dated September 21, 1897 contains his initial renunciation of the seduction theory. Masson continually goes back to the idea that there is a secret shame about this whole affair in

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psychoanalysis, pointing out that, of *The Origins of Psychoanalysis*, all references to the theory of the actuality of seduction have been omitted, as well as most of the material regarding the Eckstein episode. The obvious explanation or rationalization, depending upon which side of the fence one sits, is that this material was for the sake of clarity, since Freud soon embraced the idea of the unconscious fantasy replacing the actual deed. Masson tries to convince us that the unedited letters demonstrate Freud's equivocation about the seduction vs. fantasy battle.

The last issue in The Assault on Truth deals with Freud's relationship with Sandor Ferenczi who was, after Fliess, Freud's closest friend in the later stages of his life. This segment revolves around the publication of Ferenczi's paper entitled "Confusion of Tongues Between Adults and Children," which focussed on Ferenczi's growing awareness of the damages caused by sexual assaults upon children. This paper is included as an appendix and is worth the price of the volume. In it, Ferenczi asserts what essentially is an updated version of Freud's original seduction theory, plus a recommendation for a difference in treatment. Ferenczi suggested that the responsibility of the therapist is to provide the love that his patients had not received as children. The response from the analytic community was chilling and a request was made to Ferenczi that he not present the paper at the International Psychoanalytic Conference in Wiesbaden in 1932. The player behind the scenes here is familiar: Ernest Jones, friendly to Ferenczi on the surface, but in reality ensuring that he would be effectively silenced. For example, he wrote Ferenczi a letter expressing interest in publishing a translation of the paper, indicating that he had already translated it; and then he wrote to Freud, stating that he did not wish to publish the paper, fearing that it would discredit psychoanalysis. The paper remained unpublished in English until 1949. (I bring up this point about Ernest Jones since it is a reminder of the way he treated Reich in his biography of Freud, giving a totally distorted version of Reich's expulsion from the International Psychoanalytic Association in 1936.)

The Assault on Truth stirred up tremendous controversy in the psychoanalytic world, even though Masson, in his quest for information on Freud, had become close to the director of the Sigmund Freud Archives, Kurt Eissler, and was eventually appointed a Projects Director of the Archives. This tale is told in the second volume under review here. Janet Malcom's In the Freud Archives, which provides considerable insight into Masson's difficulties with the psychoanalytic establishment. Malcom portray's Masson as aggressive, manipulative, and opportunistic; and, in fact, Masson admits to these qualities very readily, almost with pride. He is shown to have been very self-impressed and used to having his way. He was proud of his brashness and functioned as a provocateur, albeit one with considerable charm. It seems clear that he did all he could to attract attention to himself and then complained whenever the attention was critical. He is quoted as saying, "Every time I give a paper, someone gets up and says 'I'm not interested in that paper, I'm not interested in your findings, I'm interested in you.' and then they come out with some really cheap parlor analysis" (p.54).

The insights and theories uncovered by Masson are not exactly earth-shattering. In fact, they had been addressed before, notably by Max Schur in Freud: Living and Dving (New York: International Press. 1972) as well as in an unpublished manuscript by Schur entitled "The Guilt of the Survivor." It is clear that Schur did not have to face the negative response that Masson encountered. Schur discussed this issue from a transference standpoint, and expressed admiration for Freud's bravery in dealing with his tribulations in print. The point is that the material was in print before the publication of Masson's book and had aroused little response from the analytic community. Thus, Masson's assertion that the attack came because of the controversial material seems to be only partly BOOK REVIEW BRAID

so, especially since much of what Freud dealt with has recently been explored in the recent upsurge of interest in child abuse, which now has a very high profile both publicly and professionally. The major exposé in the Malcom book is that the quality of Masson's character shares a major responsibility for what later transpired.

There is, mixed in with considerable dross, a great deal to be gleaned from *The Complete Letters of Sigmund Freud to Wilhelm Fliess*. One gets an idea of the struggle Freud must have gone through in working out his theory of neurosis and coming up with the idea of the Oedipus complex, as well as the importance of conscious and unconscious fantasy. All of the volumes reviewed here present a picture of Freud that is at variance with the traditional view. The Malcom volume ex-

poses how much the psychoanalytic establishment has idolized, worshipped, and ultimately dehumanized Freud. The Masson book and the volume of letters expose elements of Freud's character otherwise hidden from view: his overacceptance of Fliess and his ideas; his own need for acceptance; his hidden antipathy for Breuer, his early partner in research; and his inability to be direct, instead against others Ferenczi) behind the scenes. Though some less than admirable qualitites are exposed, firstly, they do not detract from the work that Freud did accomplish in the face of overwhelming criticism from a sex-negative society, and secondly, they manage to restore some humanity and give a sense of perspective to the early history of psychoanalysis.

Byron S. Braid, M.D.

Notes from the Workshop of Applied Orgonometry

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This is a new periodical publication, edited by Jacob Meyerowitz, B. Arch. It is "... devoted to the new way of thinking developed by Wilhelm Reich, which is fully expressed through the integrated technique of orgonometry." Orgonometry is a notation system developed by Reich to express functional relationships and transformations in abstract form, i.e., as functional equations. It is Meyerowitz's aim in this workshop to apply the technique to various natural and cultural functions (e.g., physics, art, language); the publication will provide a forum for the expression of work in orgonometry. He hopes that the publication "could be beneficial and supportive of his continuing work in orgonometry" and adds that, although "this publication is not deliberately restricted to his work alone," this first issue is entirely devoted to his published and unpublished work in this area.

The issue contains an introduction about Meyerowitz's own interest in orgonometry "Speaking of orgonometry" and three arti-

cles: "The real meaning of $E = mc^2$," "Sentences and formulae," and "The direction of development," For those unfamiliar with this field, reference is made to a preliminary article entitled "Basic Orgonometry" by Meyerowitz published in the *Journal of Orgonomy*, Vol. 19, No. 1.

Meyerowitz states; "It [orgonometry] is an extraordinary tool of research that is even capable of describing itself. I do not exaggerate when I say that it can describe the way anything functions."

With this somewhat grandiose beginning, he proceeds in the first paper to apply the technique to a deeper understanding of Einstein's famous equation $E = mc^2$. He begins by pondering the equation, which equates matter and energy, and concludes that something is wrong here; *primordial* energy cannot be equated with matter [a secondary function] and therefore what is meant must be *secondary* energy. This conclusion requires six paragraphs. There follows several pages of functional diagrams of the possible relation-

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ship between matter and energy, with a monotonous restatement of the fact that matter and energy are "somehow related." Finally, he comes to the conclusion that, "First, we need to qualify the functional meaning of the given term 'energy,' in a way that will clarify its precise domain of functioning."

This is the heart of the matter; a basic definition of energy at the start and its then being applied to the equation would have at once demonstrated its meaning. Einstein wrote the equation at a time when the distinction between primary and secondary energy did not even exist; quite obviously, in its use and application, it can only apply to what we now call secondary energy. Clearly, all that is required is a cursory knowledge of physics to know that the equation relates to the *secondary* energy content of matter; this conclusion does not require extended logical or "orgonometric" analysis.

The paper continues with a recurring restatement that matter and energy form a functional pair. Meyerowitz then proceeds to investigate the possible transformation of secondary energy into matter: "... functional logic directs us to think that it might exist." He then goes on to state:

We have evidence of heat-storing chemical reactions that lock energy into a compound structure. There is the living process of photosynthesis that converts light energy into plant and food structures. As a further example, we apply the energy of electricity to move particles from one material to another thereby altering the structure of both. We do not doubt in some way, SEC-ONDARY ENERGY is converted into MATTER.

This is nonsense. No reputable scientist, orgonomically or classically trained, would claim such a thing. The first two examples represent the storage of secondary energy in the bonding energy present in complex molecules, and *not* its conversion into matter. Here again, even a rudimentary knowledge of basic science would have avoided this kind of amateurish conclusion. In this case, Meyerowitz's application of "functional

logic" is a good example of how armchair analysis can lead one into untenable conclusions about matters that can ultimately be decided only by experimental observation.

Worse, nowhere in the entire paper is there any indication of how this technique generates new ideas, or a new, hitherto unsuspected aspect of natural functioning. There is a monotonous reiteration that matter and energy have a common functioning principle, but it "remains unspecified." The functional diagrams often seem to serve the function of merely restating in symbolic form what is belabored in the text. The text itself is tedious and irritating to read, with an obtuse way of rendering ideas which left me frequently waiting for the development to proceed to some conclusion or develop a theme to a new point. It was often necessary to reread sentences and paragraphs several times to make some sense of what concept was being developed, only to find the discussion going in circles. Consider the following sentences in the addendum:

The function of creation continually expresses this process in nature, but always in one direction only, toward—the creation of MATTER, SECONDARY ENERGY, LIVING ORGANISMS, and so on. Creation may therefore continue to operate in what appears to be a transformation of SECONDARY ENERGY into MATTER, i.e., in nuclear fusion. The new matter that emerges from a nuclear reaction may itself express the orgone-physical process of the function of creation—a primary realm operation—and not a transformation of SECONDARY ENERGY.

I should also mention briefly the article entitled "The direction of development": It is three pages of text and arrows devoted to an analysis of whether the functional arrow should point to the left or to the right. Meyerowitz states that the direction really doesn't matter, but written language proceeds in one direction; however, functional equations can be written both ways, and therefore, he says, "This example demonstrates one of the ways which an

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orgonometric formulation is more elastic than any spoken language."

Reich's use of orgonometry was a brilliant and creative start toward the development of a truly functional mathematics. Unfortunately, in Meyerowitz's hands it becomes a tedious exercise in circular reasoning, empty logic, and content-less conclusions. A few centuries ago, many

religious clerics and scholars spent their time in the endless and tedious analysis of the minutiae of textual meanings, such as the famous debate about how many angels could dance on the head of a pin. Notes From the Workshop of Applied Orgonometry would be very much at home with these productions.

Courtney F. Baker, M.D.

Communications and Notes

• Professor Paul Mathews died in late August, 1986. Mr. Mathews had been associated with orgonomy since the 1950's as an orgonomic counsellor, teacher and writer. Together with Professor John Bell, he founded and led the New York University course on The Life and Work of Wilhelm Reich for the past eighteen years. Mr. Mathews was a Fellow of the American College of Orgonomy and its Treasurer. Professor Mathews was 62 years old.

Announcements

- A two day weekend laboratory course was held at the Institute on May 31 and June 1, 1986.
- The Institute in its continuing research on the Reich Blood Test performs the test, free of charge, for those individuals recommended by their therapist. For information please contact: Louisa Lance, M.D., Box 304, Gwynedd Valley, Pa., 19437.

Educational Programs

The Institute conducts ongoing educational and training progrms for medical students, physicians, and laymen which include:

• Somatic and Psychic Biopathies:

This course is offered to third- and fourthyear medical or osteopathic students and physicians. It is designed to enhance the student's classical understanding of disease processes through an in-depth exploration of Reich's pioneering work in these areas. This course is not limited to students interested in becoming medical orgonomists. Applicants must be undergoing characterologic restructuring and be recommended by their therapist.

For further information, write: The Institute for Orgonomic Science, c/o Robert A. Dew, M.D., Box 304, Gwynedd Valley, Pa. 19437.

• Training Program for Medical Orgonomists:

Applicants for this program must be undergoing characterologic restructuring with an

approved therapist, be interviewed by one or more training therapists, and have completed (or be in the process of completing) their first year of a psychiatric residency. Candidates for training are required to complete the biopathies course, advanced laboratory course in biogenesis and orgone physics, and the clinical didactic course. Training then continues with the monthly clinical seminar given by the Institute, and with individual case supervision.

For further information, send a resume that includes biographical data, classical and orgonomic training, and therapy, to: The Institute for Orgonomic Science, c/o Robert A. Dew. M.D., Box 304, Gwynedd Valley, Pa. 19437.

• Laboratory Course Offerings:

Introduction to Scientific Orgonomy: For the student without a strong scientific background, a two-day, weekend course in the fundamentals of biogenesis and orgone physics is offered twice a year. The course includes lectures, laboratory work, and demonstrations. Enrollment is limited to 10 students. Course fee: \$200. The next course will be offered in May 1987. If you are interested in taking the course, send a brief resume to the Institute, including scientific background (if any) and experience in orgonomy.

Advanced Laboratory Course in Scientific Orgonomy: This Course is designed primarily for physicians and students with a strong scientific background (it is also open in selected cases to those who have completed the two-day course). It is a more comprehensive, four-day course in biogenesis and orgone physics, with lectures, laboratory work and demonstrations. Enrollment is limited to 12 students. Course fee: \$350. If you are interested in taking the course, send a brief resumé of your scientific background and experience in orgonomy to the Institute.

Manuscripts

The Annals invites the submission of articles on any of the several aspects of orgonomy. Manuscripts must be sent in triplicate (the original and two copies) to the Annals of the Institute for Organomic Science, Box 304, Gwynedd Valley, PA 19437. They should be typed on one side of white paper, double spaced, with margins of no less than one inch. A letter should be included indicating the category of the paper and should provide the name, address and telephone number of the author. The title page must include the following information about the author(s): first name, middle initial, and last name; academic degrees(s), occupation, and institutional affiliation (if any). An abstract of 150 words or less—also double spaced—is requested, stating what was done, the results obtained, and conclusions reached. References should include only those actually cited in the paper and are to be listed and numbered in the order of citation. Within the article itself, references are indicated numerically in parentheses on the line of typing. Journal references should include the author(s), title, name of the journal, volume, page numbers, and year. In the case of books, the name(s) of the author(s) and editor(s), number of the edition, name of the publisher, city of publication, and year are required. The format indicated below should be followed:

- 1. Baker, C.F., Dew, R.A., Ganz, M., Lance, L.: "The Reich Blood Test," *Journal of Orgonomy*, 15: 184-218, 1981.
- 2. Reich, W.: *Character Analysis*, 3rd edition. New York: Orgone Institute Press, 1949.

Tables should be typed double spaced. Figures and graphs should be scaled to fit within a 5³/₄ x 8¹/₂ inch format. All should be clearly labeled. Manuscripts accepted for publication are subject to copyediting. They become the property of the Institute for Orgonomic Science and may not be reproduced without the consent of the authors and the Institute.

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