

Holistic Medicine Versus Psychosomatic Medicine

IRVIN NEUFELD, M.D., *New York*

The billions of years that have elapsed make it clear that the struggle for perfection is an inborn actuality existing in every person.

—ALFRED ADLER

I. BASIC PRINCIPLES OF APPROACH (TELEO-PSYCHOLOGIC METHODOLOGY)

Alfred Adler described human life as "movement which strives toward self-preservation, toward propagation, and towards contact with the external world—a contact that must be victorious if life is not to succumb" (6). This basic Individual-Psychological principle implies that in distinction to the haphazard, deterministic, impersonal cause-effect existence of lower animals, men—singly and collectively—guide their existence toward an inherent, dynamic, and more or less conscious goal: *accomplishment before extinction*.

Psycho-dynamically, we have to substitute for actual accomplishment a feeling of accomplishment, or feeling of significance which constitutes the psychological motivation; as it were, the psychic reward for which the actual accomplishments are sought. Similarly, nutrition and sexuality—on the conscious level—are not sought so much for their inherent purposes, i.e., for preservation of the self and of the species, respectively; but for their "reward," be it feeling of "pleasure," "relief from tension," "gratification," or according to Adler "overcoming a minus situation" (6). Therefore, we may speak of a psychic motivation of self-preservation and self-perseveration. This is the approach of a teleo-causalistic psychology, or Teleo-psychology.

This approach leads to observation of a teleo-psychological phenomenon which might appropriately be termed "finalization of means" (FOM). "FOM" denotes a psychic motivational dynamism by which a means or instrument toward a goal becomes the final goal in itself because psycho-dynamically the sight of the final goals may actually be lost from awareness, and the means then appears as the final goal. Sometimes, such a means which became the goal in itself may then function contrary to its inherent purpose. E.g., finalization of money

may lead to striving for possession in a broader sense if money, originally a means of interchange of goods, becomes a goal in itself; food-enjoyment and sex gratification, means toward preservation of self and of the species, respectively, become final goals par excellence. And so the feeling of significance, a means toward—as it were reward for—accomplishments may become a goal in itself. It would seem as if men had fallen prey to and been subdued by a stratagem of “nature”: as if reward and not deeds would represent the meaning of life; as if psycho-social values would tend to supersede biological or survival values. “The pleasure and pain accompanying the struggle are only aids and rewards received on this path” (6). “Finalization of means” has profound significance not only in psycho-biological but also in other fields, such as the psycho-social, psycho-cultural, and psychosomatic, (e.g., finalization of clothing or striving for impression by external means; finalization of virginity, of religious and symbolistic activities, and rituals; of tests and examinations, etc.)

In this context self-preservation as a biological goal does not have and does not need explanation. Its denial would be identical with denial of life itself. Therefore, it has long been accepted as a working axiom.

On the other hand, striving for self-perseveration can best be comprehended as a more or less conscious, basically inherent, environmentally influenced, individually determined goal to extend, to propagate and to perpetuate one’s idea of oneself beyond the limits of one’s own physical existence in order to achieve a feeling of significance. This feeling is a necessary prerequisite and at the same time a safeguard for human symbiotic functioning, be it on the level of family, community, various ideological, religious, or other groups, or on the level of “human society” at large. Thus self-perseveration includes striving for descendents, recognition, immortality, power, etc.

“Personality” cannot fully be understood as a mechanical resultant of a pre-determined inherited equipment and acquired training. Personality is also influenced and guided—directly or indirectly—by one’s goals and by the available and applicable means leading toward those goals.

Any given individual’s life-style, although initiated and developed by innumerable constitutional and environmental processes is continually affected and maintained by his goals. Causalistic explanations through constitutional and environmental factors may easily be constructed. To some investigators, a causalistic explanation seems more

"scientific" because we are conditioned to backward or retrograde thinking rather than to anticipatory, purposive, circular or "feed-back" thinking. This mental rigidity may be explained historically through the evolution of scientific methods becoming "free" of "mystical" thinking. Furthermore, this trend in regard to human action is fortified by our tendency to account for our actions as being necessitated by the unchangeable past rather than as being purposefully designed by ourselves. Frequently, causalistic explanations are mere speculations and scientifically not more valuable than teleo-causalistic concepts. Such a retrograde, causalistic, two-valued, lineal approach in psychological research cannot account for the wide range of manifestations observed as resulting from constellations of inherited and environmental factors which seem identical, even under carefully controlled laboratory situation. Aside from temporarily satisfying our own urge for accomplishments—in this case directed toward intellectual superiority—and besides statistical or tychistic probability, no psychologic understanding of individual manifestations can be gained by strictly causalistic formulations even if one includes "unconscious," "collective unconscious," "Oedipus complex" and all the other psychological constructs among the "causes."

We must admit our inability to take an absolutely correct and complete inventory of a person's constitutional mental and physical equipment and capacity. Also, we shall never be able to record and evaluate the entire inventory of environmental influences and impressions from one's internal and external environment. (All attempts at such an inventory have by necessity been unsuccessful.)

Furthermore, we cannot recognize and evaluate these inherent capacities and environmental impressions directly, but only from their actual manifestations in any given individual. To understand individual variations in such manifestations we have to presuppose certain intrapersonal processes responsible for the individual variations which—to the observer—often seem contrary to the expectations based on the known inherited and environmental factors. Scientific approach to personality must remain futile as long as it employs a strictly deterministic, statistical inventory of inherited and environmental factors only (10). Even if we could, theoretically, assemble every single factor of a person's inherited equipment, i.e., his actual and potential and physical capacities, and even if we could have at our disposal a complete diary of every single occurrence in one's environment from the very first minute of one's life, still the psychological significance of these

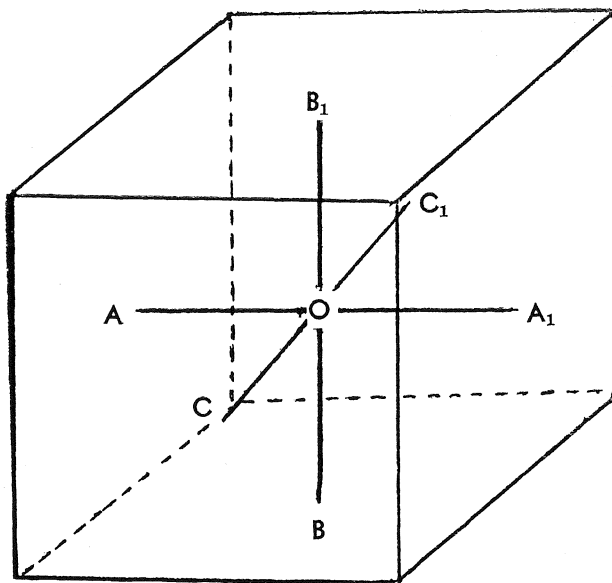


FIGURE 1

Diagrammatic Representation of Personality as a Tri-ordinate Concept:

- A—A₁: Inherited Equipment (A—O: “Imperfections”; O—A₁: “Capabilities”)
- B—B₁: Environmental Influences (B—O: constructive; O—B₁: destructive)
- B—C₁: Dynamic Individuativity (C—O: Self-assertiveness; O—C₁: Symbiotic Sense)

elements would not be explained. The constellation of the constitutional and environmental elements, i.e., the determination of what elements in the environment affect what constitutional elements and under what circumstances, the quality, intensity, and permanency of any given experience, would be undeterminable by mechanistic methods.

Therefore, personality cannot diagrammatically be represented by a two-dimensional co-ordinate system, the abscissa and ordinate of which were habitually considered as representing heredity and environment, respectively. Personality research can be fruitful only on the basis of a tri-ordinate system where the third axis represents the person's individual evaluation of and expectations from those inherited and environmental factors (Figure 1). Adler declared that “the individual's attitude reflects, not the actual facts, not the thing in itself as

a permanent 'principle of reality,' but what he 'thinks' of the demand which the external world makes on him, and what he 'thinks' of his ability to fulfill them" (5). Actually, it is this third axis (including also the "time" element in psychology) which represents the real "dynamic" element in any holistic psychology. It represents an individual's faculty to establish goals and standards for himself which become his viewpoint from which his inherited and acquired equipment is being put in action.

The psycho-dynamic significance of that third axis would not be so difficult to comprehend, if semantic difficulties did not interfere with its conceptualization.

That the important individuative faculty of the organism-personality is being side-tracked by the old, two-dimensional, causalistic concept was appreciated by L. K. Frank when he stated* that ". . . the continued use of the older cause-and-effect formula, implying a potent 'cause' operating upon a passive something to produce the effect, obstructs our efforts to understand the essential circular processes of action, reaction, and interaction taking place in the 'field' of intra- or interorganic events. The causal concept in biology (or stimulus-response in psychology) ignores the participation of the organism-personality being acted upon by the so-called 'cause' or 'stimulus' and continues the animistic conception of some mysterious power or force responsible for events." Let us assume that the dynamic process which "creates" *one* personality out of an infinite number of internal and external known, unknown, and unknowable elements is a hypothetical process, and only its end-product (the manifest personality) is available for scientific perception. One has to realize that such a great number of qualitatively and quantitatively different elements which enter into the formation of a "personality" must (even purely mathematically) give such an infinite number of possible combinations, variations, and permutations that in reality two identical constellations are only a very remote probability. Therefore, from a psycho-dynamic and semantic standpoint, this fact may properly be termed "individuativity," denoting the dynamic factors which integrate, coordinate, and give direction to the equipmental and environmental elements. (To individuate is defined by Webster "to form into an individual" and "to endow with individuality.") Even if this individuativity did not represent

* At the Conference on Teleological Mechanisms held by the New York Academy of Sciences on October 21, 1946, Annals, Vol. 50, Art. 4, 1948.

anything else but a selective correlation of the constitutional and environmental elements which would produce a psychologically significant variant, it must have an important working value in every dynamically oriented psychology. (The real application of the term "dynamic" is given by its etymological meaning, namely, *per analogiam* with dynamite, the actual capacity of which is more than and different from the sum of its component parts.)

Investigation, understanding, and management of the personality cannot be based on the quantitative completeness of constitutional and environmental inventory, but on the understanding of the individualistic use of such inventory.

This approach may be considered as being fully in line with principles of cybernetics, "circular" and "feed-back" mechanisms as applied to psychology.

II. BIOLOGIC FOUNDATION OF BIO-SOCIAL (HOLO-LOGICAL) INTEGRATION

In human symbiosis, biological life cannot be conceived of as isolated from communal life either in reality or in any psychological context. Therefore, all the overt, unrecognized, and not-understood functions of the "psycho-physical oneness" (1) have to form, develop, and perpetuate not only *the self but also the field of the self's existence*, i.e., society. Bio-social integration is a continuous process intended to integrate the two inseparable and interdependent aspects of human existence, i.e., biological and social. "Bio-social" integration also implies that man is actually or potentially not only influenced by and dependent on his animate and inanimate environment but at the same time is striving to influence and to control it.

"Biologic" should not be comprehended as synonymous with "psychic" or "somatic"; nor should "social" be regarded as synonymous with "economic" or "cultural." "Biologic" should rather imply what it etymologically means; namely, inherent in and pertaining to "life" (bios), with both the "somatic" and the "psychic" aspects, without the notorious dichotomy into soma and psyche (18). "In the last analysis, psychology is only a chapter in human biology" (23).

"Social" refers to all forms, attitudes, and actions originating from or directed toward the indivisible person's animate environment with the implicit purposiveness of preservation of the individual as well as of the society. (For the convenience of our thinking and working methods "social" could arbitrarily be subdivided into "economic" and "cultural" aspects.)

In order to denote the inclusion of all aspects of human existence in its integration we could rightly substitute for "bio-social integration" the term "holo-logical integration" implying the logic of human existence as a whole (*holos*) with all its intrapersonal and extrapersonal (animate and inanimate) relations. The over-all scientific approach adopting the view-point of such holo-logical integration—could be descriptively be termed the "org-hol-en"istic approach. Org-hol-en standing for ORGAnism-as-a-HOLOs-in-ENVIRONMENT. (Holos=whole, Greek) (17).

We have shown that self-perseveration constitutes an individual's striving to establish and to perpetuate his significance: (*a*) by having descendents (i.e., biological self-perseveration via sex-urge) and (*b*) by having accomplished other deeds or achieved significance (i.e., social self-perseveration via "deed-urge" or "urge for accomplishments").

Striving for "optimum" biological and social self-perseveration is intended to perpetuate the individual's assigned or self-assumed, general or specific significance. This, of course, is unthinkable without preservation of society, because only within society—in its narrower or broader sense—can significance be felt. Thus, human striving for biological and social self-perseveration constitutes the psychic motivation par excellence for preservation of society. It has been stated that "McDougall and Adler considered man's inherent social nature to be one of his most important attributes" (22).

Psycho-dynamically, social self-perseveration is comparable to biological self-perseveration, and social self-preservation to biological self-preservation. They represent indispensable safeguards of life. "The splitting-off in children and in young generations is only a part of this safeguarding of life. But the ever-advancing civilization that surrounds us also points to a tendency toward a safeguard. It shows that human beings are in a permanent state of feeling their inferiority, which constantly spurs them on to further action in order to attain greater security" (7). This bio-social law of human existence, which has not been sufficiently appreciated in deterministic psychology, explains the potentially pathogenic effects of mistakes both in biological and in social existence. Furthermore, from a psychodynamic standpoint, "bio-social integration" actually means *optimum* bio-social self-preservation and self-perseveration (15). "Optimum" refers to the dynamic character of their subjective evaluation. Inasmuch as there can be neither an absolute nor a measurable evaluation of the forms, content, methods, and goal of self-preservation and self-perseveration, an arbi-

trary "optimum" depends on the interpretation by the individual from the viewpoint of his life-style and his pertinent life-situation. Optimum bio-social integration includes not only passive adaptation but also the striving for acceptance by, and for excelling in a dynamic society. Ignoring the importance of the dynamic character of society, or of the hological bio-social integration, may result in misconception of both the scope and the result of our psychological, psycho-social, psycho-somatic, and somato-psychic formulations.

Adler accepted urges as "innate actualities," but he denied that deterministic power and specific direction were *a priori* categories of urges. The pleasure-producing capacity of urges was not considered by Adler as of primary significance (6). Accomplishments in line with one's life-style are accompanied by feelings of satisfaction and relief from tension (3). Psycho-dynamically, the significance of those feelings is comparable to the significance of feelings of satisfaction derived from nutritional and libidinal activities. Nutritional and sexual desires emerge not only in physiological but also in psychological "minus" situations, the overcoming of which is assumed to serve biological self-preservation and self-perseveration, respectively. Adler's concept of movement from a "minus" toward a "plus" situation may here clearly be observed as a biological "law of movement." However, overcoming of the minus-situations on the nutritional and sexual levels is not a purely somatic phenomenon. In fact, upon "deep" analysis it will be found that not infrequently it is not devoid of feelings of accomplishment or even of significance. On the other hand, strivings for accomplishment, or deed-urge should not be looked upon as a purely psychological construct. Adler clearly declared that "the feeling of insecurity and inadequacy is traceable to a deeply rooted biological basis and is not to be thought of as something having a purely psychological significance" (5). Without individual accomplishments preservation of human society would be impossible. Thus the innate urge for accomplishment, or "deed-urge," may be considered as the biologic premise for preservation and development of human society. By recognizing the sequence—striving for biological and social *self-perseveration* (manifesting itself by striving for descendents and accomplishments, respectively), leading to *preservation of society* as of the only possible field of *self-preservation*—striving for self-perseveration may easily be recognized as *conditio sine qua non* for men's self-preservation. Anthropologic studies seem to confirm that in many primitive societies man's striving for accomplishments is actually di-

rected toward preservation of his society rather than toward personal significance. Awareness of biologic and social self-preservation and self-perseveration reflects man's innate intelligence; their realization is man's innate urge. By recognizing this interdependence it will not be difficult to understand the concept that serious frustrations in one's striving for significance may be just as consequential and pathogenic as serious frustrations of the "biologic" urges. The direct psychic motivation activating the "deed-urge" is not its inherent primary purpose, i.e., preservation of society, but the secondary psychic "reward," i.e., the accompanying feeling of achievement, importance, significance or superiority. In fact, in certain persons and certain circumstances "gratification of deed-urge" may become even more pronounced than nutritional and sexual "gratifications" (Cf. FOM, p. 140).

As appetite may be considered as an innate urge to serve the purpose of self-preservation and sex-desire as an innate urge to serve the purpose of preservation of the species (i.e., biological self-perseveration), so can inferiority-feeling and striving for significance be considered as an innate urge to serve the purpose of preservation of society without which preservation of self or of the species is inconceivable.

The form and degree of manifestations as well as of satisfactions of hunger and of sex-desire present wide variations which at times actually or potentially defy their inherent primary purpose, i.e., self-preservation and self-propagation (e.g., over-indulgence in food may endanger self-preservation; homosexuality may endanger self-propagation, etc.) Similarly, form and degree of manifestations and of satisfying the striving for accomplishments frequently produce pathologic variations which at times actually or potentially defy its original purpose, i.e., preservation of society. (Severe, paralyzing superiority or inferiority complexes may endanger self and society.)

With the possible exception of undomesticated animals and very young infants, we do not observe purely somatic manifestations of urges. The environment may influence the general form and limitations of the expression and of the overcoming of urges as learned from and accepted by society. The individual manifestations of urges, their expression, their activation, and their satisfaction are determined by individual psychic superstructures.

Prevalence and dominance of sex urges have often almost axiomatically been accepted. Actually, however, any of the three urges may gain prevalence and dominance over the other. Gross and chronic imbalance of the three urges is potentially pathogenic.

An individual's methods of social self-perseveration—which often represent convenient and tricky short-cuts to “gratify his deed-urge” (namely, to achieve the desired feeling of significance without deeds)—may furnish important data for diagnosing his life-style, or his personality and integrational dynamism (Cf. FOM, p. 140). Recognizing one's way of satisfying one's “deed-urge” (social perseveration, or striving for significance) may diagnostic-technically play a role similar to that of recognizing one's dreams, early recollections, and family constellation.

III. PERSONALITY STRUCTURE AND “SOMATIC” SYMPTOMS

1. Attitude toward somatic symptoms

From the psycho-dynamic viewpoint, “somatic symptoms” denote a person's subjective awareness of imperfect functioning of his body, or of a part of it. It may subjectively be perceived as pain, disturbed function, or deformity.

The psycho-dynamic significance of somatic symptoms is not determined by the image of the affected body or organ but by the role that the function of the affected body or organ plays in a given person's life-plan. Image is only one aspect of function. This holds true even of those somatic conditions in which the main imperfection seems to affect more the form than the actual physical efficiency of the body or its part, e.g., facial disfigurements, scoliosis, amputation, etc.

It is obviously tempting, but just as obviously fallacious, to assume some *special* psychology of the physically sick or injured, e.g., as psychology of “ulcer personalities,” of “fracture personalities,” “rheumatic personalities,” etc. In fact, any mechanistic and statistical approach to an understanding of the psycho-dynamic role of somatic derangements in any individual case must necessarily be misleading.

Personality is not determined by somatic symptoms, as it is not determined by any one single factor, but it may manifest itself by a person's attitude and behavior if and when put to test by life's problems and tasks including somatic afflictions (“personality in action”). In this respect, Alfred Adler's genial triad of life problems (sex, vocation, society) could be extended to a tetralogy of life problems, the fourth cardinal problem being one's own self (including one's own “body”). For didactic purposes the four life problems could be termed the “Tetralogy of four S's,” indicating: Sex, Subsistence, Society, and Self.

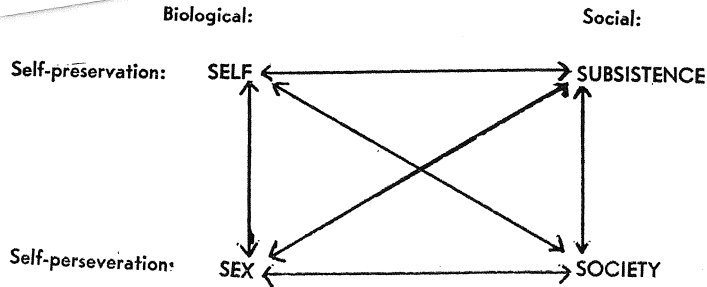


FIGURE 2

Diagram of interdependence of biological and social self-preservation and self-perseveration (bio-social integration)

Somatic inferiorities had once been considered as a primary factor in a person's total development, but later it was recognized that not the somatic inferiorities *per se* but a person's way of dealing with them may be decisive for the development of his life-style. A person's attitude toward and reaction to his "somatic" symptoms may reveal a fairly reliable insight into his life-style, because problems arising from his "somatic" status are equal in importance to his sexual, vocational and social problems. In "healthy" persons those "somatic" problems may not appear as direct and important. Nevertheless, on thorough investigation, they will be found not only to be present, but also to play a rather active role even in those persons who seem to glorify the "mind" at the expense of the "body."

One's life-style may be comprehended as functioning in three ways in one's bio-social integration:

a) The direction of one's life-style; namely, one's general and specific goals. (What is to be achieved?—Teleo-psychology as one phase of Individual Psychology or "psychology of goals").

b) The modalities of one's life-style; namely, the methods and means one selects and is willing to use in pursuit of one's goals. (How is the goal to be achieved?—Relativity Psychology as another phase of Individual Psychology, or "psychology of use").

c) The evaluation of one's life-style; namely, one's own evaluation of the desirability, usefulness, and achievability of one's goals and of the ways leading to them. (Why are those particular goals and methods pursued?—Attitudinal Psychology as a third phase of Individual Psychology, or "psychology of values.")

These three principal teleo-psychological aspects, the "What," "How," and "Why," as it were, the "functional anatomy" of one's life-style determine the goals and methods of one's "optimum" bio-social integration.

Generally, one might assume that a "normal" person's life-style is to develop his capacities for the needs of society, and to fulfill his needs according to the capacities of society. (In other words, such life-style is guided by genuine social interest.) But every child finds obstacles to his integration due to his misconceived striving for adjusting his society to himself; this striving may later lead to the neurotic's habitual disregard for the needs and capacities of society.

As applied to the problem under discussion, this would practically mean: whether, for what purpose, in what way, to what extent and why a person is using his somatic symptoms. Proper application of implicit individual-psychological principles offers effective methods not only for recognizing and understanding the meaning, but also for managing the psycho-dynamic effects of somatic symptoms in any given individual.

A person's attitude toward his somatic symptoms usually coincides with his general attitude. *For didactic purposes*, Adler classified four types of attitude and behavior: overcoming, ruling, getting, and avoiding (2). Based on this didactic classification, we may speak of "stimulancy" and of "instrumentality" of somatic symptoms. Generally speaking, stimulancy of somatic symptoms will be found to prevail in persons of the "overcoming type," while "instrumentality" will be predominant in the other three "types." (See next chapter.)

A holistic approach has to include investigation of the actual as well as anticipated effects of somatic symptoms on the afflicted individual's life-goal and pertinent life-situation. Many a patient's somatic symptoms may be regarded as "psychogenic" because of concurrent neurotic symptoms or because of apparent "secondary gains from disease." Upon closer analysis, however, it may often be discovered that neurotic symptoms were due not so much to the actual as to the anticipated effects of the somatic symptoms on the patient's bio-social integration.

Psychic concomitants of somatic symptoms may directly or indirectly affect, or—so to say—backfire, on the somatic symptoms which in turn may further affect the individual's integrational process and so forth, in a "vicious spiral" fashion. Thus, it can easily be understood

why a patient's "somatic" complaints should not be approached as being "psychogenic" or "somatogenic."

For the sake of scientific reliability it is mandatory that the relation between "somatic" and "psychic" symptoms should not be misinterpreted by confusing sequence in time with factual consequence. This premise is imperative to avoid unsound applications of sound principles. Proper holistic approach can save many a person from being unjustly marked with "derogatory" diagnoses, from the disadvantages of which they may suffer for the rest of their lives.

Sometimes the diagnosis of "psychogenic" somatic symptoms is made by the diagnosing authority to compensate for his own feeling of inadequacy, if he is not able to demonstrate adequate "objective" pathological findings which could be made responsible for the patient's "somatic" symptoms. On the other hand, due to our causalistic training, incidental pathologic somatic findings are sometimes falsely declared and treated as the cause of the patient's symptoms.

According to psychosomatic theory and practice many diseases may be considered as resulting from emotional states via the neuro-endocrine system. It should be borne in mind, however, that the reverse may also be true: subclinical pathological somatic processes—unrevealed because of insufficient work-up or inadequate diagnostic methods—may cause changes in the patient's behavior. Although psychotherapy may enable him to understand his disproportionate emotional reactions and to control them to a certain extent for a certain length of time, the progressing bio-chemical, micro-biological and histo-pathological changes may lead to more or less serious clinical manifestations.

The actual situation in most cases, however, is that the individual, as a member of a neurotic familial and social set-up, suffers both from a more or less developed neurosis and some organic imperfection (including imperfections of his neuro-endocrine system!). His "somatic" deficiency and his neurosis continually affect each other.

The psychosomatic role of organ inferiorities may satisfactorily be explained by the "phenomenon of facilitation" which denotes the following experimental observation: If a leg is stimulated by a minimal electric current—insufficient to cause visible contractions—and at the same time it is exposed to minimal external, thermic, chemical, or mechanical irritation, it will react with a marked increase of the electrical potential as recorded during the muscle contraction. The same minimal external irritations, however, will not cause any activity when the leg is not stimulated by the previously applied minimal

electric current (21). These observations seem to support the view that "psychosomatic" diseases may easily arise in an "inferior" organ which had previously, although subclinically, been affected, i.e., "pre-disposed" at the time of pathogenic stimulation. Thus, we may postulate that relatively minor, seemingly inadequate stimuli may function as precipitating or aggravating agents by adversely affecting existing subclinical, structural or functional deviations. Such precipitating or aggravating agents, however, may be provided by inanimate environmental influences (e.g., adverse climatic conditions, infection, traumas, toxins, etc.) as well as by "psychic" processes upsetting the normal physiology of the neuro-endocrine system. ("Facilitation from above.") (13) Babinsky proposed the term "physiopathic" to imply the somatic basis of those hysterical symptoms which—on insufficient evaluation—might appear as "psychogenic." Actually psychogenic symptoms are according to his terminology, "pithiatic," i.e., curable by persuasion (in Greek, "*pethein*" means "to persuade," and "*iatos*" means "curable" (8)).

Many "somatic" diseases—acquired and inherited—directly affect the neuro-endocrine system, e.g., certain rheumatic conditions, metabolic and hematologic diseases, lues, arteriosclerosis, tumors, etc. For instance, there is sufficient evidence of the involvement of the neuro-endocrine system in rheumatic disorders on one hand, and of the influence of the neuro-endocrine system on behavior on the other, to assume that behavior changes and rheumatic disorders may *concurrently* be caused by the same rheumatopoetic agent. Clinical symptoms may even precede the "objective" manifestations of the disease so that instead of talking of "psychogenic rheumatism" one could rather frequently speak of "rheumatogenic psyche" (19, 20).

To understand the full significance of co-existing "somatic" and "psychic" symptoms, it should also be borne in mind that, especially chronic, patients sooner or later seem to manifest apparent "changes" in their behavior as a function of their bio-social integration. Several considerations may be helpful in the understanding of such behavior changes in somatically afflicted persons. Probably the most important fact is that behavior changes do not necessarily imply changes in personality, or in attitude. Congenital, and early acquired disabilities may be looked upon as constitutional, i.e., "inherited equipment," (6) or "working capital" (16). Afflictions originating after the development of the life-style (about the age of four to six) may be considered as changes in environmental circumstances, thereby necessitating modi-

fications in the use of the original, inherited equipment. Behavior changes may also be influenced not only by decreased working capacity and physical discomfort but also by lack of support and understanding on the part of the environment. The patient's deflated self-respect and inflated inferiority feelings will naturally invoke compensatory mechanisms by various—frequently mistaken—means and ways. The inadequacy of such compensatory efforts, if unchecked, will result in a vicious spiral created by a steady increasing degree of inferiorism, striving for superiority, failure, disappointment, discouragement, and so on (Sisyphus Complex) (18). The goal-directedness of one's life-style as the principal dynamism in the psychic superstructure of "somatic" symptoms is usually not changed; even if the rate of movement toward the goals, the choice of means and methods toward, and the actual details of the goals have changed. What on superficial observation may appear as a change of life-style effected by somatic affliction usually is not an actual change but a modification of the manifest behavior. It is the same basic personality which devised new "tricks" (4) suitable to the new demands of the pertinent life-situation. This fact becomes increasingly evident in patients treated with ACTH and cortisone, or subjected to prefrontal lobotomies. Even in severe reactions to ACTH and cortisone the basic personality structure of the patient has not been changed. Similar observations were also made in patients after lobotomies. Based on prolonged observations made on a great number of cases, it can be stated that the psychological social index (PSI)—the ratio between social feeling and self-assertiveness—usually does not significantly change (18). There may be a minor shift in, but not a reversal of, the PSI due to the understandably increased self-concern in somatic afflictions. Not infrequently, however, there may also be a shift in the other direction, namely, an increased social feeling due to the more pronounced sincere empathy for fellow human beings.

IV. EVALUATION OF "PSYCHIC" SUPERSTRUCTURE OF "SOMATIC" SYMPTOMS

In order to understand and evaluate the relative psycho-dynamic role of "somatic" symptoms among the other symptoms of holistic integration, it was necessary to devise a workable and empirical formula which would make it possible to qualitatively and quantitatively determine "integrational stress" as closely as possible. Such a hological approach (i.e., from the viewpoint of the logic of the whole)

leads to dealing with a person's total bio-social integration and not with his presenting symptoms which may or may not be his only, or even his main problem. The practical advantages of such an analysis and evaluation against the background of the total bio-social integration (BSI) are evident even if the individual factors can only approximately be "sized up."

$$BSI = \frac{(G + T) O}{(E + M) S} = \frac{(\text{Goals} + \text{Tasks}) \text{Obstacles}}{(\text{Equipment} + \text{Means}) \text{Striving}}$$

The meaning of the symbols used in this formulation of a person's bio-social integration may be briefly summed up in the following:

G: Goals as set by one's life-style with or without one's being fully aware of them. (Primary, or subjective goals.)

T: Tasks which one has to fulfill regardless of whether they are or are not in line with one's own goals. (Secondary, or conditioned goals.)

O: Obstacles, i.e., external and internal difficulties encountered in the process of bio-social integration, including self-assertiveness, somatic symptoms, competition, etc.

E: Equipment (intrapersonal) available for use in the process of integration, including constitutional and acquired somatic and mental capacities and abilities. ("Working Capital") (16).

M: Means and methods (environmental) one has available and is willing to employ in one's process of bio-social integration.

S: Striving for optimum bio-social integration represents the individual's attitude toward the above enumerated factors which—in last instance—activates and determines the use of his intrapersonal equipment and environmental means. This complex factor could be looked upon as one's "psychological armamentarium" including motivation, courage, zeal, goal-directedness, will-power, social feeling, capacity for frustration, forbearance, perseverance, etc.

If $BSI=1$, we may speak of "integrational balance" (or "equilibrium"). If $BSI<1$ we may speak of "integrational control" (ease, or proficiency). This is the case when the "load" (the combination of the factors of the numerator is less than the available "energy" (the combination of the factors of the denominator). If $BSI>1$, we may speak of "integrational deficit," or "stress." This is the case when the "load" exceeds the available "energy." (The practical application of determining such a "stress co-efficient" or "stress-indicator" will be

dealt with in a forthcoming paper in which the diagnostic and therapeutic implications of the BSI formula will be demonstrated.)

Proper interpretation of the BSI formula will reveal the disbalancing factor(s) and the compensatory adjustments which are needed to achieve integrational balance. From the standpoint of our present investigation, however, we are mainly concerned with two questions:

a) Where and how do one's somatic symptoms and their psychic superstructure affect one's integrational stress?

b) Whether and how can integrational balance be achieved.

From a mechanical, or mathematical viewpoint, one would be tempted to conclude that somatic symptoms must necessarily and considerably increase integrational stress in two ways:

a) By increasing "O" i.e., obstacles (unfavorable attitude of environment toward somatic deficiencies, increased demand on one's financial resources, time, and energy usually connected with disease, etc.)

b) By decreasing "E" and "M" i.e., one's available equipment and means.

In any individual case, however, a holo-logical compensation may take place to prevent increase of, or to actually decrease integrational stress. Such somato-psychic dynamism, of course, does not always imply striving toward recovery from the somatic symptoms. In fact, certain mistaken holo-logical compensatory methods intended to decrease integrational stress may actually become detrimental to recovery.

How an individual reacts to his somatic symptoms depends on his life-style.

In "normal" and in a great number of "border-line" persons, the somato-psychic dynamism (i.e., psychic superstructure of somatic symptoms) is directed toward overcoming of or compensating for the impairing somatic symptoms, i.e., striving for restitution of health, or for compensatory abilities. In these cases we may speak of "*stimulancy*" (the stimulatory function) of somatic symptoms.

On the other hand—although on superficial thought it may seem paradoxical—somatic symptoms may be used as serviceable instruments in one's bio-social integration. It is not difficult to find an analogous mechanism in nature, namely, where weakness is employed as an ingenious and successful weapon of preservation of self or species. Such a holo-logic compensatory mechanism instead of striving to overcome somatic symptoms renders them instrumental in the interest of one's bio-social integration. In these cases, we may speak of "instru-

mentality" of somatic symptoms. Instrumental or purposeful use of—instead of overcoming—somatic symptoms may be directed:

a) toward decreasing the factors of the nominator by various means and methods (e.g., as alibis to avoid or diminish goals and tasks, to evoke sympathy in others to eliminate or diminish obstacles, etc.).

b) toward increasing factor "M" (i.e., means) of the denominator by provoking sympathy of others to make extrinsic means more easily available in form of help, or of certain privileges.

In the following discussion of "stimulancy" and "instrumentality" of somatic symptoms some forms of the instrumentality of somatic symptoms will be given spatial preference.

A) *Stimulancy of Somatic Symptoms (Stimulatory Tendency of Somatic Symptoms)*

Generally, this mechanism will be found in persons with a well-balanced psychological social index because they readily recognize optimum ability as their "natural" means toward optimum bio-social integration. This results in adequate, or excessive striving for overcoming somatic impairments and their psychic concomitants and/or for (over)compensation in other areas of somatic or psychic activity. Somatic impairments in these cases are being dealt with as any other obstacle in one's integrational endeavor; namely, either as having to be overcome or as requiring special adaptation.

However, it would be a mistake to conclude that persons in whom this natural, usually useful, compensatory somato-psychic dynamism is observed, should automatically be considered as "normal" or "well-adjusted."

Oftentimes, persons with severely neurotic strivings for self-assertion—if physical fitness is advisable—will tend toward optimum recovery despite their low social interest. Typical examples of the latter type are persons whose intense feelings of inferiority have habitually been masked by an obsessive striving for possessions ("Midas Complex") (18). Naturally, such activities although a product of a neurotic life-style, require optimum physical condition as a means to neurotic goals. Similar mechanisms may often be found in sportsmen, stage people, politicians, in elderly persons fighting their aging, etc., etc.

Escape from unpleasant, unwanted, or hated situations may also require recovering from incapacitating somatic symptoms, (e.g., escape from a hated home-bound situation in patients with locomotor impairment requires riddance of their somatic symptoms). These cases,

regardless of the patient's psychological social index, belong to this category of stimulatory of somatic symptoms because striving to overcome and not utilization of the symptoms represents the actual somatopsychic superstructure. Sometimes similar mechanisms of "flight into health" may be intended to avoid psychotherapy, particularly the uncovering of the neurotic origin or superstructure of the symptoms.*

The arbitrary terms "normal" and "neurotic" should not be considered, therefore, as synonymous with "well-adjusted" and "maladjusted," respectively. A large number of seemingly well-adjusted and adequately functioning people represent innumerable degrees and forms of transition between "normal" and "neurotic." Many individuals with neurotic self-elevation tendencies may dominate their environment by authority, power, stratagems, etc., so that from a behavioristic, and pragmatistic viewpoint they seem to be well-adjusted. Their neurotic self-assertiveness may reveal itself whenever their make-shift contentment or control is threatened. On the other hand, there are individuals who, despite ability and efforts are thrown into failure by overwhelming obstacles. From a behavioristic viewpoint they may seem "maladjusted." Basically, however, their reactions are still within the limits of "normality" and it takes much more obstacles to effect a complete "nervous breakdown" in them than in many seemingly well-adjusted individuals.

B) *Instrumentality of Somatic Symptoms*

According to our cultural standards, every member of human society is expected to overcome, to compensate for, or to adapt himself to any internal or environmental obstacle encountered in his bio-social integration. Furthermore, he is expected to accomplish such overcoming, compensation or adaptation:

- a) by socially sanctioned methods;
- b) without emotional derailment;
- c) with no encroachment upon or interference with the bio-social integration of others; and
- d) with no demonstrable violation of the written law.

The same cultural standards, however, in individual evaluation ascribe impropportionately more significance to success than to methods. The individual, therefore, may unintentionally, even compulsorily,

* Dreikurs described such a case in the German pamphlet, "Das Nervöse Symptom," published by Moritz Perles, Vienna, 1932.

succumb to the temptation of preferring stratagem to struggle. In a number of cases such a teleo-psychological stratagem employs somatic symptoms as a relatively safe, easy, and fast method toward goals which appear useful and/or worthwhile. Such goals may or may not be achievable by recovery from and/or by compensation for somatic symptoms.

Two seemingly different but in principle similar working mechanisms can be recognized when somatic symptoms are used toward "private" goals:

1) The patient may want to evade something by retaining his somatic symptoms. In this instance, the patient's private, imaginary interest implies negation of some undesirable responsibility of situation. (Negative purposiveness of somatic symptoms.)

2) The patient may want to achieve something with his somatic symptoms. In this instance, the patient's imaginary interest implies some positive goal which is envisaged by the patient to be achieved with his somatic symptoms. (Positive purposiveness of somatic symptoms.)

3) Frequently, both mechanisms can be observed in the same patient. Something toward which the patient assumes a negative attitude must first be avoided in order to achieve some other goal. The same mechanism may also serve as a safeguarding device in face of responsibilities to which one does not feel adequately prepared. In these cases, the negative purposiveness of the somatic symptom lies in the vague hope that those responsibilities still might be avoidable. The positive purposiveness of the somatic symptom is that it is intended to be used either as a justifiable alibi in case of failure, or as an entitlement for "special" recognition for "accomplishment despite obstacles." (Combined purposiveness of somatic symptoms.)

Sometimes those private goals are readily and consciously referred to by the patient's own unsolicited statements. In other cases, a direct or indirect hint as to such "private" goals may be gained by a properly formulated and timed "reversed inquiry," i.e., inquiring into anticipated activities which the patient would (like or have to) perform if the somatic symptoms would not hinder him (e.g., looking or preparing for a better-paying job, taking care of a household, getting married, nursing a sick mother-in-law, studying, etc.). Frequently, the activity in which the person "wants" or has to be engaged is the very thing he wants to avoid or is afraid of.

A carefully taken case-history—not arousing the patient's suspicion of being searched for actual connection between his life-style and his present ailments—may among others reveal two important facts:

1) Somatic symptoms had been successfully used by the same person in his childhood to avoid certain duties, such as attending school, being punished for misdeeds; to cover for failure; to receive some advantages, e.g., toys, a trip, the parents' special attention, or their staying home, when they planned to go out, etc.

2) The individual's life-style has basically not changed since his childhood.

These findings should not be interpreted as proofs of "immaturity."

How positive, negative and combined purposiveness of somatic symptoms may actually manifest themselves was discussed in a previous paper. Here, the principal clinical—mainly quantitatively different—forms of the instrumentality of somatic symptoms will be discussed under four headings starting with the least severe form:

a) *Symptom-consciousness*

Some persons are "body-conscious" individuals and seem to have a compulsive need for awareness of some bodily symptoms. They usually exaggerate the importance of the old "sound soul in sound body" pseudo-causalistic principle as a condition *sine qua non* for their successful bio-social functioning, especially if their achievements did not fully meet their own or their environment's expectations. However, they do not indulge in blaming others, society, circumstances, bad luck, and other extrinsic factors. They find, instead, in somatic imperfection a satisfactory, readily available, continual alibi to counter-balance their own or their environment's disappointment.

Symptom-conscious individuals should not be considered as hypochondriacs. They are rather sort of symptom-addicts who habitually indulge in thinking, observing, talking, or reading of somatic symptoms. (Cf. "Preference for discussion of illness" as a symptom of anxiety neurosis) (14). They may or may not seek relief from their trivial symptoms. They soon become aware of some other somatic symptom if and when relieved from a previous one. They may or may not solicit sympathy and leniency from their environment. However, when they become affected with an actual, serious illness, they usually suffer profoundly and usually sincerely strive for recovery.

b) *Symptom Utilization*

Under symptom-utilization is meant the more or less conscious

utilization of somatic symptoms to avoid unwanted situations or responsibilities, or to pursue certain "private" goals. Symptom-utilization may appear entirely "justified" and rational; its neurotic motivation may often remain undetected. Of the great number of variations of symptom-utilization only three—clinically rather frequently encountered—forms should be mentioned here (more as illustrations than classification): (*aa*) avoidance of manifest or suppressed integrational tension, (*bb*) avoidance of "strategic" feelings of inferiority or anxiety, (*cc*) attitude of "award-hunting."

aa) Avoidance of manifest or suppressed integrational tension. Individuals with severe feelings of inferiority, anxiety, guilt, insecurity, martyrdom, etc., may satisfactorily have carried on their duties. At the cost of considerable psychic tension, they appeared with a "mask of normalcy" as well-adjusted individuals despite their difficulties in their bio-social integration. Some adequate, intercurrent somatic symptom, however, is not unwelcome and is readily utilized as a means of escape from a distressing psychic tension caused by the increased energy expenditure which was necessary to carry on normal activities.

bb) Avoidance of "strategic" feelings of inferiority and anxiety. Utilization of somatic symptoms may often be found in persons who suffer from endogen and/or exogen discouragement or who greatly underestimate the factors of the numerator of the BSI formula.

A special category of this group is comprised of those whose discouragement resulted not from fear of failure but from fear of success. The anticipated burden of responsibility which is expected to follow a possible success may seem to be undesired, not worthwhile, or beyond one's assumed capacities. Actually, these persons harbor fears of failing in the role to be achieved. In such cases adequate somatic symptoms may inconspicuously be utilized to avoid such activities which may result in acquiring more responsibilities than one is willing to accept, or one feels adequately prepared for. (Strategic feelings of inferiority, or anxiety.)

cc) Award-hunting attitude. Although financial advantages may frequently be expected from somatic symptoms, its actual significance is in many cases misinterpreted and overemphasized. It is not the actual monetary value but its significance in the individual's life-style, his "totemization" of money, his habitual "finalization of means," or "Midas Complex" which play the deciding role in apparently "award-hunting" patients. Not infrequently the real motivation for "award hunting" is the misdirected compensatory tendency to strive for a

feeling of superiority through outsmarting "the authorities." It is also observed in persons whose friends succeeded in receiving some form of "easy money" (a "totem" in their culture) and who could not tolerate to be less "clever" than their friends.

From the psycho-dynamic and psychotherapeutic viewpoints a rather difficult problem presents itself in those patients for whom somatic impairment seems to represent, as it were, their "only assets." Although these patients do not primarily intend to utilize their somatic impairment as a legitimate excuse for retreat from obligations, they are unwilling to give up whatever token security they might see in their somatic symptoms. From a teleo-psychological standpoint, these forms of utilization of somatic symptoms may represent a primitive form of "fight for survival" against a background of severe feelings of inferiority, anxiety, discouragement, and insecurity, without adequately functioning compensatory strivings. This mechanism is most frequently noticeable in patients with a relatively low or insecure means of livelihood.

c) *Symptom-intensification*

Subjective intensification of somatic symptoms mainly occurs in two forms:

1) *Psycho-dynamic specificity of somatic symptoms.* The term "psycho-dynamic specificity of somatic symptoms" refers to the observation that different persons manifest different attitudes toward the same symptoms and signs, as may be the case with the same persons in different pertinent life-situations. "Specificity" refers to both the localization and the category of symptoms. Certain individuals ascribe improporionately exaggerated significance to certain somatic symptoms, e.g., a slight sensation in the left side of the chest may appear as an alarming symptom to heart-conscious persons; recurrent indigestion may often seriously upset cancer-conscious individuals; in others, repeated headaches frequently create thoughts of brain tumor, etc.

Individuals ascribing exaggerated significance to certain symptoms often relate either a history of that particular category or localization of disease in one of their relatives or friends; or exposure to various "educational" campaigns and pamphlets popularizing certain abhorred diseases, e.g., cancer, heart-disease, infantile paralysis, multiple sclerosis, etc. Those persons, so to say, become sensitized to certain somatic symptoms, which, if and when present, may produce a psychic super-

structure entirely out of proportion to the degree of the actual somatic disturbance ("Semantic shock").

2) *Improportionate perception of and reaction to somatic symptoms.* The second principle form of symptom-intensification is found in those persons who perceive and express the intensity of their somatic symptoms in a severity out of proportion to their actual degree. Exaggerated intensity of somatic symptoms is more frequent and more difficult to deal with when it occurs in connection with pain.

Among the many difficulties in evaluation of one's perception and expression of pain we find that:

aa) The threshold of pain varies not only from person to person but also with different types and localizations of pain in the same individual.

bb) Not only the actual perception of pain but individual expression of pain is determined by personality factors, yet unrevealed constitutional elements, etc. (Lobotomized patients are known actually to perceive pain, but their reaction to pain seems to be surprisingly objective, accepting it as a matter of fact experience, void of emotional concomitants.)

cc) The psycho-dynamic specificity of particular somatic symptoms, as described above, greatly influences not only the degree of pain perception but also the form of its expression.

dd) Previous perception of a significant pain-sensation of a similar type may also act as hyper-sensitization to specific pain-sensations. (E.g., ear-ache unbearable to a patient because of humiliating experiences connected with "ear-pulling" in his adolescence; injection-pain in children whose resistance to injections were overcome by forceful or tricky humiliation.)

ee) Any situation which may represent motivation for the above described mechanism of symptom-utilization may lower one's endurance of pain, especially if some form of symptom-utilization is being anticipated.

Symptom-intensification may serve as a suitable, as it were pre-arranged justification for anticipated symptom-utilization.

d) Adherence to Somatic Symptoms

A person manifesting subconscious resistance to recovery harbors some specific, usually imaginal, "interests" as his subjective solution of his problems. Apparently co-operative and submissive patients

may often hide deeply rooted neurotic adherence to their somatic symptoms.

Clinically, this category of patients presents the most difficult therapeutic problems. One outstanding—but sometimes very subtle and well disguised—symptom is the “sabotage” of therapeutic efforts, especially if some improvement in the somatic condition has already been achieved. Obscure relapses, therapeutic stagnations, and lack of response warrant close investigation of this form of psychic superstructure, the significance of which will be found very variable. In certain cases it means to “beat a retreat from the problem confronting the individual and to secure that retreat by retaining the physical or psychical symptoms of shock that have arisen” (6).

Another form of this psychic superstructure of somatic symptoms may be found in patients who—instead of striving for troublesome and doubtful recovery or compensation—strive for “emotional superiority” which is considered less troublesome and less doubtful. Such feeling of emotional superiority of physically suffering persons may be achieved in different forms and ways. (Those were discussed in a previous paper (18).)

Freud's theory of resistance to cure as a reversal of the normal self-preservation instinct into a destructive instinct directed inwards cannot be substantiated. Even if self-destructive tendencies are present in certain cases they usually do not represent the final purpose, but the means to some other purposes, e.g., punishment of others, self-glorification, martyrdom, “heroism,” or safeguards from anticipated crushing defeats, and innumerable other neurotic purposes to be achieved at any price. The greater the price one has to pay for one's neurotic purposes, the higher is the subjective self-significance and self-elevation. These cases often show that striving for self-perseveration—as discussed above—often actually over-shadows strivings for biological self-preservation.

In rare instances, adherence to somatic symptoms may develop into a more or less conscious, as it were, “slow-motion” or chronic suicide. Even then, we don't observe gratification of self-destructive “instincts” but an all-out pursuit of the above mentioned purposes by unusual means, i.e., subordination of self-preservation to self-perseveration, or the avoidance of “unbearable” defeat.

In many patients resisting recovery, an overt or disguised feeling of guilt may arise: the guilt of taking advantage of a basically hateful situation. Such guilt feelings may be “genuine” or ostentative; they may be intended for intra-personal, or interpersonal consumption, or

for both. At any rate, such guilt feelings have certain teleo-psychological functions (11), such as to express and counterbalance feelings of "immorality" in a culturally accepted way, to effortlessly secure a feeling of "moral" superiority as an effective safeguard against feelings of obvious or assumed "immorality"—and last but not least, to suppress a continual anxiety that the instrumentality of somatic symptoms may at any time be discovered. Thus, the concept of "instrumentality of somatic symptoms" readily explains the psycho-somatic "vicious spiral" in which the individual becomes the more trapped the more his compensatory mechanism is misdirected into channels of his "private logic."

From the teleo-psychological standpoint the superstructure of somatic symptoms represents a holo-logical manifestation of a disturbed and determined personality attempting compensation. That is a personality who is:

1) disturbed by his symptoms which actually, potentially, or imaginatively threaten his striving for optimum bio-social integration, and which lead to a complex, more or less subconscious psychic superstructure;

2) determined by the quantitative and qualitative relations between the (actual, potential, or imaginal) effects of his symptoms on his goals, task, and obstacles on the one hand, and the available individual equipment, means and strivings on the other;

3) attempting either a "useful" or a "mistaken" compensation as a definitely purposive solution to safeguard his goals, either recovering his abilities ("stimulancy of somatic symptoms") or retaining his disability as his main operational means, respectively ("instrumentality of somatic symptoms").

SUMMARY

The author demonstrates the theoretical and practical applicability of teleo-logical and holistic principles implicit in Individual Psychology to medicine. A system of bio-social teleo-psychology is outlined as an indispensable phase of a truly holistic medicine based on a holo-logical (i.e., viewed from the logic of the whole) concept of MAN as a bio-socially determined symbiotic entity.

Teleo-psychological approach must consider MAN not only from the standpoint of self-preservation (i.e., preservation of one's physical existence in an inanimate environment) but also from the standpoint of his functioning in the "animate" field of existence—what the writer

terms "self-perseveration." He considers "self-perseveration" as used in this sense indispensable for the preservation of human society. As biological self-perseveration, i.e., reproduction, is facilitated by the sex-urge, so social self-perseveration is facilitated by the "deed-urge," i.e., striving for accomplishments. If human beings are endowed with "innate actualities" (Alfred Adler's term for "urges") directed toward preservation of the human race, they must also be endowed with "innate actualities" directed toward preservation of the field of their existence, i.e., society.

"Finalization of means" is described as a commonly and easily detectable teleo-psychologic mechanism resulting in certain psychopathological and socio-pathological phenomena. By "finalization of means" is meant the pursuing of a means-toward-a-goal as if the means were the goal in itself; e.g., money (actually a means of exchange of goods), sex-gratification (actually a means toward propagation), feeling of significance (actually a means toward social accomplishments) are being pursued as end-goals—sometimes defying their original purposes.

After discussing the psychological significance of self-preservation and self-perseveration in "optimum" bio-social integration, the author elaborates on the psycho-dynamic aspect of "urges." The recognition of the direction and methods of overcoming of those "innate actualities" furnishes important data for psycho-diagnosis and psycho-therapy.

Theoretically, a "normal" personality may be conceived of as one who endeavors to develop his capacities for the needs of society and to fulfill his needs for the capacities of society. Thus, a "neurotic" personality's difficulties arise from his misconceived striving for adjusting society to himself with habitual disregard for the needs and capacities of society. In actuality, however, endless gradations between the two extremes are encountered.

The author then deals with the psychological superstructure of somatic symptoms.

A person's attitude and "reactions" to his somatic symptoms—pain, disturbed function, and deformity—must be considered along with his attitude and reaction to the other cardinal problems of his life (sex, subsistence, society). For didactic purposes, the author offers the mnemotechnic term "tetralogy of the four 'S' problems": Sex, Subsistence, Society and Self.

Encouraged by recent accomplishments of mathematical biology, the author proposes a workable formula of "biosocial integration"

(BSI). The practical usefulness of such a formula is briefly outlined and the role of somatic symptoms in that formula is evaluated.

It will be found that a person's attitude toward his somatic symptoms is determined by his general attitude. For didactic purposes, Adler classified general attitude into four groups: struggling (or overcoming), ruling, avoiding, and getting. Somatic symptoms may stimulate toward overcoming the symptoms themselves or toward (over-)compensating for the symptoms either in the same general or in entirely different areas. ("Stimulancy of somatic symptoms").

On the other hand somatic symptoms may be used as means toward some (usually mistaken) goals. Different gradations of such "instrumentality of somatic symptoms" are discussed, such as, symptom-consciousness, symptom-utilization, symptom-intensification, and adherence to symptoms. The purposiveness of this mechanism may be recognized as positive, negative, or combined, i.e., to achieve, to avoid something, or both, respectively. The most common forms encountered in clinical practice are discussed, e.g., award-hunting, strategical inferiority feelings, psycho-dynamic specificity of somatic symptoms, disability as "only asset," guilt feelings, Sisyphus complex, chronic suicides, etc.

The writer conceives the psychic superstructure of somatic symptoms as a "disturbed and determined personality's attempt at compensation" and considers it as an important function within the individual's total bio-social integration. How and why those disturbances occur, what factors determine a "personality," how the attempts at what forms of compensation are being made—these are the main problems to which the author offers a practicable approach.

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