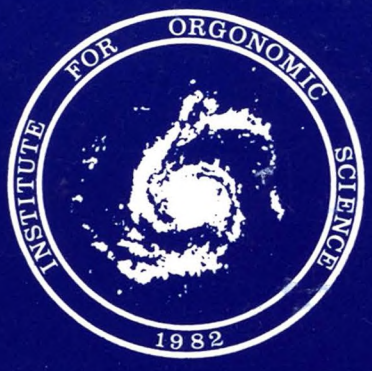
ANNALS

OF THE INSTITUTE FOR ORGONOMIC SCIENCE



Vol. 7 SEPTEMBER 1990 No. 1

The *Annals of the Institute for Orgonomic Science* is published once a year with supplementary issues as needed. It is produced under the auspices of the Institute for Orgonomic Science, Box 304, Gwynedd Valley, PA 19437. The Institute is a non-profit corporation whose officers include: Courtney F. Baker, M.D., President; Patricia Burlingame, Vice President; David Schwendeman, M.D., Secretary; Louisa Lance, M.D., Treasurer.

The contents of the *Annals*, including any articles, editorials, communications, letters, and book reviews do not necessarily reflect the opinions of the editors or the policies of the Institute for Orgonomic Science. They are solely the responsibility of the writers.

All manuscripts and communications should be sent to the following address:

Institute for Orgonomic Science
P.O. Box 304
Gwynedd Valley, PA 19437

Where possible, mailings should be marked to the attention of a specific editor or staff member.

Subscriptions:
All communications regarding subscriptions should be mailed to the above address, marked to the attention of Patricia Burlingame.

	U.S. and Possessions	Foreign Surface	Foreign Airmail
one year	$15.00	$17.00	$20.00
two years	$30.00	$34.00	$40.00
Supplements	$10.00	$12.00	$15.00

On foreign orders, please remit in U.S. currency by international money order or a check drawn on a bank with U.S. branches payable to the Institute for Orgonomic Science.

ISSN# 8755-3252
Jedidiah Press

ANNALS
of the Institute for Orgonomic Science

SEPTEMBER 1990 VOLUME 7 NUMBER 1

SCIENTIFIC ARTICLES

CLINICAL REPORTS

ANNALS
OF THE INSTITUTE FOR
ORGONOMIC SCIENCE

SCIENTIFIC ARTICLES

SEPTEMBER 1990 VOLUME 7 NUMBER 1

Further Observations on the Air Germ Experiment

ROBERT A. DEW, M.D.

Abstract

Samples of unseeded artificial protozoal culture media have been examined over a period of three to five years. During this period of exposure to the air no new organisms were found to develop in them. Experiments with seeding from a grass infusion prove that the failure to find new organisms mitigates against the existence of viable airborne cysts of protozoa in the atmosphere.

Introduction

In 1987 we reported the results of a study designed to test the validity of the "air germ" theory (1). This theory, which has held sway in conventional microbiology since the time of Pasteur, has been invoked to explain a host of phenomena in biology and pathology. Among these is the appearance of protozoa in infusions of hay or grass. The classical view holds that the organisms found in these infusions arise strictly from dried, windblown spores or cysts which alight on the grass. The water of the infusion presumably rehydrates these dormant cysts resulting in the release (excystment) of vegetatively active protozoal forms. The grass itself is considered to play merely a passive role in this process; that is, its decay in the water is thought only to provide nutriment for the various organisms. Reich, in observing the grass infusion, discovered instead that the grass, in rotting, disintegrated into microscopic vesicles; and it was from these vesicles that the protozoa developed. He photographed this process and later observed the origin of cancer cells in animal tissues by a similar mechanism. But despite the compelling nature of Reich's ciné photomicrographic evidence, the rigid adherence to the classical doctrine has remained a crucial objection to his findings in biogenesis and cancer.

The premise of our earlier study was that, if the protozoa in the infusions were simply the result of contamination by airborne cysts, culture media capable of supporting the growth of these organisms should yield the *same* varieties upon exposure to the air, i.e., without the necessity of including grass particles. Our work confirmed Reich's description of the origin of protozoa in the heaps of bions from the vesicular breakdown of the grass. More importantly, however, it revealed that during two years of exposure to the air, none of the artificial media gave rise to the "grass" organisms even though it was proved that all of the grass organisms would thrive in these media following intentional seeding.

Additionally, we observed that other specific varieties of protozoa eventually evolved in vesicles produced in the breakdown of the media themselves. The features of this process were identical to those found with grass: a bion heap condenses, develops a membrane, expands with fluid to form a *primal vesicle* which in turn differentiates into an amoeba, a ciliate, or a flagellate organism. A further, previously unreported, finding was a similar transformation of clumps of bacteria into amoeboid and flagellate protozoa. In short, the experiment supported Reich's view and cast doubt on the conventional explanation.

In the three years since our initial report, most of the original cultures have been maintained. Periodic examinations of this material during this long interval have confirmed earlier observations and have fortified our conclusions. In addition, experiments with intentional seeding suggested themselves; these have made it possible to demonstrate that the typical organisms found in grass infusions may have nothing to do with air germs. Moreover, this proof completely bypasses any arguments about the "interpretation" of Reich's observations.

Procedure

In the original experiment we employed two culture media. Medium 1 consisted of 150cc of a weak salt solution containing a few grains of uncooked rice and Medium 2 a pinch of crushed soda cracker in 150cc of distilled water (1:22). Of the more than 20 cultures from three separate trials run between 1985 and 1987, 15 have been retained. Of these, 10 had never been seeded or inoculated with organisms of any kind:

a) Three cultures of Medium 1 prepared April 15, 1985 and three prepared March 28, 1987. These six, after their initial exposure to the air, were kept covered with panes of glass. They have never been completely dehydrated; it has only been necessary to replenish them with small amounts of water every two to four weeks.

b) Two cultures of Medium 2 prepared April 15, 1985 and two prepared May 3, 1985 which have been continuously exposed to the air since their preparation. Covers of plastic screening were employed to exclude insects. All of these have dried out completely and have been rehydrated several times with distilled water.

c) There were, in addition, four cultures of Medium 1 and one of Medium 2 which had been seeded with organisms from natural sources in the original experiment.

The methods for sampling and examination were essentially the same as before; however, an improved technique was devised for long-term observations. Instead of using well slides as described elsewhere (2), flat slides and coverslips were employed to facilitate high-power examination and photomicrography. These "microaquaria" have been maintained alive for months in Petri dishes sealed with petroleum jelly, and have enabled us to follow developments in a single particle of grass, rice, etc. for extended periods.

In addition to observing live mounts from each of the cultures, a number of other experiments were performed:

1. A fresh grass infusion was prepared as a "control," i.e., to determine once again the varieties of protozoal organisms "indigenous" to grass. This infusion would also serve as a source of protozoa for experiments with intentional seeding.

2. Portions of five-year-old cultures of Mediums 1 and 2 were allocated for intentional seeding from the grass infusion to determine the current capacity of these media to support the growth of the "grass" organisms (and, hence, air germs).

Results

A. General Findings

Grossly, none of the cultures has changed substantially in the past three years. A heavy growth of bright green algae has continued to thrive in all the rice media. In contrast, these same algae are lacking in four of the five jars of Medium 2; here one found a white, powdery growth which floated on the surface, with a sediment consisting of dirty white flakes adherent to the bottom and sides. In all of the cultures the fluid was quite clear, indicating that bacterial and fungal growth were not excessive. Microscopically, bacteria, yeasts, and algae of various kinds were present in all of the jars. Algae in the rice were either large grape-like clumps of spherical green cells or dense tangles of segmented cylindrical elements in long branching chains. In Medium 2 the bottom flakes consisted of the remnants of dead fungal hyphae, algae, and bacteria; scattered individual yeasts, algae and bacteria were found living in the surrounding fluid.

B. Microscopic Examination

1. The Grass Infusion (Figure 1)

Events in the grass infusion proceeded much as they have been described in our earlier article. It is now clear that small, slowly moving amoebae (5-7u) soon begin to form from clumps of bacterial cells, i.e., within a week, and before the breakdown process in the grass is far advanced. The grass particles at this time are still green in places and no primal vesicles (heaps of bions surrounded by a membrane) are seen. By the eleventh day one sees large primal vesicles containing vigorously moving bions. Colpoda and other much larger ciliata swarm in the fluid around the plant material. A few small plastic-bodied monoflagellate organisms are also present. By the fifteenth day larger (90μ+) highly motile amoebae are visible in large numbers. It is important to note that none of this fauna is preceded by the finding of cysts. The various organisms, *once they are present*, do encyst themselves; these cysts are quite prominent in most cases, and cannot be mistaken for anything else. At this point the grass infusion was deemed ready for the purpose of seeding other cultures. In obtaining samples for inoculation, care is taken to make the sample as small as possible and to avoid including plant material, so that one can be sure that the survival of the organisms in the artificial medium is not due to an accidental "enrichment." The samples were also checked microscopically to be certain that they contained protozoa.

2. The Artificial Media (Figures 2 and 3)

Without exception, each type of medium was found to contain the same organisms present at the time of our first report in 1987. The "purity" of these cultures was often dramatic; one might see a single field containing dozens of identical, active individuals with no other protozoa present. Those cultures which had contained both amoebae and flagellates have continued to do so. Examples of the various types are illustrated in Figures 2 and 3. In the four jars which had been seeded from various sources in 1985, no trace of the seeded varieties could be found; but organisms typical of the particular medium, e.g., rice amoebae, were plentiful. What is significant is that in none of the 15 jars were any "new" organisms discovered despite a continuous exposure to the air—in some cases for over five years.

To test the capacity of the five-year-old cultures to nourish possible air germs, portions of each medium were seeded from the grass infusion. With either type, the seeded organisms have thrived and multiplied. This finding is of critical importance: to say the least, it implies that viable airborne cysts of the grass protozoa must be rare indeed. Not

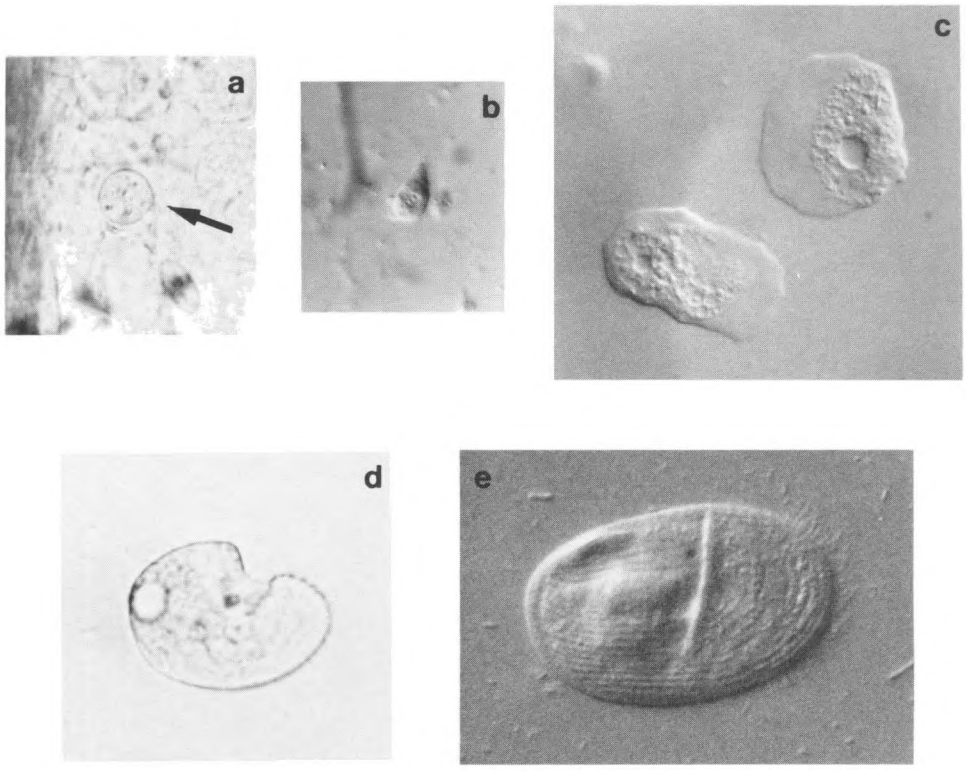


Fig. 1 Organisms from the Grass Infusion

a) A primal vesicle within a grass particle at the eleventh day. Motile Colpoda were already present. Bright field, 640x.

b) Also seen on day eleven, an active amoeba of the type which forms from heaps of bacterial cells. Nomarski DIC, 640x.

c) A pair of large "grass" amoebae discovered on the fifteenth day. Nomarski DIC, 640x.

d) Colpoda. Bright field, 640x.

e) A large Holotrichoid organism, probably of the genus Chlamydodon. *Nomarski, 640x.*

All of the organisms shown here continued to survive and reproduce over a month after transplantation to five-year-old cultures of media 1 and 2.

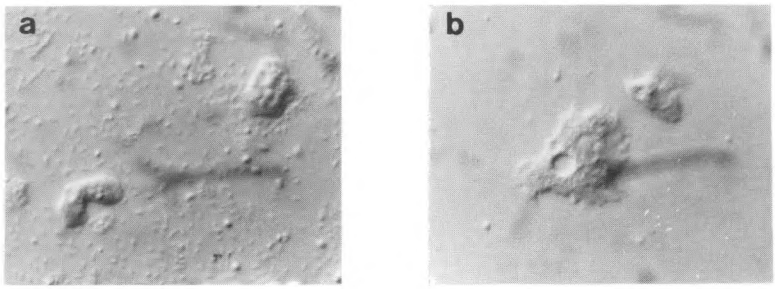


Fig. 2 Organisms from Medium 1 (Rice)

a) A pair of the small amoebae typically arising from bacteria growing in the rice medium. These are the same as that illustrated in Volume 4 of the Annals, *Figure 6a, page 33. Nomarski DIC, 640x.*

b) Two amoebae of the "large" type indigenous to the rice medium. The one at the upper right is unusually small, but is otherwise identical in morphology and behavior. Similar amoebae are illustrated in Volume 4, Figure 5e, page 43. When the photograph above was taken, the organisms had begun to contract, resulting in a ragged, spicular appearance at the periphery. Nomarski DIC, 640x.

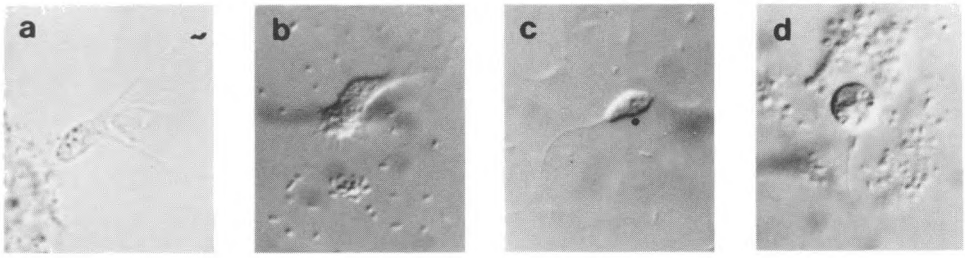


Fig. 3 Organisms from Medium 2 (Soda Cracker)

a) A typical medium 2 amoeba. Its squid-like appearance results from the fact that it is floating free between the slide and coverslip. Dark granules may be seen within the cytoplasm. Bright field, 640x.

b) Another individual of the type shown in (a). Here the organism is adherent to the surface of the slide which accounts for the difference in form. This was the only variety found in medium 2. Dozens of individuals could be seen within a single field. An example of this type is also shown in Volume 4, Figure 6b, page 33. Nomarski DIC 640x.

c) and d) show flagellated organisms. The one in (c) is amoeboid; that in (d) has a rigid membrane. These are also illustrated in Volume 4, Figure 6d and e. Nomarski DIC, 640x.

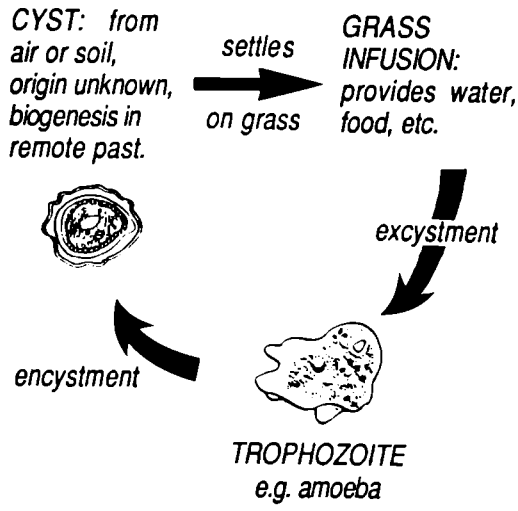
one appears to have fallen into any of the cultures in over five years.

Discussion

As we have seen, the principal results from our extended observations of the culture media are:

1. It has been shown that, despite three additional years of exposure to the air, no new protozoal organisms have appeared in any of the culture media. Instead we find, as previously, pure growths of the same amoebae, flagellates, etc. which we found earlier—organisms which appear indigenous to the particular medium.
2. It has been further demonstrated that these media, despite their age, are still capable of nourishing the protozoa which typically develop in grass infusions.

Together these findings further confirm our argument against the air germ theory—at least as it has been applied in the case of protozoal biogenesis. Let us begin by illustrating the classical doctrine:

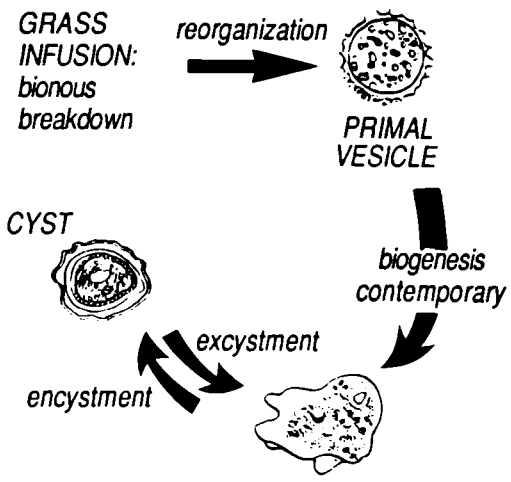


This view implies that for each species of protozoa found in the grass infusion, for example, at least one cyst of that individual type must have been present from the beginning, e.g., on the grass, or must have fallen into the infusion from the air at some point. In other words, the *immediate* origin of all these cysts is from the air (or in the soil in which the grass grows).

We would have to agree that such cysts indeed exist. Several of the vegetative forms we have encountered have been seen to encyst and excyst themselves under various conditions. We would further conclude that it seems plausible that in the right circumstances such cysts might become airborne, or otherwise be carried from one place to another. The classical biologist, on the other hand, by his own admission, has not demonstrated cystic forms for all the species. Furthermore, to our knowledge, he has not substantiated the presence of protozoal cysts in grass infusions *before* the appearance of their vegetative forms. It is highly significant that Kudo, in his textbook on the protozoa (3), describes artificial culture media designed to support the growth of specific types, but makes it clear that these media must be *intentionally seeded* with living specimens of these organisms in order to obtain their growth and reproduction. Nowhere does he say what happens in these media if they are merely exposed to the air without seeding. While it has been shown that certain kinds of "germs" are trapped in filters through which air has been passed, the organisms which result from culturing these filters are not the protozoa one obtains in the grass infusions. Finally, the biologist must also concede, according to his own view, that the origin of the cysts is, ultimately *untraceable*; he can only *guess* from where they might have arisen.

In our infusions of grass, rice, etc. *we find at first no cysts*, but regularly observe the organization of the diverse protozoa from heaps of bion vesicles or bacteria. *The formation of cysts is then seen to follow from vegetatively active individuals.* Grass protozoa develop *only* in the grass infusions; they do not develop in the artificial media, although they

will thrive there *after* intentional seeding. These are experimental facts, not assumptions. They may be illustrated schematically in the following way:



It may be appreciated from a comparison of these schemata that the two different viewpoints are in no way mutually exclusive; one need not *disprove* the air germ theory in order to prove the case for contemporary spontaneous biogenesis from bion vesicles. A motion picture film of the process, for example, would do this without in itself directly refuting the existence of airborne cysts. Nevertheless, finding inconsistencies in the air germ theory does oblige one to give serious consideration to other possibilities. It is here that the religious and *exclusive* adherence to this theory has done the most damage; one would still be laughed at today for raising the specter of "spontaneous generation" by questioning the air germ theory.

There is, on the other side of the issue, the very real danger of a related kind of bias. Reich challenges the precepts of the air germ theory with typical brilliance and power; not infrequently, one is simply swept away by the force of his arguments. The potential problem here is a failure to examine critically what he says or to neglect "checking out" his procedures. A case in point is his remarks about hay or moss washings:

> *If the protozoa derived from germs attached to the moss or hay developing from the germs in the infusion in a few days, this could be proved by the following experiment: Hay or moss is washed in water in such a way that not the smallest particle of hay or moss remains. This can be done by letting the water run through a filter on which the hay is placed, or by drawing some stalks through the water several times with a pincer. The water, thus "inoculated with germs," shows no trace of protozoal growth.* (4:66-67)

Upon reading this experiment in the light of our own experiences, we had some reservations about Reich's explanation for his failure to obtain protozoal growth. Cysts will not ordinarily excyst themselves in the absence of a living food supply. This fact indeed constitutes one of the major complications in this area of research; one cannot operate with *sterile* media. If Reich's washings had an insufficient population of bacteria, for example, his results would not necessarily indicate an absence of cysts. In any case, we elected to try a similar experiment to see if we could detect cysts on direct examination. Fresh, green grass clippings were shaken vigorously in a flask with distilled water. The washings were poured off and centrifuged. Immediate microscopic examination showed several varieties of pollens, fungi, algae, diatoms, etc., and, most importantly, cyst-like structures and a few rapidly swimming paramecia. *In only three days*, the same tubes revealed many active "grass" ciliata, amoebae, and rotifers.* These findings were at first dismaying; however, on further reflection we realized that the results are not so surprising. If one considers that the earth and decaying vegetation beneath the growing grass are continuously undergoing bionous breakdown, one should expect

*A multicellular microscopic worm-like organism.

that organisms would also be continually forming. A heavy rainfall, such as that preceding our experiment, or even the formation of dew overnight would then allow these protozoa to migrate up the blades of grass where, in the drying sunlight, they might encyst themselves. Our point is that the grass washing experiment, as described by Reich, does not appear to be an entirely satisfactory argument against the air germ theory. And, most significantly, if one had no knowledge of the peculiarities of cysts, one might not have questioned his results in the first place.

It is evident that, in addition to the obstacles of prejudice, the serious student of this controversy must also master certain technical problems if he would correctly evaluate what he sees under the microscope. These difficulties have to do mainly with differentiating between the formation of primal vesicles from bion heaps and other similar appearing events seen in connection with encystment and excystment. One requires a clear idea not only of what the trophozoite and its cysts look like but also a familiarity with the various forms they assume in changing from one to another. To put it more strongly, any responsible advocate of Reich's view in this matter must have a knowledge of cysts; only then can he be confident that the organization processes he observes in a particle of washed grass or rice have nothing to do with air germs.

Our observations do raise a number of questions whose answers are not immediately apparent. We noted in our original report that both the grass infusions and the artificial media seeded from the grass infusions eventually became barren of the typical "grass" protozoa. It was speculated that this occurred because the highly motile and rapidly reproducing organisms outstripped the nutritional capacity of the cultures and that the accumulation of waste products created a toxic environment. These conditions normally cause the protozoa to encyst or die. One question which arises is why, if after five years the artificial media can again be successfully reseeded, did not encysted grass organisms themselves excyst at some point? In other words, if conditions again become favorable in the artificial media, why do we not find active grass organisms in them *without* reseeding? Why did the rice and soda cracker organisms survive for more than three years, in some cases despite complete dehydration of the medium? And, further, how was it possible for these old cultures to become, once again, capable of supporting reseeded grass organisms without our doing more than replenishing them with distilled water?

One obvious conclusion is that the cysts of the grass organisms were simply unable to withstand these conditions in a viable state, while those of the rice and soda cracker protozoa were more durable. These organisms, persisting as they have, seem to represent a "lowest common denominator." They arose and survived after everything else died off, and their activity and requirements were so low that the "food chain," e.g., bacteria, was able to reproduce fast enough to keep pace with their needs. With the larger, metabolically more active protozoa from the grass absent, the bacteria again became plentiful enough to support these organisms when they were reintroduced by reseeding.

References

1. Dew, R.A.: "An Air Germ Experiment," *Annals of the Institute for Orgonomic Science*, 4:1, 1987.

2. Dew, R.A.: "The Amateur Scientist in Orgonomy," *Annals of the Institute for Orgonomic Science*, 4:1, 1987.

3. Kudo, R.R.: *Protozoology*. Charles C. Thomas, Springfield, Illinois, Fourth Edition, 1954.

4. Reich, W., *The Bion Experiments on the Origin of Life*. Farrar, Straus and Giroux, New York, 1979.

Orgone Treatment of Sprouting Mung Beans

COURTNEY F. BAKER, M.D. AND PATRICIA BURLINGAME

Abstract

Mung bean seeds and sprouts were exposed to widely varying durations of orgone irradiation from a five-fold cylindrical accumulator. Exposure times varied from one minute to eight hours given in one dose and the bean sprout weights measured daily for four to ten days. The effects on growth were small but highly consistent and demonstrate several important treatment phenomena.

Introduction

The orgone irradiation of seeds and sprouts using the ORAC is a useful and rewarding method of investigating the biological effects of the orgone. A number of previous studies exist in the orgonomic literature, using various combinations of irradiation of seeds, of sprouts, dry vs. wet seeds followed by observations of yield, germination rate, plant vitality, length, etc. (see 1, 2, 3, 4). The seeds and sprouts are easy to work with and can produce rapid results if the experimenter is only interested in initial growth and germination rates. This can allow several replications of the experiment under highly similar environmental conditions.

Most of the researchers cited above reported positive results at least part of the time, in regard to germination rate, yield (both in regard to total number of fruits as well as average size), plant vitality, length, etc. The most useful experimental result, from a purely practical point of view, is the demonstration of increased plant growth, yield, or vitality following the irradiation of the seeds only. Obviously, seed irradiation is technically simple and could affect the growing of large numbers of plants. In the present experiment we began by treating seeds, but then quickly shifted to treating sprouts, after reviewing the results of the initial testing with a desire to compare the results of the two types of irradiation procedure. The results proved to be quite unexpected although highly consistent over five full replications.

Methodology

In this experiment, ordinary mung bean seeds and sprouts were exposed to varying amounts of orgone irradiation using the same ORAC. The effects of treatment were determined by measuring the weight of the bean sprouts at the conclusion of each replication. Five replications involving variations of time of treatment relative to sprouting, and variations in water availability, were done over a three-month period.

On the day preceding the first seed treatment, a five-fold ORAC was constructed, using a two-pound coffee can, fine steel wool, and sections of plastic bags. The completed ORAC was placed in the sun for several hours to facilitate charging. The weather was clear and dry, and the ORAC felt fairly strong by late afternoon.

Mung bean seeds, purchased at a local grocery store, were distributed to five groups in each replicate, with 300 beans per group.

The dry beans were weighed, then placed into one-pint glass jars, rinsed with warm water, then left to soak in water overnight (8 to 15 hours). After the soaking period, the beans were rinsed and drained, then reweighed. A piece of nylon mesh was affixed to the top of each jar with a rubber band, and the jars were inverted in a styrofoam cooler. The beans were rinsed twice a day, and weighed once a day, for four to ten days.

The ORAC treatment schedule and variations on the sprouting method were as follows:

Treatment Groups (identical for all replications):

A: no ORAC treatment

B: one-minute exposure

C: eight-minute exposure

D: one-hour exposure

E: eight-hour exposure

Replicate #1: The seeds were treated *dry* by placing each group into a small metal can, which was then inserted into the ORAC. Groups B, C and D were treated sequentially during the treatment of group E. The ORAC was placed in the sun, and loosely closed with a plastic lid to protect the seeds from birds. After treatment, the seeds were soaked for 15 hours, and weighed for ten days.

Replicate #2: The seeds were treated at the *initiation of soaking* by placing the water-filled jars into the ORAC. All groups were treated sequentially, outdoors in the covered ORAC. The total soaking time was eight hours, and the sprouts were weighed for seven days.

Replicate #3: The seeds were treated *after soaking* for ten hours. Treatment was sequential and outdoors. Weighing continued for six days.

In these first three replications, the only source of water derived from twice-daily rinsings.

Replicate #4: Treatment as in replicate #3, with soaking time of 11 hours, and five days of weighing. During the sprouting period a *wick* was added to supply a continuous amount of water to the growing beans. The wicking was accomplished by lining the jars with paper towels before adding the soaked beans, and then placing them on their sides in the styrofoam box, which contained one-quarter inch of water.

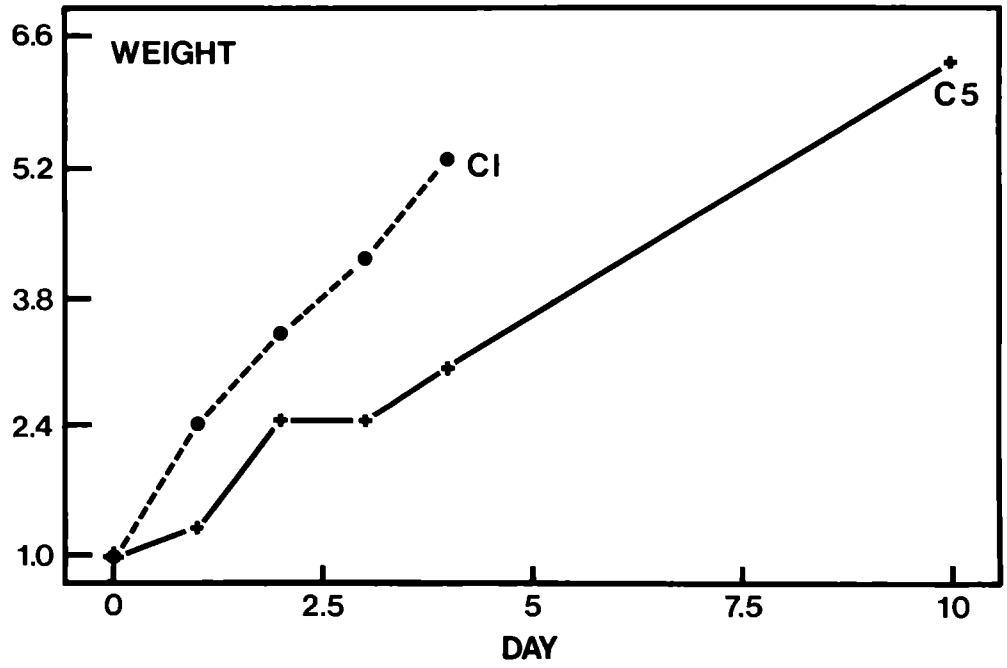
Replicate #5: The seeds were *treated indoors*. Beans were soaked for ten hours, then sprouted in the same method as replicate #4 using wicks for continuous water. Weighing continued for four days.

Results

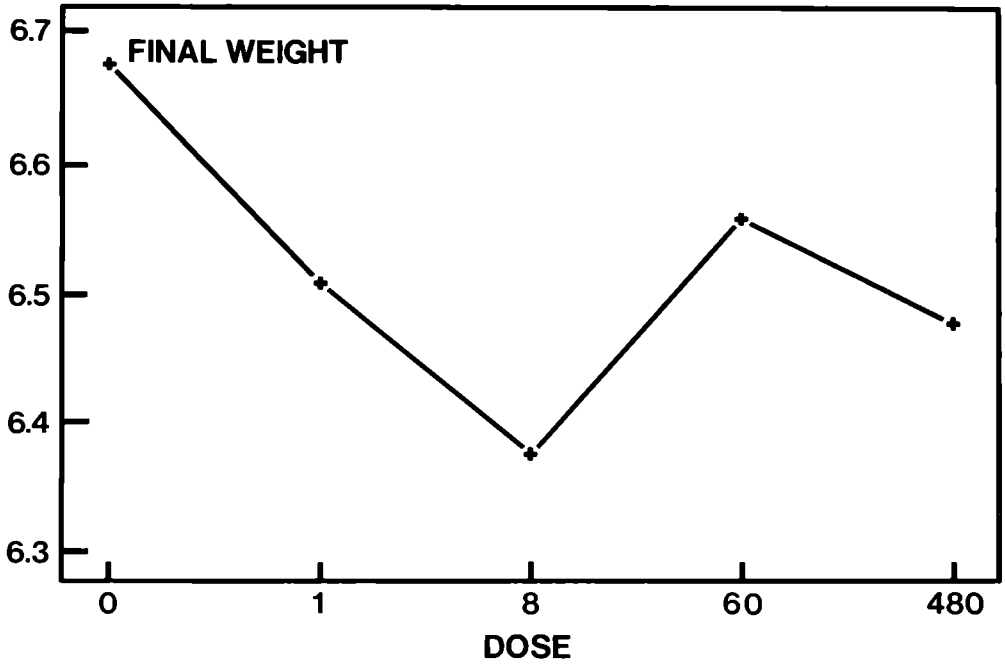
The data show that environmental temperature and water availability (not surprisingly) dominated the growth rate, with orgone irradiation demonstrating only a very small percentage effect on final weight. Table I tabulates the five replications and shows growth rate compared to temperature ranges and water availability during the growth for each control group (weather is also included since this may have bearing on the treatment effects of the accumulator). Clearly, as weekly minimum and maximum temperatures rose, and as water availability increased, growth rate increased (more than doubled). Growth rate is given in grams/day for 300 sprouts.

The weight gain during the observation period in all groups was highly linear ($r > 0.99$), as shown for example in Graph 1, which compares the growth curve of the first control group with the last. Orgone irradiation had no apparent effect on this linearity.

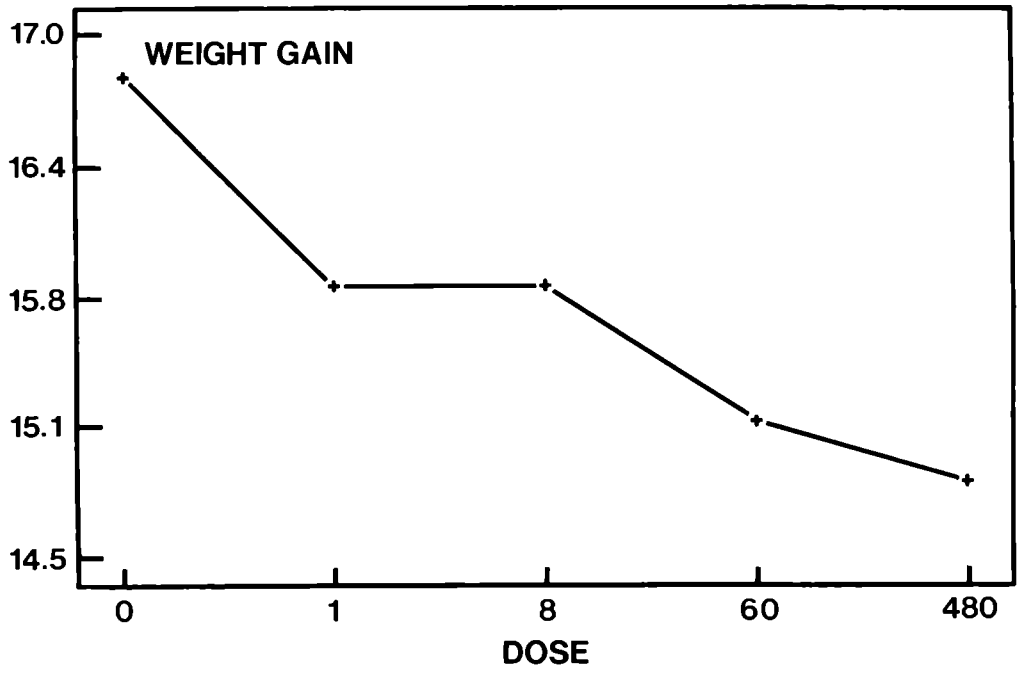
The weight gain was tabulated, for graphical and statistical purposes, by dividing the



Graph 1: Growth curves for control groups C1 and C5, showing linear weight gain with time.



Graph 2: Average values of final weight of each group, showing dose-response relationship (dose in minutes).



Graph 3: Plot of weight gain after soaking against dose for first replication, showing inverse relationship.

final sprout weight by the initial (dry) bean weight. The average bean weight was 0.04 gms and the average total weight increase varied from 5.3 to 7.2 times, depending on the length of the observation period. There were a total of twenty-five final values, representing controls plus four treatment times, replicated five times. Among the twenty treatment groups, orgone irradiation had the effect of depressing final weight in seventeen of the groups, with average values of weight depression ranging from a minimum of -0.3% in the first group to -10.5% in the last group. Moreover, the dose-effect relationship, as will be shortly discussed, was remarkably consistent throughout the experimental groups.

Table I: Comparison of Growing Conditions and Growth Rate

Group	Rate	T°F (min-max)	Water	Weather
C1	0.52	40-62	soak/rinse	cloudy/rain
C2	0.81	50-65	soak/rinse	overcast/rain
C3	1.04	57-79	soak/rinse	thunderstorm
C4	1.24	64-82	wick	hot
C5	1.04	66-85	wick	hot

The final weights of each group, compared to the control group, are shown in Table II. By inspection, it is seen that only three groups (all with 60-minutes exposure) had final weights greater than their control groups (R1, R2, and R3). In addition, in the R4 replication, the 60-minute irradiation value shows a relative peak, compared to the other values. This trend can be seen clearly in Graph 2, which plots the average final weight for each treatment group against the treatment time. It shows a progressive depression of final weight going from one to eight minutes of treatment, a rise at one hour, and a fall at eight hours. What is more remarkable is that each of the five replications individually showed similar dose-effects, i.e., an initial weight depression at low exposure times, followed by a peak and then a depression at eight hours.

Table II: Final Growth Values Compared to Control

T(min)	R1	R2	R3	R4	R5	Avg.
0	1.000	1.000	1.000	1.000	1.000	1.000
1	0.991	0.961	0.990	0.981	0.942	0.973
8	0.995	0.970	0.977	0.949	0.859	0.950
60	1.003	1.028	1.012	0.963	0.876	0.976
480	0.998	0.979	0.970	0.956	0.904	0.961
Avg.	0.997	0.985	0.987	0.963	0.895	

The depression in weight gain was also demonstrated in the first replication group. In this case, the dry seeds were irradiated, then soaked in water, and weighed at the end of 24 hours. At this time, most of the weight gain was due to water absorption. Graph 3 shows a plot of post-soaking weight gain against dose, demonstrating a clear inverse relationship, i.e., increasing irradiation time correlates with decreasing water absorption.

Discussion

The effects of orgone treatment on final weight were rather modest but showed a high degree of consistency, both relative to classical parameters (water, temperature) and orgone effects (consistent depression, similar curves). From this data we are inclined to draw several tentative conclusions.

First, the treatment had its weakest effect when applied to the seeds, rather than actively growing sprouts. This has implications for other applications, i.e., where experimenters have tried to increase yield by treating seeds. It is intuitively sensible that the excess energy provided by irradiation will have more pronounced effects on actively growing, energetically changing organisms such as sprouts, rather than seeds, which are relatively dormant.

Second, a clear dose-response curve is evident, since all five groups showed generally similar curves. However, in 17 of 20 trials the

response was negative, i.e., the treatment depressed final weight. This weight suppression effect—probably due to inhibition of water absorption—was directly demonstrated in the post-soaking weights of the seeds in the first replication (see Graph 3). From this we may speculate that the treatment has two different effects on the sprouts, i.e., a predominant effect that depresses weight gain, and a second effect that stimulates growth at the right treatment dose (approximately one hour). In any case it is remarkable that a single dose as short as one minute showed a consistent effect through all five replications.

Finally, it is possible that the depression in weight gain is not "negative" from the plant's point of view, but a trade-off for some other beneficial effect not measured or noticed in this experiment.

References

1. Lane, L.: "Effects of the ORAC on Growing Plants," *The Journal of Orgonomy*, Vol. 11, No. 1, May 1977.

2. DeMeo, J.: "Seed-Sprouting Inside the Orgone Accumulator," *The Journal of Orgonomy*, Vol. 12, No. 2, Nov. 1978.

3. Espanca, J.: "Orgone Energy and Plant Life," *Annals of the Institute for Orgonomic Science*, Vol. 3, No. 1, Sep. 1986.

4. Claymond, H.: "Effect of the Orgone Accumulator on Potato and Onion Plants," *Annals of the Institute for Orgonomic Science*, Vol. 4, No. 1, Sep. 1987.

Human Armoring
An Introduction to Psychiatric Orgone Therapy*

MORTON HERSKOWITZ, D.O.

Chapter 7
Therapeutic Procedure

In its broadest context psychiatric orgone therapy can be defined as the influence of one energy system (that of the therapist) on another (that of the patient) in removing the blocks to the appearance of the orgasm reflex. The definition is not violated by the fact that only a minority of patients finally arrive at the point at which the orgasm reflex occurs with some regularity. The meeting place of the ideal of the defined goal, and the real therapeutic situation for most patients, is that while striving to achieve the ultimate objective (orgasm reflex), impediments to freer functioning are removed, symptoms disappear and the experience of life becomes richer and more curious.

As much as we long for it, therapy is not a miracle cure. Some of us when we come to therapy are like trees with badly bowed trunks. Those trunks can never be straightened. The most that can be accomplished is that we can decrease the curvature of the arc henceforth and enable the structure to grow straighter than it would without therapeutic influence. In the best cases, the youngest and the most flexible, we can *almost* achieve straight growth. In our metaphor the bowing of the trunk represents physical and characterologic armoring. If the armoring is firmly established, it cannot be completely removed in therapy. In optimal circumstances the patient may function as if the armoring were not present. But in acute traumatic situations the patient will tend to hold in the place where he had always held. If the therapy has been successful, the process need not continue beyond tendency into actuality. But the tendency indicates that the trace of the armoring still exists.

Therapy, for the patient, is hard work. It requires commitment and courage. It demands that the patient walk into the dark places that he has assiduously avoided since infancy or early childhood. The opinion of some poorly informed advisers to patients that entering therapy is a matter of relying on a therapist and of abandonment of "solving one's own problems" could not be wider of the mark. There is no human act braver than facing one's anxiety.

The age range of patients varies from early infancy to old age. Psychiatric orgone therapy is unique among psychotherapies in that it treats infant patients directly. Where parental treatment of the child is the cause of the infant's armoring this must be discovered and corrected either by simple instruction, or by therapy directed to one or both parents.

*The first three chapters appeared in the *Annals of the Institute for Orgonomic Science*, Vol. 3, No. 1, Sept. 1986. Chapter 4 appeared in the *Annals*, Vol. 4, No. 1, Sept. 1987. Chapter 5 appeared in the *Annals*, Vol. 5, No. 1, Sept. 1988. Chapter 6 appeared in the *Annals*, Vol. 6, No. 1, Sept. 1989.

Armoring in the infant can often be corrected in one or two sessions; the armoring is not yet rigid and the infant usually has a goodly store of energy with which to work. Obviously the therapist does not apply the same degree of physical force to the infant's armoring that he employs in treating his adult patients. The measures are simpler because the infant has not yet built defenses against defenses, as adult patients have. The armoring is usually obvious, and easily eliminated. Whether the armoring recurs depends on the persistence of the environmental factors that originally created it.

A four-month-old infant is brought to therapy because it has been whiney and irritable for several weeks and its feeding has become fitful. The mother, who had been in therapy, functioned well through pregnancy and delivery and had enjoyed the first months of motherhood before the onset of the recent symptoms. The child's state distresses the mother not only because of the obvious discomfort, but also because the mother's fantasy of a flawless motherhood and an ideally "healthy" child has been punctured.

Discussion reveals that for several weeks before the onset of the child's symptoms the mother had experienced marginal but increasing frustration over her inability to spend the amount of time she desired with her child and still perform her housewifely duties with the same efficiency as before. Her husband had not offered to assist her in caring for the child because he assumed that this was her responsibility entirely. She had not broached the matter with him because she anticipated that with increased experience she would be able to handle things adequately. Her throat, which had been a significant area of armoring during her therapy, is now rearmored. It is clear that she is repressing natural frustration and anger in her endeavor to promulgate a myth of perfect and sublime motherhood. The child with its sensitive perception has become affected insidiously by the mother's repression until the point where things have gone out of tune in its structure, and symptoms erupted.

Examination of the infant discloses that the chest is not moving freely, there is slight rigidity of the neck and the sounds that she makes are being squeezed through an armored throat. Otherwise there is no significant armoring. The eyes are open, lively and trusting, the abdomen is soft, the pelvis freely movable.

The mother is instructed to hold the infant and scream with almighty rage. When she does, the infant opens her eyes wide and gazes at the mother with a look of startled disbelief. Then she too begins to cry and scream. The session is terminated at the point at which the infant's scream expresses the full frustration of her condition.

In the following week the mother reports that the whining and irritability never recurred after the therapy session. The infant is again feeding with her usual gusto. The mother has returned home and instituted a new familial *modus vivendi* in which the husband participates in household and child-caring tasks. The emotional air in the house is brighter. The state of motherhood in that household is now less "perfect" but more real.

The patient is a bright, gentle four-year-old with armoring of the ocular segment that is going to require painful pressure to eradicate. I approach her with some trepidation. This is our first meeting and I would prefer not to hurt her, but as I observe her flattened expression I put that preference aside. I proceed to prod deeply in the forehead and temple area and elicit cries, yells and ultimately the straightforward facial expression of fury directed at me. She spends her wrath punching at me and is finally satisfied. Now her eyes are sparkling and her face is alive. On her way out from the treatment room through my office she stops in her tracks, makes a detour behind my desk and gives me a broad, frank kiss.

The frustration factor in the treatment of children is the reappearance of armoring once it has been cleared, due to environmental conditions beyond the child's control. If the conditions that created the armoring continue to prevail, the armoring will reemerge despite treatment. Consequently, parental guidance or treatment is often the crucial fact in the child's treatment. Once the child has grown to adolescence the significance of parental influence declines, but before that time the fact of the child's dependence is critical.

The treatment of adolescents is generally undertaken only in the face of severe problems. Puberty is regarded as such a time of change and upheaval that one endeavors only to interfere to the extent that the patient is kept afloat and off the shoals. One doesn't embark on long therapeutic journeys in such rough seas and shifting winds. The surest course is to intervene only when necessary, removing the most obvious armoring, then to take one's hands off and give the organism a chance to find its own way.

The treatment of aged patients is usually assumed for purposes of symptomatic relief. Generally armoring becomes "institutionalized" with age, the organism has accustomed itself to an equilibrium in which the armoring is a significant factor, and one intervenes only when the equilibrium has become disestablished, precipitating symptoms.

A seventy-eight-year-old woman has made an uneventful recovery from major surgery, but she has become acutely anxious with attacks of falling anxiety (fear of falling). Her anxiety is of such severity that she is afraid to venture onto her feet. She is lying with fixed eyes, tight upraised shoulders, stiff and barely-moving chest. Her pupils are wide, extremities are cold.

I gently encourage her to freer breathing. Once the chest is mobilized we work on eye movement which she participates in fearfully at first, then with increased confidence. When the eyes move relatively freely we begin speaking of her fear of dying which struck her with full force only after the surgical emergency had been met. It is apparent that she felt in such imminent danger of dying that only by assuming a state of almost complete immobility, the paralysis defense of the cornered animal, could she hope to escape the attention of the angel of death.

Now with her eyes and chest mobile we gently encourage, first passive, then active movements of the shoulders and arms in the sitting position. She is more comfortable now, and beginning to be at ease in her surroundings.

At the next session it is noted that the anxiety is considerably decreased. Her daughter reports that during the week she has occasionally ventured from the room unassisted. The eyes, chest and shoulders are mobilized again, and she is instructed to kick in the supine position, with the aim of getting energy into her legs, giving her more assurance of their solidity. She is more lively and cooperative at this second meeting. Her daughter calls on the following week to report that her mother is now moving about freely. There is no vestige of the falling anxiety.

In treating patients one generally proceeds from the head downward to the pelvis. There are two general reasons for this procedure. First, armoring in a higher segment binds energy that is necessary for the dissolution of the armoring in the lower segment. And second, the deepest and most frightening anxiety (sexual anxiety) resides in the pelvic segment and one does not begin to deal with this anxiety until the individual has gained energy and emotional strength from having dealt with the anxieties of the higher segments.

The first task of treatment is to determine the location and intensity of the armoring, then to discover how it fits in the pattern of defenses of the individual patient. The con-

duct of therapy is a detective operation. One does not merely discover a layer of armoring, treat it, discern the next holding place, loosen it, etc. Unless therapist and patient slowly and painstakingly relate the function of one defensive operation to the next, i.e., discover the architecture of the defensive system, the problem of the character structure has not been solved and the loose ends will produce pathology of one sort or another.

It is a relatively simple matter to provide dramatic episodes in therapy, but except for the transitory effect of the positive transference which the drama provides, little of lasting value has necessarily been achieved. In some cases the flashy effect has itself become an agent of the defensive system, standing in the way of significant movement or discovery. Thus, inexperienced, too-adventurous therapists have reported on cases in which the orgasm reflex was elicited on the first or second therapeutic session, and the patient was so frightened that the reflex did not reappear for years—or never. One does not forswear all dramatic episodes in therapy. There is a natural drama in every life and from time to time it surfaces in therapy, unprodded and unprovoked. The excitement of new discoveries and recovered memories is stimulating to further therapeutic progress, but the essential movement of therapy owes more to the thoughtful step-by-step advance due to hard work than to the occasional leaps.

The location of the armoring is discovered by observing the patient at his ordinary activity, then in the performance of specific emotional tasks. For example, as the patient talks to you, you note that he averts his gaze, or his eyes are blank, or animated. You watch him play with his fingers, his chest is stilled and the voice sounds are quieted. The trunk is propped ramrod stiff on the chair, or it slouches. He smiles or his eyes become dulled momentarily whenever he speaks of things that provoke anxiety. His handshake is reactively aggressive, or flabby, or you feel that he really senses and values the contact.

These impressions and many more add up to an initial evaluation of the individual's status. To these one adds those gleaned in the performance of emotional exercises. He is asked to follow a quickly moving flashlight without moving his head, to look angry, sad, worried, frightened, etc. He punches the couch, kicks with as much anger as he can muster, screams, yells, bellows, etc. These emotions that he can portray easily and with feeling are those which are free. The parts of his body that are incapable of expressing various aspects of emotions are the armored areas. The experienced therapist knows that the armoring that he uncovers in these maneuvers does not define the entire gamut of armoring in the patient. He is aware that areas that appear free of armoring on superficial inspection will become regions of blockage as the therapy progresses and it becomes necessary for the patient to use all possible resources in the battle to contain the orgone flow within the body. But these areas and armorings will be dealt with in their appropriate time.

In general, each segment of armoring may contain traces of superficial and secondary armoring, and once the armoring is dissipated the core function of the segment is revealed. For example, one would work through the meaning of sad, pleading eyes in the superficial layer, arrive at the frustration and anger that occasioned the sadness and pleading, and only after the secondary layer of anger can be fully expressed would the eyes be capable of expressing the warmth and trust which was their elemental property. The foregoing model is purely academic, a gross simplification of the process as it unwinds in the actual therapeutic experience. In some segments the secondary layer is already clearly revealed, e.g., in the angry jaw, hands clenched into fists, etc. and in this case it would not be necessary to work through the expression of

the superficial layer. The meaning of the superficial layer in these instances is simple inhibition.

In approaching each armored segment the angry uses of the segment's affect are generally elicited before the tender emotions. There are two reasons for this. First, that is the way the emotions are layered. And second, so long as any vestige of secondary layer emotion is present one cannot reach the deepest unalloyed tenderness and openness. The lingering traces of anger lurk in the shadow, warning against complete exposure. The exception to this rule is in that case in which the patient has been sorely injured and abused in his life and is closed off to all relationships. The only hope of any progress in therapy lies in the establishment first of sufficient warmth and trust between patient and therapist to enable him to begin to open up to another person.

The individualized and perceptive evaluation of each patient is absolutely necessary to the successful conduct of treatment. There are only the most general formulas to use as guides. Every patient is unique. No case is easy (except in some instances where the goal is merely symptomatic relief). The patient is always wiser in the employment of his defenses than the therapist is in discovering them.

Whether the therapist addresses himself initially to a discussion of character traits he has observed or begins with work on the physical armoring is a matter of the propriety in the individual case. Some patients are regarded with such delicacy that one does not put them on the couch for months, until they are shored up sufficiently that the physical work is not threatening. Other patients in whom the physical armoring is so obvious and so symptomatically troublesome are treated immediately from the physical side. Whether the therapist approaches the patient first from one side or the other makes no difference; he is working on the character structure in either event. Therapy is not a matter of doing a little physical work, then doing a little talking, as some who are ignorant of the process assume. It is always a matter of working on the character structure wherever it can most easily be grasped. Of the psychoanalytic techniques, the only one that is employed with any frequency is dream interpretation, and then not in the meticulous weeks-long search for the associations of each tiny element as is the psychoanalytic manner, but in a more general, intuitive way, to discern signposts in the unconscious as the therapy proceeds. The idiosyncratic patterns of defense are exemplified by three patients, each of whom is hiding sadness.

The first is a witty, vivacious student in her early twenties who is never silent. She is bursting with energy, attractive, constantly on the move. On the couch in her first session she is forbidden to talk. I ask her to breathe easily, but freely. She follows instructions, and after several breaths she raises her finger and looks at me bright-eyed, indicating that she has something significant to say. I place her upraised finger down by her side and indicate that she should merely go on breathing. After a dozen more breaths the finger rises again, and her eyes and a humming sound indicate that she has something *really* important to communicate. I replace her finger by her side and repeat the instructions. One final attempt to talk is parried, and by this time she realizes that the ploy will not work. She proceeds more seriously with the breathing now, and in a short time she is crying in sobs that overwhelm her. The vivacity has been exposed as the distraction from her sadness. For weeks, subsequently she cried in each therapeutic hour.

The second patient, also in her twenties, is tough and cynical. She works in advertising, which helps to reinforce her classification of her species mates: "there are those who take

and those who are taken." She is not one of the taken.

In therapy she is constantly demanding and critical. I am not sufficiently inventive. I am thinking of other things while I am treating her. We always do the same thing; not enough is happening. To my answer that everything that she does is mechanical she replies that that's the only way she can do what I ask. After weeks of her harangue, I arrive one day at the break point, and proceed to lash out at her, concluding with an invitation to leave therapy. Her demeanor changes immediately and she proceeds to cry deeply, murmuring, "I'm sorry, I'm sorry." Now she is no longer a tough, slick woman, but a whimpering, sad little girl. Her offensive defense has been cracked, exposing the misery beneath.

The third patient, in his late twenties, is the most amusing patient I have known. His stories are so funny that I must discipline myself to cut him off, so that we can get work done in therapy. Even on the couch he often interrupts with a humorous insight that sets us both laughing. He is at the beginning of a career as a professional comic and has achieved some acclaim. In fairness to him I recognize that we cannot continue to proceed in this manner. At great personal loss I inform him that henceforth there must be no humorous talk between us. He is an essentially serious man and he accepts the prohibition soberly. Now his demeanor in therapy is changed. He is uncomfortable, ill at ease. He makes a few attempts at jests, but stops himself. With work on his throat and chest we soon arrive at a deeper level of crying than we had achieved before. The sadness deepens and continues with time. He says that he has to work harder at being funny now, because he usually feels sad. The jocular subterfuge no longer works. (He ultimately gave up comedy for another profession.)

The combination of being deprived of the use of the defenses of the superficial layer on the one hand, and of increasing the energy level by full breathing on the other, is usually sufficient to begin to propel submerged, repressed feelings toward the surface. The beginner therapist, armed with a bag of clever tricks, is sometimes eager to demonstrate his prowess by "jumping in and making things happen." If he succumbs to the temptation, he only muddies the waters. In most cases in the beginning the simple expedient of permitting the patient to do nothing but breathe more fully starts him in the direction of unravelling. The two qualities that the understanding American obstetrician, Dr. Lee, described as desirable in the obstetrician apply to the medical orgonomist in the onset of treatment. "He should have," he said, "a set of fat buttocks; and he should know how to sit on them." The ability of the therapist to stand aside after slight pressure is applied to the repressed side of the patient's character structure permits the emergence of emotions in an orderly, comprehensible fashion, so that the architecture of the character can ultimately be discerned. In the last resort one always must depend on the patient for his own progress, and here, in the beginning, is a good place to start.

Having made a successful foray into the character depths on the initial attempt, the therapist anticipates that he will recognize some change on the next visit. The patient returns, and there may be some observable difference in his attitude. But also there may not be. In the latter case, whereas at the last visit the patient was a body of fuming emotion, he is now his original, stock-still, contained, dead self. There is not a scratch, not a faint scar of the wound exposed in the previous session. He is "restored." Moreover, when he is put on the couch and the same pressures are applied, nothing happens. He is not merely reconstituted, he is reinforced! Character, in an attempt to maintain the so-

long-held equilibrium, has increased the defensive array against change. One may work for the next five visits to attain the degree of opening of the first session. The battle lines are drawn.

Why, since the patient's life is so troubled that he has sought professional help, and since it is obviously in his interest to cooperate fully, does he invariably throw up such formidable resistance to progress?

One answer is given by a patient on whose cervical armoring we are concentrating. The armoring is that of stubbornness, and she and I have had revelations of the wild rage beneath the stubborn defense. We both know too, the difficulties that her stubbornness has gotten her into in the course of her life. At one point I say in exasperation, "Why don't you stop being so damned stubborn!?" And she yells in reply, "Because to me that's me; it's the only me I know and I'm afraid that if I weren't stubborn I'd be nothing!"

With such an alternative, between maintaining the character defense or facing a feared ego disintegration, it is no wonder that patients apply Herculean efforts in resisting.

Other, more subtle examples of resistance:

A patient has just been through a screaming tantrum that was partly mechanical, but contained some elements of affect. Afterwards I ask, "What did you feel?" He replies with a clear note of triumph, "Nothing." I challenge the note of victory in his voice and point out that if he really felt nothing he should properly be disappointed, rather than triumphant. Following this path, we discover that it is more important to defeat me than it is to open the way to his depth. From here we get to the anger that is blanketed by his affectlessness.

An early middle-aged man is lying, breathing down through the diaphragmatic segment without resistance. "This sure is a great feeling," he says as he continues. In a short time he announces, "I want to rage now, OK?" I say, "No, just keep on as you are." He continues for several minutes more, then informs me that "there's some rage that has to come out." I tell him to "cool it." After several more minutes he says, "I'll tell you the truth, that feeling down there is driving me nuts."

A regular feature of therapy is the discovery of accented armoring of a lower segment once the armoring of a higher segment has been cleared. It is as if the enemy marches from head to pelvis and as he makes advances, the scattered defensive troops regroup and concentrate the more, the closer to the ultimate defensive position, the pelvic segment.

Sometimes areas which appeared to be unarmored in the initial evaluation become areas of strong resistance as the therapy progresses. For this reason one cannot definitely specify the extent of armoring until the pelvic segment has been reached.

Not only does the armoring of the lower segments increase as higher armoring is dissolved, but when one is at work on the armoring of the lower segment the armoring in the higher segment often reappears, like the reemergence of a brush fire in an already dampened area. The rekindled brush fire must then be once again stamped out before the work can proceed. This process is often repeated many times.

A woman in her mid-thirties, bland, faceless is asked to make a face. Her usual face, in answer to this request, is one of anger. But as she advances toward the more complete expression of anger she invariably becomes nauseated. We do not yet proceed with work on the armored diaphragm by practicing gagging, for fear that loosening down that far would expose her to energetic forces that she could not tolerate. After months, she learns to express her anger more fully without becoming nauseated. Now her expression is more lively, she is more active, and friends compliment her on how well she looks. It is now safe

to proceed with work on the armored diaphragmatic segment. We work on gagging for the entire session. At our next meeting she appears her old self—her face has lost its expression and she is once again drained of energy.

Working through the emotion contained in any armored segment inevitably leads to the release of overt anxiety and a subsequent contraction of the organism. Contraction follows expansion (release, freedom) as inevitably as night follows day. The inability of the armored human organism to tolerate states of emotional expansion is a fact of which revolutionary leaders and political quacks who promise "the liberation of mankind" (Reich called them "Freedom Peddlers") are unaware. In the course of therapy every patient is sometimes freed—and cannot stand it! Then he crawls back into whatever refuge he has constructed in the course of his life and gazes longingly outward. It is not by chance that most men live "lives of quiet desperation." We dream of freedom from our shackles, but when they are taken from us, we grab for them because they have become part of us.

A borderline psychotic law student who is in danger of flunking out of school is expressing rage by punching and yelling. His throat suddenly tightens and he reaches for it with both hands as if to attempt to loosen the tight ring. He coughs repeatedly, and soon he is sobbing. With encouragement the deep sobs begin to come freely and he cries through most of the hour. When he is finished he says, "I can't remember crying since I was a tiny kid; that felt so great." He is turning pale and beginning to tremble. The tremors spread throughout his body. He clothes himself and is given covers, but the shaking is unabated. He sits in the waiting room through the session with the next patient, and when I see him at the end of that hour he is still trembling, but the intensity has declined. At his next session he reports that he shook intermittently throughout the week and had periods in which he thought he would faint. He says in half jest, "You're a bigger son of a bitch than my last psychiatrist. He didn't do *anything*; you *do* something, and I'm worse off than I was before."

Therapy is a constant process of reaching in for inexpressible emotions, enabling the patient to give utterance to them, going through the period of anxiety following release until the patient is once more comfortable, then repeating the process with the next deeper anxiety, and on till the deepest anxiety is reached. In the course of treatment, the patient feels better, then worse, then better, then worse. In general, each good period is a little higher than the previous one, and low periods come to be tolerated better. This general rule does not hold for the final anxiety, pelvic anxiety, which is the most terrifying of all. In the period that patients face their sexual anxiety they may feel worse than they ever remember, and develop symptoms that they never had before.

In the therapeutic pursuit from the top to the bottom segment, special attention is always devoted to the eye segment. Unless the armoring in the eye segment has been dealt with thoroughly, the effect of work on any other armored segment is attenuated. If the eyes are totally blank then the attempt to deal with armoring elsewhere can only result in mechanical, uninvolved performance. If the eyes are dull then there is incomplete involvement in proportion to the dulling of the eyes. If the eyes express deceit and this expression escapes the attention of the therapist, then he will be fooled by the semblance of emotional expression in lower segments. If the eyes show disdain, cunning, distance, they too will interfere with the work below. The eyes are the chief place of escape for the patient. The patient who relates that she plays bridge hands

in her mind during sexual intercourse is fleeing in her eyes. Everyone who fantasizes when he makes love is escaping from his mate with his eyes. Full, clear eye contact is necessary for total involvement. Consequently throughout therapy one returns again and again to the eyes, to insure that they are not used as a sanctuary from complete participation.

The eye (brain) segment is also the seat of the process of rationalization. Rationalization has its proper place in every good neurotic defense. The rational uses of the brain have brought us to encyclopedias and moon walks; the defensive uses of thought sequester us from our feelings and are enemies to affective flow in therapy. Analysis stops action, and for this reason the company of many psychoanalysts is often deadly dull. The fault of analyzing while in action is common to patients who have been in psychoanalysis and to psychotherapists in therapy. It is an added burden to the therapy. In medical orgonomy we refer to this kind of interference as brain parasitism; energy is withdrawn from its place of action into the brain, and the action ceases.

Processes of depersonalization and dissociation have their origin in the withdrawal of energy into the head. There is a lack of charge and a disruption of the current of excitation in the rest of the body creating the sensation of standing outside one's own body or being an observer of the action in which one is involved.

An example of the absurd lengths to which brain activity can be carried in interfering with the emotive process is exemplified by a medical-student patient who, at the precise point at which he was about to burst into sobs, suddenly became intellectual, preoccupied with the physiology of the tear glands as they relate to emotion, and how they connect with the vocal cry. Eyes freed of armoring are luminous and alive. They read the environment perceptively and participate fully in all emotional responses.

The work on the oral and cervical segments does not involve the same kind of intense watchfulness that is intrinsic to work on eye armoring. Here it is simply a matter of dealing with whatever armoring is discerned in these segments. The ordinary rule of first dealing with the negative emotions before attempting to elicit the warm emotional expressions of the segment applies. One cannot get at the full warmth of countenance until the patient has acknowledged, expressed, and felt the hateful expressions and has become able to utilize them in appropriate circumstances in his daily life. The biting, growling, yelling, and crying must be exorcised before the lips can suck with appreciation, the face smile openly and look warmly and the throat make deep, modulated sounds.

The chest segment is of extraordinary import in the conduct of therapy. Always the first order of business as the patient begins each session is to let the chest breathe freely. Free breathing by increasing the intake and distribution of orgone energy inspired from the atmosphere increases the energy level throughout the body and exerts pressure on armoring, wherever it exists. The armoring may be indiscernible until full breathing is instituted. Thus, for example, one may not note anything unusual in the eyes until the breathing becomes full. Then we watch the eyes become increasingly dulled as the patient turns off to the intolerable sensations of the higher energy level.

With breathing, patients often experience a sensation of tingling in various body parts, often in the extremities. Those trained in the medical or biological sciences immediately ascribe these effects to hyperventilation, and assume that they have explained the phenomenon. The truth is that the classical descriptions of the physiology of hyperventilation only *describe* the sensory phenomena; they do not begin to *explain* them, except in

terms of nerve and muscle hyperirritability (see Appendix). The connection between the chemical changes and the hyperirritability is never established.

Against the purely chemical explanation witness the following facts observed in therapy: There is usually a line of demarcation where the tingling stops. The tingling never penetrates into a heavily armored area. Once the armoring is dissolved out of a segment, the tingling continues into that area. Some patients take five full breaths and they are tingling all over. Others breathe all hour and do not feel any tingling, or only barely. Some patients at the beginning of therapy, after relatively little breathing, experience intense sensations proceeding to carpopedal spasm (curling of fingers and toes—a classical sign of "hyperventilation"), but later in therapy, when their organisms have expanded and they can tolerate higher levels of energy, they can breathe much longer and fuller and these things do not occur.

The experience of tingling sensations (also described as a numbness, humming, ice water in the blood) is uncomfortable to patients in a contracted, low-energy state and stimulating and pleasant to more alive bodies.

The sensation is not confined to the treatment room. Emotionally alive individuals experience it during states of high emotion (tingling with excitement or pleasure), or when they are thrilled as by music or a vivid sunrise.

The treatment of armoring in the diaphragmatic segment is often time-consuming because it involves the principle of submission and surrender to one's own energetic flow, which is often difficult to learn. Work through the diaphragmatic, abdominal and pelvic segments is more concerned with giving in to oneself, rather than in moving outward, which is more typical of work on the upper segments. This is not always the case. There are times when one works on the secondary-layer emotions of these segments, angrily banging the abdomen, or thrusting the pelvis hatefully.

As one approaches the pelvic armoring a complete review of the patient's sexuality is often in order. The sexual guilt, sexual experiences from childhood and sexual fantasies are elicited. Sometimes some of these matters have been discussed when appropriate before this time. At any rate, pathologic sexuality, both psychological and somatic, is finally cleared when dealing with pelvic armoring. This is the time when the most intense pleasure anxiety appears in the therapy.

Pleasure anxiety is the inability to tolerate pleasurable sensations in the body. It cannot be completely understood, except by those who have experienced it consciously. We all assume that we want as much pleasure as we can attain. Then how, or why are we unable to tolerate it?

The deepest and fullest animal pleasure is the uninhibited flow of energy into and through the genitals. In a society in which the full, deep experience of genital pleasure in childhood is equated with sin, where little boys and girls who have been discovered loving sexually are regarded as villains, a giant inhibition is interposed between the genital apparatus and the total inpouring of energy. A certain level of energy is tolerated, and this is experienced as sexual gratification. When the energetic flow is higher than the tolerated level, anxiety is precipitated and the entire body is joined in "no." The inflection of the "no" is terrifying. Patients give the following accounts:

"The other day I felt that I was almost going to come and suddenly I was yelling 'No, no,' and I don't even know where it came from. I wasn't thinking it consciously."

"I start feeling soft and warm, and then I get scared and actually think I'm going to die."

"The whole day I was feeling sexy and near the end of work I was really looking forward to going home and rushing into bed with S.

Then these strong feelings started in my pelvis. They came in waves. One wave would start and it would go away, then another one, bigger than before would come. I got so scared that I had a real bad anxiety attack, and by the time I got home I was a wreck."

"You know my trick of travelling around to various places in my head when I'm making love. Well, last week I followed your instructions and didn't do it. I just let myself concentrate on the feelings in my vagina, and it was marvelous. But just when I was about to have my climax I let myself travel again. But this time I was in a place I didn't know and I was lost. I got so scared; I pushed R. away and started to cry."

The time of therapy in which the pelvic armoring is approached, which is called the end phase of therapy, is particularly perilous. Not untypically patients experience acute anxiety attacks, falling anxiety and fear of dying. Men sometimes experience sexual impotence or penile anesthesia for the first time in their lives, and women—frigidity and vaginal anesthesia.

During the end phase, in a desperate last-ditch effort not to finally submit, all the old armoring that had been cleared tends to reinsinuate itself, and with vengeance. Somatic disorders sometimes develop in the armored segments in this period. It is a time, as one patient put it, "when all the places have a chance to see what they remember." The therapist's attention is constantly distracted from work on the pelvic segment onto dealing with long-gone armoring, now reinstituted. The body fights desperately against achieving full freedom, while the patient's energy gathers toward it.

Most patients do not achieve the fairly-regular appearance of the orgasm reflex in therapy. Of those who do reach this level, most must wait for a year or two after therapy is terminated before the reflex becomes a regular feature of the genital embrace. In this time they have worked through the lingering traces of anxiety in their daily lives, and have gained the courage to live deeply.

The majority of patients leave therapy or are discharged before the level of full genitality is attained. For the most part they have come to therapy because their lives were distraught, or they were not performing efficiently, or they had distressing symptoms. Once they had broken through enough of their armoring so that these conditions changed they were not interested in more therapy, and for them the choice was correct. Some patients would wish to continue further, but are discouraged by the therapist who balances the current state of well-being against the strength of the remaining armor and the potential for anxiety with further therapy. Just as there are some patients who are so brittle in their armoring that they are best not approached at all with orgone therapeutic means, there comes a point in the therapy of some patients when caution overrules valor in deciding on continuance.

The treatment of each patient, like life itself, is a totally individual matter. One would try certain measures with one patient that would be unthinkable with another. Most patients are made to lie with legs extended and they are corrected when they cross their legs, because this interferes with the energetic flow. But I do not even mention this to the schizophrenic boy whose legs are crossed in a tight knot, who is holding on to this side of sanity with all his might. For him, the abandonment of the pelvic defenses might tip the balance to psychosis. Nor do I discuss the defensive function of her fat with the obese girl who is barely coping with school, family and social pressures. We will discuss her fatty armoring at a later time when she is stronger. We deal with all armoring whether hypertonic (tense), hypotonic (flabby) or fat only when there is sufficient energy at liberty to handle it.

The energetic flow is something that the patient gathers in the course of time. Reich

once compared the treatment of a patient to the progress of a locomotive through a mountainous area, where rocks had fallen onto the track. The therapist's function is to remove the rocks, not to push the locomotive. As the impedences are cleared the momentum of the locomotive increases. And particularly with regard to the final block, the pelvic block, Reich cautioned, "You don't go down (to the pelvis); the *down* comes up to you."

The essence of good therapy is that it must be logical. There must be a consistent uncovering of the neurotic character patterns with a consequent enlargement of the patient's potential. In a misguided therapy, one might dig into a deep layer before the superficial debris had been removed and suffer a cave-in. Chaos would ensue. There are some therapies based very loosely on a Reichian model in which this situation pertains.

Various adjuncts to the work on the psychological or physical side of the armoring are employed in therapy from time to time. Reich experimentally used the Medical DOR Buster* to facilitate the breakdown of armoring. The DOR (dead orgone energy) buster is a modification of the orgone accumulator** (a device that increases the concentration of orgone energy above that which prevails in the atmosphere at large). It operates on the principle, discovered by Reich, that a metal tube, potentiated by an accumulator, which empties into fresh water has the property of attracting concentrations of DOR into the water. No therapeutic claims are ever made to patients in therapy when these devices are employed. Orgone accumulator devices are not prescribed in therapy, but some patients construct them and try them on their own. Since the days when atomic bombs were dropped and atomic tests were instituted the orgone atmosphere has been altered and the therapeutic efficacy of orgone energy devices has become complicated. No therapeutic claims are made for these devices. Their use is strictly in the investigative, experimental stage; and the scientific investigation of the physical orgone energy proceeds continually under auspices of the Oranur Laboratories. Hydrotherapy is occasionally recommended in states of agitation or listlessness.

Drugs are used in psychiatric orgone therapy, but not to the extent that is prevalent in most psychotherapies. Tranquilizers may be used in states of acute anxiety, but only if the level of anxiety is more than the patient can tolerate, and only with the understanding that this is a temporary expedient. The wholesale use of tranquilizers is decried in medical orgonomy. Antidepressants are only used in treatment of depression when there has been insufficient time for the therapy to take hold. Most depressions are treated without the use of drugs.

The use of drugs in treatment of somatic disorders generally follows conventional medical practice. Although orgonomic theory assumes that the vast majority of somatic disorders, including cancer, are of biopathic origin, i.e., a tissue disorder related to the armoring process, many disorders when they are full-blown are more amenable to treatment by conventional means rather than by working on the armoring which was their source. This would vary with the potential for reversibility in the disorder. For example, a patient who came to therapy suffering from pylorospasm would continue to take his antispasmodic medication until the therapy had penetrated through the armoring of diaphragmatic and abdominal segments, when his pylorospasm should have been dissipated.

All patients are advised to exercise vigorously. Regular, hard exercise accomplishes

---

*Reich, Wilhelm: The Medical DOR-Buster, *CORE*, Vol. VII, Nos. 3-4, Dec. 1955 (out of print).

**Reich, Wilhelm: *The Orgone Energy Accumulator, Its Scientific and Medical Use*, Orgone Institute Press, 1951 (out of print).

two things. It aids in energy metabolism, providing a source of energetic discharge, so that the organism is then free to charge up to a higher degree. Secondly, it gradually increases muscle tone. Tonic musculature is capable of holding a higher charge than atonic musculature, thus providing a patient with a greater potential for work. From the psychological side, the possession of a strong body makes one feel more capable and confident. A confident patient will attack problems in therapy from which a less confident patient would flee.

Therapy is generally conducted once a week, sometimes twice weekly, and in times of crisis more frequently as the situation demands. The duration of treatment varies widely. Symptomatic cures which appear dramatic are often achieved in one or two visits. On the other hand there are patients who have been in therapy for five or seven years, and who continue in therapy because they are still making progress. Reich once declared that no patient should be treated for more than three years, assuming that after this time there were diminishing returns. But many therapists in accordance with their own experience do not choose to follow this rule. The logistics of the excess of the demand for therapy over the number of qualified therapists is a factor in this decision. Does one proceed for another year with this patient who will likely gain a half-inch, or does one take on a new patient who will probably gain two inches?

Patients are often given vacations in the course of their therapy. They stay away for a period of months to years, to enable their lives to catch up to the new capabilities of their character. In each period of absence from therapy, which the therapist's annual vacation imposes, there are always many patients who report, "I didn't know that I could do this well without therapy." Others return and say, "I felt great while you were away; I think I'd like to stop now and see how it goes." "If I need you, I'll call you." On most occasions, the therapist will pronounce the blessing for departure.

The integration of the therapeutic experience with the movement of life outside poses occasional problems. Reich once revealed that he sometimes would stop in the course of treating a patient and think, "This is an utterly weird activity in which to be involved; patients screaming and crying, punching the couch and out there deer are grazing." "Sometimes," he indicated, "this seems like a strange kind of work to do, and sometimes it seems like the most important."

This is an experience shared, I am sure, by every therapist, and at some time in the course of their therapy, by most patients. There is, from one perspective, an ivory-tower quality to the therapeutic scene. In the world outside, simulation and superficiality are the ordinary modes; they are banned from the treatment room. The feigned smile lubricates one's way through the social day, but on the treatment couch it raises the therapist's hackles. More than one patient has remonstrated with his therapist, "but it's not like that out there!" The objection is true, but unimportant, notwithstanding. The therapeutic relationship does not seek to duplicate the social milieu, but to undo its damaging effects. The therapist recognizes that the patient must learn to make his way in the world, but not at the peril of his soul.

Then there are the inevitable times when one is at work on the problems of a layer of armoring, and thoughts drift to the world outside. The mind wanders to the nightly danger in the streets, the benumbed mobs throughout the world, the fouled atmosphere, corrupt political systems and sick officials, and wonders at a process that uncovers nature in the patient only to have it subjected to assault subsequently at a hundred different levels. Occasionally the pressures of life are so acute that the search into oneself must be

temporarily abandoned until the environmental problem is settled.

But for the most part there is a confluence of therapy and life. Character *is* fate. Each increment to the patient's ability adds to his options. When his personal strength is enhanced, so is his ability to overcome obstacles. If therapy makes one more intolerant of falseness and triviality, more discerning of the game-playing of suitors, for example, thereby decreasing the number of potential mates, it also insures that one will not become caught in a flimsy relationship.

At this time, emotional health cannot be defined as the condition of the organism in which there is total absence of armoring. A totally unarmored human in a heavily armored society is subjected to disdain, abuse and misunderstanding at every turn and he suffers the ultimate fate of Dostoevsky's "Idiot." The perception and good contact which the relatively unarmored state affords, dictates that armoring must be worn for selective occasions to prevent this fate. This type of armoring is flexible, worn like a coat rather than borne as an inflexible corset.

Medical orgonomy recognizes that the disorder of pulsation is the soil in which pathology sprouts.

A young man suffers from a frightful obsessive disorder. Any reference to man's finite life precipitates in him a preoccupation with thoughts of death to which he is sometimes nailed for hours.

He is emotionally dry and appears to be dull, though he is not. In the two years of his therapy there has been no sign of affect, nor any symptomatic change except for an increase in anxiety. In one session, the dam breaks; he not only sobs beyond control, but gives voice to his rage, crying, "I'll tell you one thing, if I ever kill myself I'm going to take a lot of people with me."

On the following visit he says, "You know, the funniest thing happened after last week. When I went home, I watched a TV program, and there were graves in it. Then I started talking to my parents about graves, but I didn't have any feeling about dwelling on it. I was just talking about death like a normal human being."

Symptoms are the ultimate manifestation of the pathological disorder; they are not the disorder itself. Beneath the symptoms are general reaction patterns which are a step closer to the source. One patient never perspired before therapy, now she perspires profusely. Another patient had become so accustomed to "stronging it" (his words) to physical pain that his perception of pain had decreased to the point of bare recognition. Now things hurt again.

Psychiatric orgone therapy, dealing directly with energetic forces, is powerful medicine. I remember that often as I walked out after therapeutic sessions with Reich, I felt as if I had been propelled into another dimension. I assume and hope that my patients have this same experience.

The therapy is employed in all disorders in which pulsation of the organism is disturbed. This encompasses a wide range of disturbance, including all functional emotional disorders (with the limitation that since most therapists are engaged in private practice the patient must be ambulatory and in sufficient contact to come to therapy) and all biopathies (physical disorders which arise from a disturbance of pulsation) which are not yet irreversible.

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.

This seminar was held on November 12, 1989 at the Laboratory of the Institute for Orgonomic Science.

Courtney Baker, M.D.: Today's seminar is going to be devoted to some of the new findings in infant development and Dr. David Schwendeman has agreed to present this new research from his reading and clinical experience.

David Schwendeman, M.D.: In *Children of the Future* (1), Wilhelm Reich recognized the importance of studying normal infants throughout the course of their development in order to learn more about what health is and, therefore, more about psychopathology and the energetic phenomena of the organism. In recognizing the importance of observing normal infants, he was well ahead of his time, since it is really only in the last fifteen years that others have started to do that kind of research in earnest. First, I think it is important to keep in mind that it is fairly easy to do research studies that establish certain capabilities and abilities that an infant has; but, it is another matter to take that data and draw some conclusions about the inner experience that the infant is actually having. So, it always comes back to drawing hypotheses and inferences and formulating a theory based on the collected data.

For example, if you take a fourth-month-old infant and position him with an electronic screen on the left and one on the right and show a picture of an approaching car on the left screen and a car receding into the distance on the right screen and then play an audio tape of a car approaching, that four-month-old infant will look at the picture of the car approaching. Play the tape of the car receding into the distance and the infant will look at the picture of the car that is receding into the distance on the monitor. This kind of visual and auditory integration can not be explained by any known theory of learning at this time. These infants are integrating information in a way that Piaget, for instance, would not explain. In fact, most of the current researchers in the field look at Piaget and Freud in very much the same way: that they were brilliant in the theories they developed based on the methods that they used, but that they have turned out to be quite wrong. Many of the people involved in this new research, including a lot of psychoanalysts, have argued that the psychosexual stages developed by Sigmund Freud are, in essence, useless for the understanding of infant and child development.

Arthur Nelson, M.D.: Melanie Klein dismissed a lot of Freud's staging also. She believed that the Oedipal conflicts begin during the end of the first year of life. According to her, the internalization begins much earlier than Freud suggested, and I have always thought her line of reasoning to be quite valid.

Dr. Schwendeman: The whole notion of stages is challenged strongly by almost all of

these researchers. For instance, if you say that autonomy is an issue that comes up in the anal stage of development and that it's really in the controlling of the bowels that the child learns to be autonomous, then how do we explain it when a child refuses to eat during the oral phase? Isn't that an expression of autonomy also? A four- or five-month-old infant will turn his head away to break contact when he has had enough stimulation. Isn't that autonomous?

Dr. Nelson: For years I have been arguing that with regard to the trait of stubbornness there is an oral, as well as an anal, form of it. "I won't give you the satisfaction" is based on an oral power struggle.

Dr. Schwendeman: The analysts who work in this field seem to draw one of two conclusions: Either they say, "Let's throw out the psychosexual stages altogether," or they say we can retain the psychosexual stages as a line of development as long as we regard it as that, a line of development. In other words, there can be many lines of development such as an affective line, a cognitive line, an interpersonal line, et cetera. There may be a series of developmental lines, of which the psychosexual is just one. Thus, the psychosexual line can no longer be viewed as the central way of organizing our thinking about an infant's development.

Morton Herskowitz, D.O.: Certainly, I don't think you can just throw out the concept of the psychosexual stages, because they do have validity in viewing childhood development; however, there are many other ways of viewing child development, not one exclusive way. And, I think there is no doubt that when you examine most people's characters, you can clearly define oral traits, anal traits, phallic traits and genital traits and that this does have validity. That other socializing processes are occurring at the same time may be equally valid or even more valid.

Dr. Schwendeman: I'll continue by presenting some of the things that I have found interesting and if anyone wants to stop to discuss any of the ideas, we can do that. Most of the researchers in the field have, to their credit, tried to start on a biological level rather than on a psychological level and would like to understand development from the biological standpoint first. The problem is that almost all of them end up saying that in order to do that we've got to start with some sort of psychological hypothesis and one of the most popular starting hypotheses is that there is a "self" within each individual. This is usually defined as a center of initiative or a center of organization. Daniel Stern is a psychoanalyst and prominent researcher in this field. Let me read his definition of "self":

> *There is the sense of a self that is a single, distinct integrated body. There is the agent of actions, the experiencer of feelings, the maker of intentions, the architect of plans, the transposer of experience into language, the communicator and sharer of personal knowledge. Most often the senses of self reside out of awareness like breathing, but they can be brought to and held in consciousness. We instinctively process our experiences in such a way that they appear to belong to some kind of unique, subjective world of organization that we commonly call the sense of self.* *

Dr. Nelson: They are also known as the ego functions, aren't they?

Dr. Schwendeman: In Stern's second book (2), which seems to be even more highly regarded than the first, he begins with the physiologic realm by discussing sensation.

*Stern, Daniel S., *op. cit.*, pp. 5-6.

Of course, mothers have always been aware that infants have acute sensation right from the beginning of life and that they are acutely aware of their environment. I'm sure this is not news to anyone in this group. What almost all of the researchers arrive at is the importance of the mother-child relationship and, therefore, you can't look at the infant's development as separate from that dyadic relationship. In other words, the child's development is really a function of that relationship and arises directly as a result of it. Now, I think that there is a problem with that in orgonomic thinking. In *Man in the Trap* (3) the importance of contact between the mother and child is stressed. But, in some of the orgonomic literature the emphasis is on the self-sufficiency of the child and that the surrounding environment needs only to protect the infant's safety and teach it to respect the rights of others. If you read through the orgonomic literature about self-regulation, you get the strong impression that what is important is to stay out of the way of the infant and let it develop on its own. The current research does not support that notion at all. Rather, it supports the very great importance of contact between the mother and child, and it defines contact in a much more specific way than we have been able to do.

Dr. Baker: That is a good point. Mothers who are in therapy have brought that up. There does seem to be confusion about what Reich meant in terms of self-regulation. One can get the impression from reading him that he recommends a sort of laissez-faire attitude in child rearing. Clearly that is incorrect, since infants and children need to be trained, taught and shown.

Dr. Nelson: The concept of self-regulation implies an age-appropriate readiness and the integration of previous experiences. The need for contact and for the sucking experience can be self-regulated by the infant.

Dr. Schwendeman: Let me say a little more about the section on sensation in Stern's book. We know that sensation is acute right from the beginning of life. But until recently no one had quite understood how well cross-modal integration of different sensory modalities occurs or how early it occurs in infants. For example, one of Stern's experiments revealed that, if a three-month-old infant is shown a picture of its mother on a television screen, but her voice is delayed by several hundred milliseconds, the child will become noticeably disturbed and distraught. In another experiment, blindfolded three-week-old infants were given one of two different pacifiers to suck on. One was the typical, spherical pacifier; the other had little nubs all over it. The infants only touched the pacifiers with their mouths. The pacifiers were placed on a table, the blindfolds were taken off, and the three-week-olds looked back and forth and consistently identified the one that had been in their mouths.

Robert Dew, M.D.: Animals and even insects of all sorts exhibit behaviors that they couldn't have been taught and we have come to accept that there are some things "built into their wiring," so to speak. Is that the conjecture here?

Dr. Schwendeman: That's right. The notion is that this kind of perceptual integration of different sensations is built into the organism. It is not something that is learned. The capacity to discriminate is innately programmed and does not require lots of repetition to learn.

Stern also points out that memory shows up much earlier than we had thought. Infants are able to remember. Our three-and-a-half day old infant was crying out of hunger; it gave its typical distress cry for hunger. My wife put the baby in the nursing position and the baby

immediately stopped crying. The breast was still covered and the baby was simply being held in the usual position for nursing. So, even at such an early age, the infant "knew" what that position meant. Stern says that an infant remembers an episode. It remembers the feelings, the sensations, the perceptions, what Mom did, what I did, et cetera, as an episode. When these episodes are repeated, they coalesce as a memory. In other words, the experiences that are consistent over time, that are not varied, form memory. From those experiences, the infant is able to generalize. In the infant's mind are breast-feeding episodes based on the experience of what generally occurs. Stern believes that memory forms on the basis of consistent, non-varying episodes. The old notion was that, developmentally, the traumatic episodes were important even though they were not typical.

Dorothy Burlage, Ph.D.: If the traumatic incident is atypical, it will be washed out by time.

Dr. Schwendeman: But, if the mother consistently turns away at the time of breast-feeding, then the times when she does make good contact will be the atypical ones and they will be lost to memory.

Dr. Baker: Recent animal research demonstrated that learning had occurred in animals that had not been conscious of the experience. Laboratory mice were conditioned to a fear stimulus while unconscious from anesthesia. When the animals were fully awake, they reacted to the fear stimulus even though they had not consciously encountered it before.

Louisa Lance, M.D.: So these memories form even without a sense of self-awareness, which gives more credence to the notion of an in utero memory.

Dr. Baker: There have been experiments where a recording of the mother's voice was played as it would sound in real life, and as it would sound muffled by the amniotic fluid. The baby responded to the sound of the muffled voice, since it had, in effect, learned that sound under water.

Dr. Burlage: The fetus picks up emotional trauma of the mother, also. I have seen infants with gastrointestinal problems and often found that their mothers experienced severe emotional problems during pregnancy.

Dr. Schwendeman: In orgonomy, it is believed that one of the roles of the ocular segment is that of perceptual integration. Does research that indicates that we are innately programmed to perceive in such a sophisticated way change that? In the last issue of *The Journal of Orgonomy* (4), Dr. Charles Konia states that the ocular segment is important into adulthood.

Dr. Baker: That is not a contradiction of the fact that there might be certain periods, or stages, when the ocular segment is more sensitive than at others.

Research with blindfolded monkeys demonstrated that they did not develop full visualization ability after the patches were removed if they had been blindfolded during a critical time of development.

Dr. Nelson: I think we all agree that in schizophrenia the ocular segment is damaged very early in life and that this gives rise to certain recognizable signs and symptoms in individuals. However, ocular segment damage may occur during other developmental phases. For example, a few years ago I wrote a paper on the obsessive-compulsive neurosis where the ocular segment disturbance is a secondary phenomenon that gives rise to the obsessiveness.

Dr. Burlage: Going back to Stern's research, one of the arguments he makes against calling the early infantile period the oral stage

was that the findings confirmed that the auditory and visual processes occurring during that period were equally important to later development. He also takes the position that the three processes continue to be important throughout life.

Dr. Nelson: The orgonomists in South America recognize that the infant's experience is a combination of those processes, and incorporate work on the oral segment with work on the ocular segment as well.

Dr. Schwendeman: Stern tells of how Eric Erickson, twenty-five years after his work on the oral stage and the concept of basic trust, went back and looked at infants in preparation for a lecture and said, "Everything is happening with their eyes and I never realized it before." So, it seems that many observers of early development are beginning to agree on the importance of the combined sensory experiences of the infant.

Affect is another interesting aspect of early development that has been studied. Sylvan S. Tompkins (5) developed the idea that there are affects that are an innate part of the infant at birth. He describes them as biologically innate programs that control facial muscle responses, autonomic nervous system responses, and global responses. The global responses are correlated sets of responses that are evident in all these areas simultaneously. He defines nine basic affects. Two of them are positive: one is interest and the other is excitement. One is neutral and that is the affect of surprise. The rest are negative: distress, fear, anger, disgust, shame, and contempt.

Dr. Burlage: Does Tompkins say that shame is one of the original affects? Other people argue that it comes later.

Dr. Schwendeman: There is some evidence that it does appear later, but Tompkins defines it as one of the originals. At any rate, Tompkins defines it as a specific emotion. He believes that the face is particularly important because the facial muscles are finely articulated and are, therefore, able to respond more quickly than the autonomic nervous system or any of the other physiologic functions. Therefore, he believes that the face takes the lead, so to speak, with regard to a specific affect and that the other responses follow reasonably quickly. Cross-cultural studies favor Tompkins' view in that the basic facial expressions of joy, interest, fear or anger will be recognized worldwide without the aid of language. Another thing that supports his idea is that these affective expressions don't change very much. Sadness and anger look very much the same on the face of a two-year-old and an eighty-year-old. Another finding that favors Tompkins' view is really quite impressive. They have conducted experiments where actors were instructed to mimic the faces of these basic affects while they were hooked up to devices that would record their heart rate, respiratory rate, skin temperature, et cetera. The readings were the exact ones that Tompkins would predict, and the same as if the affects had been generated by internal emotion.

Dr. Burlage: I have always thought that those findings were of particular interest to orgonomy.

Dr. Nelson: It is orgonomic. There are two directions of energetic movement. One is up, and that is expressivity. The other is downward, and that is productivity.

Dr. Baker: David is saying something different. He's saying that just the mechanical process of moving these muscles causes the autonomic system to respond.

Dr. Nelson: I'm not sure it's just mechanical. There has to be feeling there, also.

Dr. Baker: Not necessarily, and that is what is so interesting. They are not necessarily feeling the emotion, they're just mimicking it.

Dr. Lance: And, the autonomic responses follow.

Karl Fossum, M.D.: It could be that even if it is done mechanically, it will still trigger the feeling.

Dr. Schwendeman: Yes, that is the direct challenge to orgonomy. I gather from my reading that Tompkins believes that because there are more rapidly firing neurons related to the face, the face can respond more quickly than an autonomic innervation to other parts of the body.

Byron Braid, M.D.: I'm not sure his assertion about that is entirely correct. Current work on neurotransmitters as the generators of affect indicate that the response time between stimulus and the release of neurohumoral transmitters is something like 40 to 50 milliseconds. How long it takes for that to spread to the tissue to produce a biochemical effect, I don't remember, but it is very fast.

Dr. Herskowitz: Clinically, the autonomic responses seem to be coincident with the stimulus, so I can't imagine any autonomic time lag.

Dr. Dew: If we are talking about milliseconds, it is probably something that we can't even perceive in terms of a time lag. It seems that the conflict here is in Reich's idea that the autonomic nervous system is the center, or generator, of emotions. We have operated on the principle that expressiveness has its origin in the autonomic nervous system, and perhaps that has to be reexamined.

Dr. Baker: It may be that the affects are "wired in" and the armoring disrupts it. And that by mimicking the emotion, the autonomic responses occur in spite of the armoring.

Dr. Lance: Method actors have been doing this for years. They mimic the expression and the emotion comes through, and the audience experiences it as real. Actually, in preparing for parts that require intense emotional expression, the actors are taught to reach into their own memories of emotional experience to help them recreate the emotion in a convincing manner.

Dr. Schwendeman: Tompkins does say that the function of affects is to amplify stimuli which will then lead to a response. For example, in a newborn, the stimulus is hunger and the affect is distress which really amplifies the hunger sufficiently to get a response from the mother to feed the baby.

Dr. Baker: The affect, then, is adaptive.

Dr. Schwendeman: The affects become the ultimate motivators of behavior. In the newborn, all it can do is use that affect to get the mother to feed it, but in a four-year-old, the same distress can lead the child to say, "Hmm, what can I find to eat around here?"

Dr. Baker: So, the affects are not just incidental to life experience; they are part and parcel to getting what you want.

Dr. Dew: That is very interesting because we do observe that when there is an affect block, there is also a lack of aggression.

Dr. Schwendeman: There is some experimental evidence for that. One researcher studied two children on a weekly basis from birth to about three years of age. Using Tompkins' theory, a child develops interest—a positive affect—and the face is exuberant with joy involving a new toy. Now, if the child becomes distressed because he can't get some piece of it to work, and the mother comes along, soothes the child and teaches the child how to use the toy, the negative affect of

distress is followed by the positive experience of pleasure. So, the experience has been: positive, negative, positive. This child can then go on to self-initiated playing. The other child studied demonstrated what happened if the original positive affect of interest got a negative feedback from the mother which then led to distress in the child. This child became very passive in the first year of life, as if he had learned that being interested in things was not a good thing. These experiences, repeated over time, get integrated into the child's view of how the world works. It is not just a single traumatic event, but a series of small events that forms the basis of a neurosis.

Dr. Herskowitz: I think we have always said that the armoring is produced primarily by chronic, repetitive acts that, in themselves, are of minor consequence. Patients may have memories of traumatic events that are quite dramatic, but it is these chronic, repetitive acts that lead to the characteristic armoring of most neurotics.

Dr. Baker: Yet, in therapy, patients get better by reexperiencing traumas. They have very strong reactions to something traumatic, like being beaten. They don't express the million little things that happened to them.

Dr. Lance: That is true, but in some ways it is harder to uncover these "million little things" because they represent attitudes which are more subtle and harder to identify than the big traumas. Each of the small events, if taken one by one, wouldn't cause a neurotic trait, but together they gradually erode the child's view of himself and his position in the world. And, in therapy, the patient's ability to identify these attitudes and express his feelings and reactions to them help him to get better.

Dr. Fossum: There are constellations of many experiences; some of them stand out with specific memories, but the most important ones probably don't.

Dr. Herskowitz: That happens when some patients just cry and cry. They don't know why they are crying; they are simply crying! But, I think there is a big intellectual gratification when a memory is recovered which can add a lot of energy to the process of getting well.

Dr. Burlage: May I change the subject to ask a question? Is the process of armoring different in a six-month-old than it would be in, say, a six-year-old child?

Dr. Nelson: Certainly we can say that the more profound disturbances occur early in life.

Dr. Dew: Reich said that babies are more like amoebas. If there is an insult to the organism, the entire organism contracts.

Dr. Herskowitz: You don't see discrete muscular armoring in infants like you do in older children and adults. Infants don't, for example, armor at a specific point in the dorsal area—their entire back gets tight. They hold back in a more global manner, both energetically and muscularly.

Dr. Burlage: I asked the question because I wonder how much of the physical illness I see in many infants and children arises because of early emotional assaults.

Dr. Schwendeman: Remember what they found in the foundling homes in England? The basic, fundamental needs of the infants for warmth, food and shelter were met, but there was little or no emotional contact. The mortality rates of these infants were astounding.

From the reading I've done, it seems that what we call expansiveness is not built into the organism at birth, but is the result of the interaction with the caregiver or mothering figure. An infant smiles, the mother smiles

back, the infant smiles more, the mother smiles more and there is a positive spiral of excitation that goes on. This happens with many of the early infant-mother interactions. I think that an infant deprived of these things never develops a capacity for full expansion.

Dr. Lance: It's possible that there is an innate capacity for expansion, but in order for it to fully develop, the initiation of the impulse has to be reinforced by the dyadic interactions.

Dr. Dew: So, it is possible that the stimulation enhances the infant's ability to expand.

Dr. Burlage: Is that the same as saying that you need two energy systems for this to occur?

Dr. Schwendeman: Although the researchers don't use those terms, that does seem to be what they are describing. The infants appear to have a certain built-in range of excitation at which they feel comfortable. If the mother adjusts herself to keep the infant or child within that range by stimulation or soothing, I think eventually the child learns how to do it for himself. It has been shown that infants of four and five months are quite capable of gaze aversion to end stimulation when it is too much for them, and to use various sounds and facial gestures to get the caregiver to "pick up the pace."

Dr. Lance: Reich talked about the same thing in describing the problems that occur when the capacities for expansion are different in the child and the mother. If a child had a capacity of 100% but the mother has only 50%, the child will feel that he isn't getting enough; conversely, if the capacities are reversed, the child will feel overwhelmed. This is why it is so important that the caregiver be in good contact with the needs of the infant.

Dr. Schwendeman: Going back to Tompkins' work, one of the things I have found to be very important in my clinical practice is the concept of shame as an innate affect. I am impressed by how often shame is operative in patients and how it interferes with their being able to tell me things that are important. I don't know if I'm convinced that it is a fundamental emotion, but I am convinced of its importance in the therapeutic process.

Dr. Nelson: From the psychoanalytic standpoint, shame is a superego function and, therefore, a defense.

Dr. Dew: There is a clinical correlation between shame and the capacity for aggression, so that if a child's capacity for expansion is restricted, maybe he is more susceptible to feeling shame.

Dr. Schwendeman: Then there is the whole question of shame versus guilt? There is still a good deal of controversy about definitions and when and how each arises. Shame seems to imply that there is something bad or defective about the person. There is something fundamentally defective about the entity "me." This fits with the current popular notions of self-psychology, whereas the concept of guilt fits more with the psychoanalytic theory of neurosis. Guilt implies that "I've done something wrong. I've wished for something wrong or bad."

Dr. Nelson: Then guilt is a superego function and is a defense, not an innate affect.

Dr. Schwendeman: That is not Tompkins' view, but I would have to read more about his position in order to defend it. I have seen several patients who presented with shame as a primary defense. When you question them as to what makes them so bad, very often it is revealed that they had been treated badly by their parents. The patients are left with rage against their parents whom they also needed for their survival. In an attempt to keep the parents in a positive light, therefore, the child takes the position that "I must be bad so I

deserve to be treated this way." It is an adaptive thing to do in the dysfunctional family. Since the child is not independent and can't take care of himself, he takes the stand of, "I'm the bad guy, not you!" to insure that he will still get some nourishment from the parents.

Dr. Dew: From an energetic point of view, we have considered that, in shame, the excitation gets to the skin surface and is stopped, whereas in guilt, the excitation gets stopped in the musculature. And, there has been general agreement that guilt always has something to do with repressed anger, so that clinically the tension that is created by guilt is relieved when the anger is released.

Dr. Baker: I don't think you can have guilt if you haven't done something, or wanted something. In other words, you can't have guilt if you don't have aggression.

Dr. Fossum: I often wonder if shame and guilt are not just two stages of the same process, and that shame is the earlier part of that process.

Dr. Schwendeman: There is no agreement as to which comes earlier. I have seen a study that was done very early, around eighteen months, where red powder was put on a child's nose and then the child was placed in front of a mirror. The child got a look of embarrassment, or shame on his face.

Dr. Lance: I can't believe that all children would have that reaction. What if the mother was standing behind the child and was laughing in pleasure? Would that child feel shame? Or, it could be that a child that young was disturbed by seeing something different from the usual Gestalt, just as they are disturbed by seeing only part of a face.

Dr. Herskowitz: I think shame is a socialized function, and has to do with deviations from what is expected. Early on, it is the expectations and reactions of others, and later these get internalized.

Dr. Braid: You certainly see that in children when peer pressure creates the intense need to conform.

Dr. Baker: The same thing happens in adults. If you go to a place and are inappropriately or sloppily dressed, you feel embarrassed, ashamed. Even though no one says anything about it, you have the perception that *you* are wrong.

Dr. Fossum: Yes, the presence of other people is a big part of that feeling, because if you were dressed like that at home, you wouldn't have the sense of shame.

Dr. Dew: Let me read from something that Dr. Burlage just handed me. This is from research done by Lichtenburg (6) in 1977 that says that the observation of the facial configurations of small infants indicates the probability that distress, shame, and contempt are preprogrammed affects. He says that repetitive sequences of intercommunication between infant and mother in which the infant's autogenous, erotogenic pleasure is responded to by shared pleasure or by cool, businesslike indifference, or by distress, disgust, shame or contempt will leave episodic memory markers.

Dr. Nelson: Part of the problem with some of this research is that even though the infant is making certain facial gestures, we still have no way of telling exactly what that infant is feeling.

Dr. Schwendeman: Right. That is one of the problems. You don't know what is going on on the "inside."

I think one of the things that this current research points out is that right from the beginning, we are "put together" much better than

we ever thought. The infant is an intact human being with tremendous capabilities. Much of the research verifies our orgonomic understanding: the importance of the eyes, the importance of pulsation, the importance of contact and the importance of the superimposition of two energy systems. What I think the work really challenges is the Freudian notion of developmental stages—the psychosexual stages—that we have carried over from psychoanalysis. Defining people on the basis of one or two character traits just doesn't hold up in this research. It seems that if we apply some of the newer findings to our practice, we will spend more time focusing on the interactions of patient and therapist. How much of what goes on in therapy is a response of the patient to us, as a correlate of his early dyadic experiences?

To be continued . . .

References

1. Reich, W.: *Children of the Future*. Farrar, Straus, and Giroux, New York, 1983.

2. Stern, Daniel N.: *The Interpersonal World of the Infant*. Basic Books, New York, 1985.

3. Baker, Elsworth F.: *Man in the Trap*. Macmillan Company, New York, 1967.

4. Konia, Charles: "Orgone Therapy (VIII)," *The Journal of Orgonomy*, Vol. 23, No. 1, May 1989.

5. Tompkins, Sylvan S.: *Affect, Imagery and Consciousness*. Vol. 1 (1962) and Vol. 2 (1963), Springer, New York.

6. Lictenberg, Joseph D.: *Psychoanalysis and Infant Research*. Analytic Press, Hillsdale,

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.

ELECTROMAGNETIC MENACE

Currents of Death, by Paul Broden, Simon and Schuster, N.Y., 1989

We have previously commented in this column on new evidence on the biological hazards of electromagnetic radiation. Since then, evidence and momentum have been building about the dangers, fueled by new studies as well as increased public awareness. *Currents of Death* starts like a medical detective story. It begins with the work of Nancy Wertheimer, perhaps one of the most important studies initiating the current wave of concern. Wertheimer, an epidemiologist, was looking for clusters of deaths from childhood leukemia in Denver, hoping to confirm a theory about the importance of infection. Instead, as she roamed the city tracking down locations on her list, she noticed many electrical transformers near the houses of the dead children. Eventually, she was able to demonstrate a significant correlation between nearby power lines (mostly from secondary feeder lines) and childhood leukemic deaths. In fact, measurements were subsequently made, which allowed an estimate of the minimum or "threshold" level of magnetic field at which a significant effect was noted. This level turned out to be approximately 2.5 milligauss, an astonishingly low value (representing a field strength several hundred times weaker than the earth's steady magnetic field).

Broden details the neutral-to-hostile reception that this study received—the reaction of the power companies, behind-the-scenes maneuvering by various scientists and self-styled experts, and the eventual rise in public awareness. Later, her study was duplicated and the findings reconfirmed, and others began studying electric and magnetic effects on living organisms in the laboratory.

A number of other findings relating to EM hazard are also detailed in the book. These include several studies linking exposure to VDTs (Video Display Terminals) and birth defects, increased rates of miscarriage, and cataracts. Other studies suggested links between milligauss magnetic fields and increased leukemia, breast and brain cancer. Additional concerns about the possible hazards of electric blankets, electric motors, and pulsed radars were raised. Finally, Broden mentions the laboratory studies demonstrating reproducible effects on chicken embryos and enzymatic reactions.

The evidence seems to establish clearly that exposure to electric and magnetic fields of varying intensity and frequency can have severe biological effects. This, of course, confirms orgonomy's long understanding of the antithesis between orgone energy and electromagnetic energy, and hence the danger to living organisms.

The mechanisms of action, on the other hand, appear to be quite complex—something more, in fact, than simply the result of heating

(fields often too weak to cause heating) or an oranur effect. The effects are often non-linear, show "windows" of frequency and magnitude, depend on the orientation of the ambient DC magnetic field, and show transient and threshold phenomena. There does not seem to be a simple dose-response relationship. All of this complicates the experimental work and theoretical understanding. It suggests also a modification of our orgonotic understanding, in that the effects appear to be far more complex than simply the toxic irritation and destructive results of an oranur reaction.

It is likely that more experimental evidence will appear in the literature, and that the public discussion will increase. Meanwhile, what can the average person do to protect himself? First, living near high-tension power lines or secondary feeder lines can be avoided. So too with prolonged exposure to VDTs; shielded types should be used if possible. Many electric blankets demonstrate strong magnetic fields, although there are apparently some now on the market which minimize magnetic field emission, and one might replace the bedside electric clock with a non-motor driven digital model. Finally, in general, avoid prolonged exposure to any source of high voltage or high current electric devices.

Courtney F. Baker, M.D.

HYPERTENSION - "NEW" FINDINGS

In *The Function of the Orgasm*, Reich describes the typical psychosomatic diseases as the result of chronic sympatheticotonia. He states:

> *The basic characteristic of sympatheticotonia is the chronic inspiratory attitude of the thorax and the limitation of full (parasympathetic) expiration.* (p. 283)

The first disease that he describes is cardiovascular hypertension, deriving from chronically contracted peripheral blood vessels, with associated tachycardia, feelings of oppression in the chest, and even full-blown cardiac anxiety. This biopathy, with its characteristic picture of the armored chest held in inspiration, has been known to orgonomy for a long time.

Now a new finding in hypertension, called "Shallow breather? Look for hypertension" has just been published in *Science News*, June 23, 1990, Vol. 137, No. 25, p. 398. A team of researchers studied 26,429 individuals of whom 1,031 had become hypertensive by age 55. The hypertensives were then compared with a demographically matched sample of 1,031 men and women who did *not* become hypertensive by age 55. It was discovered that forced vital capacity—the measure of how thoroughly one can exhale the residual air in the lungs—was an excellent predictor of the chance of developing hypertension. Specifically, the larger the forced vital capacity (better exhaling), the lower the probability. The researchers also discovered that high uric acid levels also correlated with hypertension, though less strongly than forced vital capacity.

The mechanism relating forced vital capacity and hypertension is readily understood in orgonomic terms; however, the research leader was at a loss to make sense of the correlation:

> *. . . these two factors are so "strikingly large" that they "suggest the possibility of a causal association," though he admits "we haven't a clue" to how they relate to hypertension.*

Courtney F. Baker, 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 orgonomic 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.

A Seed-Sprouting Method to Compare ORAC Effectiveness

H. J. CLAYMOND*

I. Introduction

In the course of his work with the orgone accumulator (ORAC), Reich exposed mice to ORACS constructed with either iron, aluminum or copper metals and observed adverse effects on the animals exposed to aluminum or copper ORACS. As a result, he warned against the use of aluminum or copper in the construction of ORACS.

DeMeo (5) sprouted mung bean seeds in 1-fold and 10-fold iron layer ORACS. He reported that sprout length was increased by ORAC exposure and the growth enhancement was greater for the higher-fold ORAC. The growth-promoting effect of ORAC exposure may be explained in part by a potentially slightly higher temperature within the ORACS (See To-T in Baker and Burlingame, 2). The growth-promoting effect of ORAC exposure may also be related to an increase in tissue orgonotic charge which is generally associated with swelling of tissues.

The purpose of this project is to demonstrate the use of a seed-sprouting technique as an assay of the biological effects of ORAC exposure and to compare ORACS constructed with different metal layers.

*M.S. in Agronomy (pseudonym).

II. Apparatus and Supplies

1. Soybean seed, 2 lbs. Other bean species may substitute for soybean but good seed quality is important. The germination rate should be at least 90%. Available at any farm supply store.

2. Heavyweight seed germination paper, 10" x 20", basis 76#, catalog #SD7615L, Anchor Paper, 480 Broadway, St. Paul, MN 55101, (612) 298-1311.

3. A 1/2" thick plywood board 10" x 20".

4. Plastic bags, 6" x 12".

5. 100% wool fabric, 6' long and 14" wide. 4 pieces. Available at fabric store.

6. Lightweight cardboard, 6' long and 14" wide.

7. Iron (not galvanized), copper, and aluminum sheet metal, 6' long and 14" wide. Sources for ungalvanized iron: check the Yellow Pages under Metal Specialties or Metal Stamping. Copper and aluminum are available from lumber and hardware stores as copper or aluminum flashing.

8. Heavy rubber bands.
9. Four 120 ml plastic beakers. Plastic beakers are available from Fisher Scientific (215) 265-0300. Plastic cups may be used as a substitute.
10. Miscellaneous tools: electric drill, 5/16" drill bit, hammer, tin snips, ruler (cm), scale.

III. Building the ORACS and the Control

Cut the sheet metals, cardboard and wool to matching sizes of approximately 72" x 14". The ORAC is constructed by placing the metal layer over the wool fabric and rolling this into a coil that results in four layers (i.e., a 4-fold ORAC). The metal must face the inside and the wool the outside (1). Before rolling the metal and wool into a coil, the wool must be fastened to the edge of the metal to prevent slippage. This can be accomplished by punching a series of small holes along the edge of the metal by using a nail and hammer. The wool can now be attached by sewing it to the metal through these holes. Once it has been rolled into a coil, the inside of the coil should have a diameter of approximately three inches. Cut the excess length off the outside end of the coil so that there are exactly four layers, and place three heavy-duty rubber bands around the ORACS to hold them together. Additional details on methods of ORAC construction are given by Baker and Burlingame (2) and DeMeo (3).

IV. Seed Germination

The 10" x 20" plywood board will be used to make a pattern for seed placement on the germination paper. Using a 5/16" bit, drill 5 rows of 20 equally spaced holes into the plywood so that the holes are in a 1" x 1" grid pattern. The first row of holes should be approximately 2-1/2" from the side and 1/2" from the end.

Place 12 seed-germination papers in a pan of water to soak for five minutes. Spread a saturated sheet of germination paper on a flat surface and place the plywood pattern over it. Place a soybean seed in each hole of the grid pattern (100 seeds per paper). Remove the plywood pattern and place a second saturated germination paper over the seeds. Roll the two germination papers (containing the seeds between them) into a firmly wrapped coil. Wrap one additional saturated germination paper around the first two. Repeat this entire procedure to make four separate wrappings of germination paper, each containing 100 seeds.

Add 30 ml of water to each of the 120 ml plastic beakers. Stand on end and place one of the previously prepared rolls of germination paper containing the seeds into each beaker. Place a plastic bag (open end down) over the germinating roll of seeds. This is to prevent the germination paper from drying out. Do not wrap the plastic bag tightly because air must be free to circulate to the germinating seeds.

Place the rolls of germinating seeds into the various ORACS for treatment. Cover the top end of the ORACS with a doubled layer of wool fabric to shut out light. Secure the wool fabric with a rubber band. Add water to the beakers holding the germination paper as needed (Fig. 1).

After seven days of exposure remove the seeds from the ORACS and unroll the germination papers for observation. Observe the sprouts' general appearance as to color, signs of decay, length, shape and thickness. Measure the length of each sprout to the nearest centimeter, record the data and determine the average sprout length for each ORAC treatment. The data can be displayed graphically (Fig. 2) as a frequency distribution (4). Determine the fresh weight (FW) and dry weight (DW) (oven dry weight at 70°C after 24 hours) of each group of sprouts. Calculate the tissue

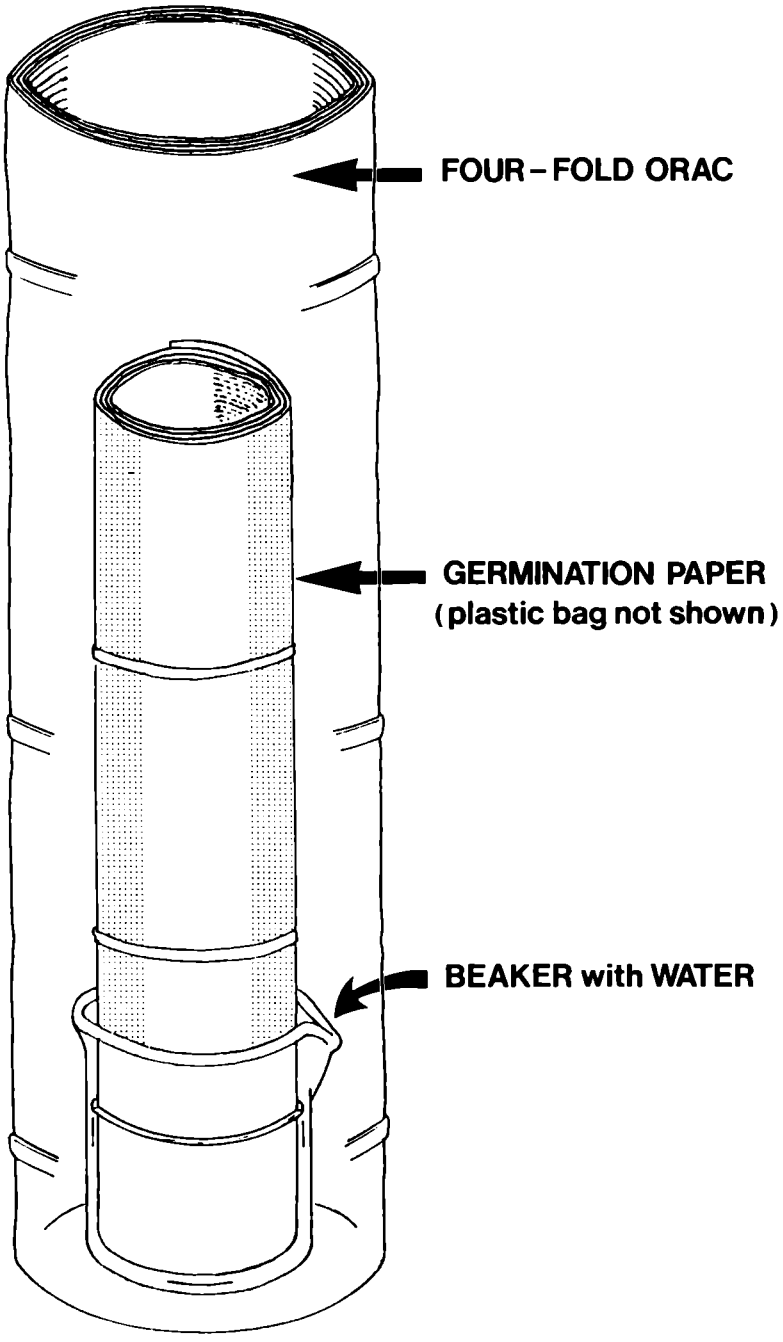


Fig. 1. Phantom view of completed ORAC - seed germination setup.

percentage water content as:

$$\frac{FW - DW}{FW} \times 100 = \% \text{ Tissue Water Content}$$

Growth of sprouting seeds is due primarily to water uptake. Therefore, tissue water content of sprouts is an indication of growth.

Table 1

Tissue water content of soybean sprouts affected by ORAC exposure

ORAC Treatment	CM	%
Control	13.8	86.1
Aluminum	12.3	85.3
Copper	15.0	86.1
Iron	13.5	86.0
$LSD_{0.05}$	4.1	1.1

V. Results

Using the procedures as described above, soybean seeds were sprouted in iron, copper, aluminum and control ORACS. The frequency distribution of the data from three replications of 100 seeds, each sprouting in the same ORACS, is shown in Fig. 2.

The aluminum ORAC, compared to the control, copper and iron ORACS, had a greater number of sprout lengths less than 16 cm and fewer spout lengths greater than 16 cm. Although copper and iron ORACS tended to have fewer sprout lengths less than 8 cm, average sprout length was not different than the control. The tissue water content of sprouts from the aluminum ORAC was lower than for the control, copper and iron ORACS (Table 1). Thus, differences among treatments in tissue water content were reflected in treatment differences in sprout length. The effect of aluminum, but not copper, agrees with Reich's observations that ORACS constructed with these metals may be toxic to living organisms.

It is interesting that both iron (Fe) and copper (Cu) are elements essential to plants, while aluminum (Al) is believed to be nonessential, and even toxic under acid soil conditions. In soils having a pH less than 5.5, some of the aluminum present in soil solubilizes and stunts root growth of sensitive crops (6).

These results indicate that this seed-sprouting technique provides a simple bioassay for determining the effectiveness of a particular kind of ORAC treatment. Seed-sprouting is quite rapid compared to the growth of a whole plant to maturity to obtain yield data. Thus, this technique has the potential of more rapidly providing insight into various aspects of ORAC treatment that may influence the effectiveness of ORAC treatment of other living organisms.

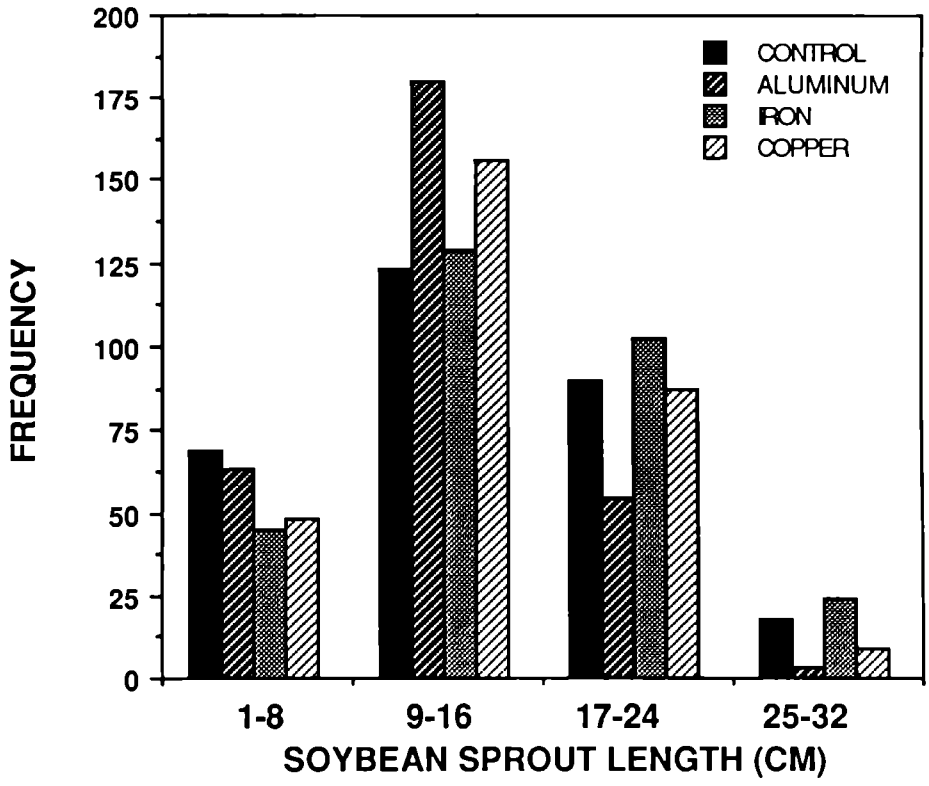


Fig. 2

VI. Going Further

The following is a list of factors that could be studied using this seed-sprouting technique:

1. The type of organic material used in construction of the ORAC layer.

2. The length of time of ORAC exposure—for example, continuous versus periodic exposure. Claymond (7) reported that the duration of ORAC exposure influenced potato yield.

3. The best time of day for ORAC exposure.

4. Comparing similar ORACS constructed on supposedly "good" (clear, pleasant) and "bad" (rainy, contracted) days.

5. Comparing ORACS with different numbers of layers.

6. Comparing the effects of additional metallic elements that could be used in ORAC construction. For example, it would be interesting to study elements such as lead and cadmium which are nonessential and toxic, and elements such as zinc and manganese which are essential plant nutrients.

References

1. Reich, W.: *Cancer Biopathy*, 1st edition. New York: Farrar, Straus, and Giroux, 1973.

2. Baker, C.F., Burlingame, P.S.: "The Amateur Scientist in Orgonomy," *Annals of the Institute for Orgonomic Science*, 5:74-80, 1988.

3. DeMeo, J.: *The Orgone Accumulator Handbook*. El Cerrito, CA: Natural Energy Works, 1989.

4. Sokal, R.R., Rohlf, F.J.: *Introduction to Biostatistics*. San Francisco: W.H. Freeman Co., 1973.

5. DeMeo, J.: "Seed-Sprouting Inside the Orgone Accumulator," *The Journal of Orgonomy*, 12:253-258, 1978.

6. Foy, C.C., Chaney, R.L., and White, M.C.: "The Physiology of Metal Toxicity in Plants," *Annual Review Plant Physiology*, 29:511-566.

7. Claymond, H.J.: "Effect of the Orgone Accumulator on Potato and Onion Plants," *Annals of the Institute for Orgonomic Science*, 4:44-48, 1987.

People of the Lie
The Hope for Healing Human Evil

by M. SCOTT PECK

Simon & Schuster, Inc., New York, 1983, $9.95

This is a dangerous book.

I have written it because I believe it is needed. I believe its over-all effect will be healing.

But I have also written it with trepidation. It has potential for harm. It will cause some readers pain. Worse, some may misuse its information to harm others.

So begins M. Scott Peck's introduction to *People of the Lie*. This is a book about human evil, mostly as it pertains to individuals, although there is a section on group evil. Dr. Peck is a psychiatrist trained as an analyst, and also recently became a Christian. In writing this book, he is well aware of bringing together a scientific study of human psychology with older, more judgmental ways of assessing behavior. Peck relates that we do not yet have a psychology of evil, and that to understand it, we must consider diverse viewpoints, i.e., not only the conventional medical model, but also a religious perspective. As he notes, the concept of evil has been central to religious thought for millennia, but is virtually absent from psychology. A psychology of evil requires a uniting of the best features of the scientific and religious approaches to this problem. One reason science has avoided studying evil is that the concept of evil implies a value judgment, and science is supposed to be value-free. However, he feels that this is no longer possible or desirable for science, and that in fact a merger of the two systems is already occurring (science can no longer be entirely value-free). This will require that scientific psychology will be forced to integrate things not yet considered "scientific" such as literature and mythology. Both of the latter have dealt extensively with evil for centuries.

Peck gives seven clinical examples, from his own practice, of individual evil, with analysis of the different features of evil that each case illustrates. In addition there are chapters on exorcism and possession, group evil, and the dangers of dealing with evil. I will mention four of his case histories here to illustrate certain salient features of evil.

Bobby was a 16-year-old boy, hospitalized for depression after stealing and crashing a car. His eyes and manner were dull, expressionless; there was no insight. He stared at the floor and replied in monotone. Bobby's brother Stuart had committed suicide several months before with a .22 rifle, and his behavior and grades had deteriorated in the several months following. The critical point in Bobby's interview came when Peck attempted to draw Bobby out, eventually eliciting the fact that for Christmas he asked for a tennis racket, but was given a gun instead. Peck was horrified; it turned out not to be just any gun, but *the* gun, i.e., the very gun with which Stuart committed suicide.

His parents were hard-working, blue-collar middle class, who denied any awareness of Stuart's emotional problems prior to the suicide, nor had any awareness of Bobby's current difficulties. When he confronted the parents about the gun, they were oblivious to any possible meaning in this behavior, and were even belligerent, reacting in part with righteous indignation. Peck's reaction to this was revulsion, which he notes is a common, understandable and even useful reaction to evil (useful in that it gives information about the true nature of the individual). He had no interest in seeing the parents again, nor did he perceive any value in doing so. He was, however, able to get them to agree (after some discussion and threat of court proceedings) to allow Bobby to live with a relative in another town.

Bobby's parents, and others designated as evil, are, for the most part, ordinary people, "'solid citizens'—Sunday school teachers, policemen, or bankers, and active in the PTA" (p. 69). The massively destructive examples of evil—the Hitler and Stalin regimes—are actually the exception. Most evil is committed by ordinary people in subtle ways—such that the behavior is rarely recognized as criminal behavior or even as destructive. Thus, the evil actions of ordinary people may be difficult to recognize.

How, exactly, does Peck define "evil"? He begins by saying that he can do no better than the definition given by his 10-year-old son: "evil is 'live' spelled backwards." That is:

> *Evil is in opposition to life. It is that which opposes the life force. It has, in short, to do with killing . . . I do not mean to restrict myself to corporeal murder. Evil is also that which kills the spirit . . . Evil, then, for the moment, is that force, residing either inside or outside of human beings, that seeks to kill life or liveliness.* (pp. 42-3)

Roger was another 15-year-old, but in this case the son of a successful high-level political figure (Mr. R.), a lawyer and general counsel to a large federal department. Roger had shown progressively falling grades and his school had recommended a psychiatric evaluation. His eyes had the same lifeless quality, and he was similarly non-verbal, although eventually able to articulate that he wanted to go to boarding school. In fact, he had expressed this interest to his parents some months previously, but had received a firm "no" in reply. At this point Peck interviewed the parents.

"Mr. and Mrs. R. were a handsome couple in their early forties—articulate, impeccably dressed, obviously to the manor born.

'You're so kind to see us, Doctor,' Mrs. R. said, genteelly removing her white gloves. 'You have an excellent reputation. I'm sure you must be very busy.'

. . . It was a pleasure to interview people so intelligent and sophisticated that they answered my questions before I even asked them. Yet I felt vaguely uneasy." (pp. 88-9)

Dr. Peck's unease increased as the interview progressed. Despite their articulate, smooth and polished manner, he sensed hiding, lies, and subtle distortion, but nothing he could clearly put his finger on. He eventually recommended Roger to a psychologist for testing, and that he be sent away to a boarding school. The parents resisted these recommendations with various rationalizations, all the while expressing a willingness to do "what you think is best, Doctor."

The parents, however, never took Roger to the psychologist, but put him in a local Catholic school instead. He continued to have even more serious difficulties, and was seen for a second time several months later. Despite his difficulties, Roger was now quite positive about the school that he was in, and actually doing quite well in some extracurricular ac-

tivities (to which his parents objected). Peck also discovered further destructive parental behavior—they had prevented Roger from attending a well-earned school trip, because his room wasn't clean enough! Again he interviewed the parents, who again resisted any real action to help Roger, while again verbalizing their strong interest in Roger's problems, money was no object, etc. Peck recommended that Roger remain in the school, and again see a psychologist.

He later received a note from Mrs. R. stating that they "have followed your advice and have sent Roger to a boarding school." (!)

In looking over the two interviews with the parents, Peck noted "between one and two dozen lies." At every turn, when a referral or suggestion was made by Peck or the school, it was sabotaged—and rationalized—by the parents. The difficulty in labeling such behavior as evil, he notes, is its subtlety:

> *While evil may manifest itself obviously, as in the case of Bobby, it rarely does so. More commonly by far its manifestations are seemingly ordinary, superficially normal, and even apparently rational. As I have said, those who are evil are masters of disguise* . . . (p.104)

Roger's parents were educated, sophisticated and sensitive—except regarding Roger. Here, their insensitivity was selective and their lack of concern for him was utterly consistent. They lied to Peck "repeatedly and routinely." Yet all the while they maintained an impeccable image of concern and respectability. This is characteristic of those whom Peck considers to be evil:

> *Utterly dedicated to preserving their self-image of perfection, they are unceasingly engaged in the effort to maintain the appearance of moral purity. They worry about this a great deal. They are acutely sensitive to social norms and what others might think of them . . . The words "image," "appearance," and "outwardly" are crucial to understanding the morality of evil. While they seem to lack any motivation to* be *good, they intensely desire to appear good. Their "goodness" is all on a level of pretense. It is, in effect, a lie. This is why they are the "people of the lie."* (p.75)

Hartley was seen for follow-up after discharge from the state hospital following his third suicide attempt. He looked dull, grey—crushed—and sat silently beside his wife, Sarah, whom he had requested accompany him to the interview. As the interview progressed, Hartley demonstrated a pathetic helpless attitude, repeatedly emphasizing that he could do nothing without Sarah. He had formerly attended Yale, been a successful salesman, but was now unemployed and could not even drive a car. Sarah attended to all his needs. Indeed, it became clear that at every turn, Sarah belittled him and emphasized his helplessness, her "burden" and "duty" in taking care of him. When Peck confronted her need to keep him helpless and infantile, she decompensated briefly into a rambling monologue of loose associations.

What was instructive about their relationship was not just Sarah's evil in controlling Hartley, but his willingness to be in thrall to Sarah. They had formed and maintained a mutual, albeit extremely pathological, relationship. We are not forced, according to Peck, to become trapped by an evil power; we do it to ourselves. This aspect is even more important when considering group evil, such as the My Lai massacre, to which he devotes an entire chapter. In the latter case, perhaps 50 men actually pulled triggers (600 were killed) but at least 500 knew of the incident and did nothing.

The most important case, and in fact a major impetus for writing the book, was that of Charlene, an attractive young woman who came with vague complaints, but proved to be one of the most frustrating cases he had ever treated. She was one of those rare evil people who come for therapy. His first reaction to treating her, after a number of sessions, was confusion. This, he notes (although he did not understand it at the time) is characteristic of evil people: they leave you feeling confused and unable even to think clearly. No clear diagnosis pattern had emerged in her behavior, yet she was clearly disturbed. Finally, almost by accident, he discovered that she was highly obsessive-compulsive, with a life full of rituals which she had been keeping from him; that is, she had been consciously lying to him. When confronted about the lying, she calmly informed him that she simply wasn't ready to share all of her secrets with him.

It eventually became clear that this attitude was quite central to her psychodynamics—an extremely stubborn willfulness. She had to be, and in fact remained in control throughout the therapy. She was unable or unwilling (and Peck considered this to be the critical failing of the therapy) to regress, instead stubbornly professing her "love" for him, while sexualizing what was actually a pre-genital need for affection. In fact, she was generally oblivious to the needs of others, and often quite intrusive and selfish. As the therapy progressed, a semi-autistic quality became apparent, in that she regulated her life, and relationships to others, by a set of predetermined rules. This caused her no end of grief in the real world, but had absolutely no impact on changing her behavior. For example, she went through frequent job changes, each job rarely lasting more than a few months. The reason ultimately became apparent. She entered each job with a fixed idea of what was expected (i.e., her own rules) and stubbornly resisted any attempt to have her conform to the actual needs and duties of the job. Eventually she infuriated her co-workers and was fired. Her personal relationships fared no better. None of the pathetic history had any influence on her approach to future jobs or relationships.

It was from this behavior that Peck extracted what he considers to be the central element of the psychology of evil behavior: the inability to submit. A healthy individual always submits to something higher—whether it is God, love, or reality. In submitting to reality, we allow it to be a determinant of our behavior, modifying or discarding the desires of our "will" if it fails to square with the lessons of reality. Charlene was utterly unable to submit—to the regressive process of therapy, to the reality of job demands, to the needs of another person, or even in some cases to the trivial reality of road signs (she frequently got lost). Her strong willfulness took precedence over all other considerations.

Behind this willfulness lies terror. In recognizing this, Peck saw the evil person as extremely lonely, forever unable to submit, and thus make real contact with another person. The evil person is profoundly unable to tolerate self-examination, because of a terror of making contact with his true feelings. As a consequence, he projects all his failings and problems onto the outside world.

Peck defines evil more properly as "the use of power to destroy the spiritual growth of others for the purpose of defending and preserving the integrity of our own sick selves. In short, it is scapegoating" (p. 119). A great deal of energy is expended in this effort, because of the underlying fear that the pretense will break down, and the person will be forced to confront the world, himself, and particularly his own evil. The net result for other people, however, is destructive, regardless of how subtle the activity is carried out.

Was Charlene truly evil? Peck raises this question because her pathetic behavior, while extremely crippling to her own life, did not

really hurt anyone else. However, he notes that if she had been married, or had a child, this behavior would have certainly been imposed on the mate or child, with destructive consequences. Thus, she can be labeled as evil because she had the internal dynamics of an evil person, and only circumstances prevented this dynamic from having socially destructive consequences.

Can it be said that evil is an illness, considering that the individuals involved do not appear to be in pain or show any disability? This objection is easily answered, since many serious illnesses initially manifest no discomfort for the victim. Also, while evil people do not appear to suffer, they, in fact, live in deep fear. Finally, Peck notes that the unwillingness to suffer emotional pain often lies at the root of emotional illness. The individual who reacts with depression, despair, self-doubts, and emotional pain is actually much healthier than those who remain confident, composed and apparently unresponsive. The evil person is evil not because of his faults, but because of an extreme unwillingness to *acknowledge* his faults.

Peck suggests that evil be named a psychiatric disorder, a specific variant of the narcissistic personality disorder. He also feels that there is a large overlap with individuals diagnosed as having ambulatory schizophrenia. He lists the characteristics of this disorder as follows:

> *(a) consistent destructive, scapegoating behavior, which may often be quite subtle.*
>
> *(b) excessive, albeit usually covert, intolerance to criticism and other forms of narcissistic injury.*
>
> *(c) pronounced concern with a public image and self-image of respectability, contributing to a stability of life-style but also to pretentiousness and denial of hateful feelings or vengeful motives.*
>
> *(d) intellectual deviousness, with an increased likelihood of a mild schizophreniclike disturbance of thinking in times of stress.* (p. 129)

Thus, Peck has defined evil as a diagnosable mental illness which manifests itself with socially destructive behavior, and with individual characteristics of excessive intolerance to criticism and a strong concern with social appearances, along with intellectual deviousness. How does this understanding compare to Reich's understanding and description of the Emotional Plague?

Reich, of course, understood and described the deeper energetic dynamics of plague behavior, specifically as deriving from genital frustration, with a deep fear of natural impulses. Peck's approach remains at the level of behavioral description and psychology, yet nevertheless touches this aspect when he comments on the terror of self-examination (i.e., fear of inner contact). In other respects, his understanding squares remarkably well with a number of basic features of the emotional plague as described by Reich in *Character Analysis* (pp. 248-280):

(1) According to Reich, "Emotional Plague" is not defamatory, it is a disease. Peck feels that "evil" is a diagnosis, and warns against danger of making moral judgments in the guise of diagnosis.

(2) The emotional plague shows highly rationalized behavior with an extreme lack of insight. Peck devotes some considerable space to a description of the rationalizations, deviousness, and lack of insight of evil people.

(3) As soon as the motives of the emotional plague are touched, anxiety or anger develops. While Peck is not this explicit in his description, this very reaction is clearly evident in most of his case histories.

(4) An essential characteristic of the plague is that the action and reason given for it are never congruent. This conforms to Peck's understanding of evil people as "the people of the lie."

(5) The plague manifests itself with destructive behavior on the social scene. Peck identifies this aspect as "scapegoating."

At the descriptive psychological level, Peck has given a remarkably good analysis of plague behavior. The fact that he does not deal with, or perhaps even understand, the deeper energetic basis of the emotional plague in no way detracts from his remarkable book.

Peck also warns of the dangers of a psychology of evil. First is the danger of making moral judgments (although, as he notes, we must make *some* moral judgments), especially if cloaked in scientific authority. There is also the general danger of the misuse of science itself. Finally, there are potential dangers to the individual therapists in their dealings with evil people.

Like Reich, Peck feels that knowledge of evil ("know your enemy") and exposure are basic remedies. Psychiatry has failed to recognize evil because it has bought the mask of respectability—and this masquerade of sanity must be stripped away.

This is an important book, both for the clarity of insight about the psychology of the emotional plague, but also because of the wide audience Peck reaches. *People of the Lie* was a best-seller, and his previous book (*The Road Less Traveled*) reached three million readers. It is precisely a wide-reaching understanding of the plague, as Reich noted, that is so crucial in ultimately understanding and mastering it.

It might be fitting to end with a quote by Thomas Merton that Peck uses in describing the "mask of sanity," the pretense of respectability, that the plague has used so successfully to conceal its activities and very existence. Ultimately, behind this mask of sanity, evil people are the most insane of all. As Merton writes (regarding Adolf Eichmann):

> *One of the most disturbing facts that came out in the Eichmann trial was that a psychiatrist examined him and pronounced him* perfectly sane. *We equate sanity with a sense of justice, with humaneness, with prudence, with the capacity to love and understand other people. We rely on the sane people of the world to preserve it from barbarism, madness, destruction. And now it begins to dawn on us that it is precisely the sane ones who are the most dangerous. It is the sane ones, the well-adapted ones, who can without qualms and without nausea aim the missiles and press the buttons that will initiate the great festival of destruction that they, the sane ones, have prepared.* (p. 265)

Courtney F. Baker, M.D.

Communications and Notes

Announcements

Charles Oller, M.D., 1908-1990

The Institute mourns the death of Charles Oller, M.D., who was the first orgonomist to practice in the Philadelphia area. Dr. Oller was one of Reich's original group, and he remained dedicated to the principles of orgonomy throughout his life. Dr. Oller was a simple man, in the best sense, and published several volumes of poetry which spoke of his love for children and the delights of nature. He devoted many hours of his last years to painting. Dr. Oller was a valued colleague and his passing saddens his friends and co-workers.

The *Annals* is pleased to announce the publication of a new orgonomic journal in Germany, "Lebensenergie. Zeitschrift fur Orgonomie." It will be published once or twice yearly in German, and topics will include the practical application of orgone energy, scientific work, orgone therapy, the atmosphere, and child development issues. Send subscription orders to: Zentrum fur Orgonomie, MemelstraBe 3, 6930 Eberbach, FR of Germany. Price per single issue: 12.-DM plus 3.-DM postage plus 3.-DM airmail. The editors include Dr. Dorothea Fuckert, whose work on the clinical application of the orgone accumulator has appeared in a previous issue of the *Annals*.

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 further information please contact: Louisa Lance, M.D., Box 304, Gwynedd Valley, Pa. 19437.

Educational Programs

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

- *Somatic and Psychic Biopathies*:

This course is offered to third- and fourth-year 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 resumé 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, 1991. If you are interested in taking the course, send a brief resumé 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 Orgonomic 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 degree(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 5¾ x 8½ inch format. All should be clearly labeled. Manuscripts accepted for publication are subject to copy editing. They become the property of the Institute for Orgonomic Science and may not be reproduced without the consent of the authors and the Institute.

ANNALS
OF THE INSTITUTE FOR ORGONOMIC SCIENCE

SEPTEMBER 1990 VOLUME 7 NUMBER 1