

Outline of Teleo-Psychological Principles in Rehabilitation of Physically Handi- capped Persons

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This paper is intended to serve as a preliminary communication regarding the problems so frequently encountered in rehabilitation work, in order to clarify the rehabilitator-rehabilitant relationship to the benefit of both, namely, generating an encouraging feeling in the rehabilitant that not only is he not alone during the process of rehabilitation but that he will not be left alone afterwards.

I. PSYCHO-DYNAMICS OF SOMATIC DISABILITIES AND THEIR APPLICATION IN REHABILITATION

Somatically handicapped individuals may fall into any or all of the three categories of "imperfect organs" described by Alfred Adler (3): impaired function, deformity, and pain.

To a varying degree, those organ inferiorities *actually* hinder them in their strivings for optimum self-preservation, self-assertion, and proper functioning in human symbiosis (social functioning).

Normally, people react to any category of organ inferiority with a commensurate feeling of inferiority which initiates constructive efforts toward over-compensation (25), e.g., Laura Dewey Bridgman: blind-deaf-mute; "Stratton Story"; F. D. Roosevelt; Lord Byron, etc. Compensatory efforts may be undertaken with conscious or unconscious motivation, and with the goal of decreasing or of overcoming the actual disability, or of developing abilities in other physical or mental areas.

In a great number of cases, however (according to Kubie (45) approximately 33 per cent), the patient's conscious or unconscious "resistance to ability" makes routine rehabilitation extremely difficult. Any neurotic resistance may constitute a serious handicap in itself. But, if accompanying a physical handicap, it aggravates all the consequences of the somatic as well as of the emotional disability.

In these cases a planned total rehabilitation program becomes imperative if re-routing of the patient's strivings toward normalization of his goals and means is to be achieved. "It is not the organic deficiency which is to blame for the failure, but our method of education," as Adler (5) has stated.

It is mainly in these cases that the psychological preparedness and fitness of the entire rehabilitating personnel (including physicians, physical and occupational therapists, vocational counselors, psychologists, claim examiners, social workers, members of the different public and welfare agencies, and last but not least, members of the disabled person's family and environment) becomes of extreme importance. (44, 54, 69)

The magnitude of this problem becomes evident if one gives more than a passing thought to the fact that the number of physically disabled persons in the United States alone amounts to 25,000,000 at present; will yearly be increased by 350,000, without wars (2), and will gradually and unpredictably increase with the constant upward shifting of the upper age-limits of the population.

Modern psycho-dynamic concepts furnish two important basic principles for the validation of the concept of total rehabilitation:

1. A human being can properly be understood only as a *bio-social entity* manifesting himself in biological (somatic *and* psychic) as well as in social (cultural *and* economic) areas of his existence. This interrelatedness among all the areas of human functioning is continuously fluctuating. (Dynamism of human indivisibility.)

For a concise comprehension of the psychological concept of "bio-social entity" the following passage is quoted:

"Biologic" should not be comprehended as synonymous with "physical" nor should "social" be regarded as synonymous with "economic." "Biologic" should rather imply all somatic and psychic areas of "*bios*" (life). "Social" should refer to the forms and contents of the continuous interactions between the individual and his animate and inanimate environment with the implicit purposiveness of optimum preservation of both the individual and society. Arbitrarily, "social" can be subdivided into "cultural" and "economic" aspects. Thus, the term "bio-social entity" signifies that in every human being there is a constant and dynamic inter-

dependence among the innumerable aspects of his somatic, psychic, cultural, and economic spheres. (58)

2. The ultimate goal of optimum self-preservation—both in biologic (somatic and psychic) and social (cultural and economic) aspects—represents one of the main causative factors which direct human attitude and behavior. (Cf. Teleo-causalistic principle, purposive causation, purpose-conditioning, “feed-back path.”) (30, 38, 41)

“Optimum self-preservation” by no means implies any absolute or objective evaluation of goals but refers to the subjective and relative evaluation of all human goals and means, as the individual sets, evaluates, and pursues his goals and applies his means to achieve those goals.

What implications do these two principles have with regard to somatic impairments? Appropriate application of—not only “giving lip-service to” (39)—the holistic concept of human beings automatically formulates the following general postulate: Optimum somatic rehabilitation of somatically handicapped persons should be co-ordinated with and directed towards optimum psychic rehabilitation if he is emotionally imbalanced; optimum social rehabilitation if he is socially not integrated; and optimum economic rehabilitation if he suffers from economic deprivation. Optimum rehabilitation means the best reconditioning available and practicable under the prevailing circumstances in any given case. The ultimate goal, of course, is the state in which the best available rehabilitation will be practicable in every case.

In the last analysis, every person with a permanent or protracted physical impairment of any appreciable degree is in need not only of somatic but of mental, social, and economic rehabilitation as well. These four aspects of rehabilitation cannot be separated without jeopardizing the success of the entire rehabilitation program, be it institutional or non-institutional. This statement should not be interpreted to mean that all permanent physical disabilities necessarily lead to psychological immaturity, which had also been assumed (46).

It is neither the extent (3, 7, 24, 50) nor the duration (43, 57) nor type of the actual disability which determines a disabled person's adjustment dynamism in rehabilitation and social integration. It is a person's dynamic attitude—the pattern of which is generally formed in his early formative years—which plays a decisive role not only in his general life-style but also in his pertinent life-situations including disability, rehabilitation, and social integration.

This dynamic viewpoint can sufficiently explain the unsatisfactory and often contradictory findings concerning psychological concepts which were arrived at by mechanistic methods, e.g., statistics, inventory forms of psychological tests. "The personality is not determined by the inferiority but by the individual's reaction to the inferiority." (24) It has been stated that, generally, severely disabled persons seem to show less emotional imbalance than do the slightly disabled. (51) (Cf. "Marginality Theory," Barker, et al. (11).)

However, findings contrary to these hypotheses have also been reported. (21, 43, 50)

The belief that the attitude of the physically handicapped individual towards his limitations is a reflection of the attitude of those with whom he comes in contact cannot be generally and mechanically accepted. The attitude of the environment, however, to a great extent encourages or discourages the patient's efforts toward compensation for or overcoming of his limitations.

In the last analysis, a handicapped person's social re-integration—*as he sees it*—constitutes the motif for his rehabilitation. Rehabilitation is not to be looked upon as an end-goal but as a means to social re-integration. One's attitude to an instrument is naturally influenced by one's attitude to the envisaged achievement with that instrument.

Practically, this would mean: to what extent, and for what purpose is the individual using his disability? (18, 19) Is he determined to move and proceed toward a normal goal *despite* his disability, or does he try to achieve his goal with and on account of his disability? Is he fighting with his available constructive energy, or is he trying to use his disability *in lieu of* constructive energy? Is he trying to hide his disability, or is he trying to hide himself behind it? Does he consider his disability as an obstacle to be overcome or as a weapon to be used? Does the individual consider his disability as something to fight against, or to fight with? Briefly, does he see in his disability an enemy or a friend? Does he want to indulge in pity, sympathy, or does he accept his disability while endeavoring to utilize the abilities he still commands?

Rusk and Taylor (62) reported that "at the Illinois Children's Hospital in Chicago, out of 80 severely crippled children, 36 were described by their teachers and housemothers as tending to capitalize on their disabilities deliberately, although not necessarily consciously."

Through the psychodynamic process of identification, a handicapped

person's awareness of other handicapped persons' experiences in their social integration also greatly influences his attitude toward accepting the "challenge of ability." It has been emphasized that a handicapped person should be psychologically educated to meet the difficulties which may be encountered after rehabilitation in his attempts to be utilized and rewarded after rehabilitation. (45, 71, 11)

II. SOCIAL RE-INTEGRATION ("FOURTH PHASE OF MEDICINE") AS THE GOAL OF REHABILITATION REPRESENTS A DECISIVE FACTOR DURING THE PROCESS OF REHABILITATION

While active treatment of a sick or injured person constitutes the first phase of medical care, after-care and convalescence may be considered as the second, and the process of rehabilitation of the physically disabled as the third phase. (52) In the writer's opinion and experience a great number of rehabilitated persons are in real need of or could greatly benefit from: periodic follow-up examinations; information on medical advances in the management of their particular ailment; advice and supervision of continual chemical, physical or dietary therapy; medically supervised mental hygiene; evaluation of working and environmental conditions as to their effect on the person's somatic and mental *locus minoris resistenciae*; and an encouraging feeling that he is not alone *during* rehabilitation and also that he will not be left alone *after* rehabilitation.

Such a planned and systematic treatment of rehabilitated persons, especially of those suffering from permanent or progressive somatic ailments, could conveniently be considered as the "fourth phase" of medicine.

Post-rehabilitational aspects, *as viewed by the rehabilitant*, represent decisive factors determining many a patient's attitude and behavior *during* rehabilitation.

The thought emerges that not only the patient needs rehabilitation, but also the society in which the rehabilitated patient is to live. (29, 45) If society is unwilling and/or unprepared to utilize and to reward the fruits of rehabilitation, all the efforts will be only partially successful. Refusal of adequate utilization of restored ability will create a new chaos within as well as around the patient.

Idle restored energy may be more detrimental to the patient's somatic and psychic welfare than his disability! (37) It is not an exag-

geration to consider the phase of social re-integration of the disabled as the "fourth phase" of medicine, i.e., the phase which follows and utilizes the costly and tedious efforts of rehabilitation. Lack of a well coordinated post-rehabilitational program may constitute a great obstacle not only after, but also during rehabilitation. Many patients who may sincerely want to achieve the utmost from "what has been left" (Rusk) cannot clearly see their way after rehabilitation. This fact is especially true of and detrimental to elderly people!

From the patient's view the problem can be simplified by reducing it to one question: *Rehabilitation for what?* What reward can *he* (the disabled) expect from ability as compared with what he expects from disability? In what way—if at all—will his restored ability be helpful in his striving for optimum biological and social self-preservation?

The rehabilitation team dealing with a case should be capable of seeing the entire situation also from "where the patient stands." The fact that the patient's situation and standpoint are usually much more difficult and complicated than they appear to the attending personnel can be appreciated by doctors, nurses, therapists, etc., when they become disabled themselves.

Clinical intuition as well as the necessity of sympathy, understanding, flexibility, and responsiveness in the "art" of rehabilitation have been sufficiently emphasized. (12, 47, 48, 49, 50) The first prerequisite for all the postulated personal qualities of the rehabilitator, however, is *empathy*, the ability "to place himself in the psychological shoes of the patient." (17)

Influence of the "fourth phase" (i.e., the post-rehabilitation social re-integration) upon the "third phase" (i.e., the process of rehabilitation) can frequently be detected, especially in those rehabilitants who clearly recognize their *real interests* in optimum rehabilitation, and in those who seem to derive certain fictive, "private," or "imaginary interests" from their disabilities. In the numerous cases between these two extremes such an influence may not be conspicuous but is still present.

III. "REAL INTEREST" IN REHABILITATION: PSYCHOLOGICAL SOCIAL INDEX (PSI)

The goal of all rehabilitation is optimum restoration of function and/or form with minimal neurotic impairment, in the shortest pos-

sible time and for the longest possible duration. This goal represents the patient's "real interest."

It must be pointed out that restoration of function includes not only improvement or cure of the original disability but also the development of the handicapped person's other abilities which will ease the ill effects of and/or substitute for the original limitations. The task is not rehabil-

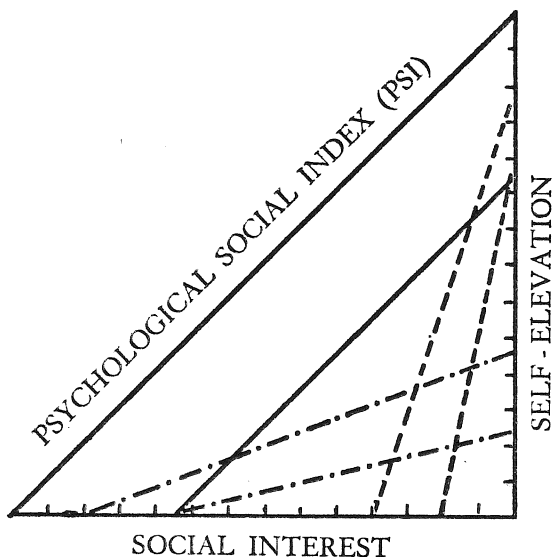


FIGURE 1

$$PSI = \frac{\text{Social Interest}}{\text{Self-elevation}}$$

- Business-like "balanced" social relationship, disrespect for "common good," revengeful attitude, etc. (PSI=1)
- - - - - Low social interest against marked self-elevation tendencies, egotism, ego-centeredness, severe inferiority feelings miscompensated by neurotic, improporionate superiority strivings. (PSI < 1)
- · - · - · - Near-ideal social attitude with strong feelings of responsibilities and "productive" feelings of inferiority. (PSI > 1)

itation of a *given disability*, but rehabilitation of the *handicapped person*.

It is the patient who is to be rehabilitated. Therefore, it is his teleological aspect (purposive view) which should be reckoned with in determining the methods, aims, and outcome of rehabilitation. (Directive Rehabilitation.)

Patients with a balanced "Psychological Social Index" (58) usually recognize their real interests. The "Psychological Social Index" (PSI) indicates the ratio between an individual's social interest and his personal self-assertion (See Figure I). Often, however, certain people with a low PSI and with severely neurotic strivings for self-assertion—if necessitating physical fitness—may also tend toward optimum rehabilitation. Typical examples of the latter type are people who have habitually been suffering from intense feelings of inferiority masked by an obsessive striving for feelings of superiority which they seem to find in turning everything they can into wealth ("Midas Complex"). Such activities—although a product of an unmistakably neurotic life-style resulting from misdirected and miscompensated inferiority feelings—naturally require optimum somatic restoration as a means to their goals. ("Fourth phase" clearly and decisively influences the third phase.)

Patients with a high "Psychological Social Index" who clearly recognize that their real interests lie in ability rather than in disability are the best candidates for rehabilitation and social re-integration.

Any patient's active co-operation can more easily be achieved if disability is recognized by him as being against the direction of his general life-line, and psychological guidance during rehabilitation should make him cognizant of this fact. Then, recognition by the handicapped person himself of ability as his *real* interest, should give impetus to his endeavors.

As an illustrative case of how anticipated post-rehabilitational aspects may affect the process of rehabilitation, a case may be cited which was described by Rusk and Taylor. (62) A young paraplegic veteran whose weight dwindled to seventy pounds and whose life "was a matter of time only," suddenly—due to an indirect psychotherapeutic effect—recognized his post-rehabilitational goal to be creative writing. From that moment on, this *goal* became the *cause* of a decisive change in his attitude and behavior during rehabilitation which became successful only after recognition by him of his real interest in ability, namely, creative writing.

IV. "IMAGINARY INTEREST" IN DISABILITY—"ANTI-REHABILITATION EMOTIONAL SYNDROME" (ARES)

A certain number of patients—even those who possibly could not expect any, or at least substantial, financial award for their handicap—present conscious or unconscious emotional inhibitions to their rehabilitation. (45, 53, 54) In the absence of an expedient and convenient diagnosis such as "compensationitis," "pensionitis," etc., some other reason for their resistance against restoration must be found. Practically all these reasons represent certain purposes—mostly well hidden and well guarded—in the patient's personality structure. Such purposes may appropriately be called fictive, private, or *imaginary interests*, because they are created by the patient's imagination as his subjective solution of his problems. The patient's problems may be very real but his solutions do not concur with generally accepted normalcy. Those solutions may or may not be arbitrarily labelled as neurotic but the anticipated *interests* are almost always *imaginary* and at variance with their *real* (objective) *interests*.

Creation of and adherence to imaginary interests in disability involve a complicated—more or less sub-conscious—psychic process which may be perplexing and dishearteningly difficult to manage during rehabilitation if the attending personnel is psychologically unprepared for such complications. In certain cases of severe resistance one can speak of clinically manifest "Anti-rehabilitational Emotional Syndrome" (ARES), the post-traumatic form of which is probably the most common and most representative.

In patients who offer serious resistance to their cure, Freud (31) postulated a reversal of the normal self-preservation instinct which turns into a destructive instinct directed inwards. Those patients—Freud stated—cannot tolerate the thought of being cured, and he assumed that suicide may belong to this category. These findings are not applicable even to those disabled persons who show serious inhibitions to their rehabilitation. They might harbor thoughts of suicide, they might talk about the purposelessness of their lives, but they do not commit suicide. In fact, they possess a very genuine and refined instinct of self-preservation which represents a necessary inherent quality without which it would be inconceivably difficult for them to carry on despite all the overwhelming odds. It is not unusual to observe that disabled persons are more alarmed by a minor inter-current physical ailment than the nondisabled.

If unusual tardiness in a handicapped person's rehabilitation is noticeable despite proper diagnosis and treatment of his physical condition and proper management by the entire rehabilitation team, the meaning and role of his handicap, as well as his anticipated post-rehabilitational aspects, should be psychologically investigated and evaluated rather than interpreted as a hypothetical "destructive instinct directed inward."

Two seemingly different, but in principle very similar, working mechanisms can be recognized in a patient's imaginary interest in his disability:

What does the patient want to *evade* by retaining his handicap?

What does the patient want to *achieve* with his handicap?

In the first instance, imaginary interest implies negation of some undesirable situation which the patient anticipates from his rehabilitation. (Negative purposiveness.) In the second instance, imaginary interest implies a *positive* goal which is envisaged by the patient to be achieved with his physical limitation. (Positive purposiveness.)

Not infrequently both mechanisms can be observed in the same patient. Something toward which the patient assumes a negative attitude must be avoided in order to achieve some positive goal. (Combined purposiveness.)

A. *Negative Purposiveness of Disability*

Imaginary interest in disability lies in refusal of what the rehabilitant anticipates from rehabilitation.

A young girl sustained a fracture of the right wrist. After prolonged treatment she was still unable to help her mother with household work which she had reluctantly performed before her injury. After her younger sister had definitely taken over her role in the household she became so co-operative in therapy that her hand was rapidly cured.

Such and many other similar cases prove that not only expected financial reward but any situation opposed to the patient's dynamic life-line can inhibit optimum restoration. Undoubtedly, her real interest was full restoration of her wrist-function. On closer observation, however, it becomes clear that the diagonal antagonism between her real interest (i.e., a good hand) and her imaginary interest (i.e., her freedom from household work) precluded her co-operation. (Negative purposiveness, evasiveness.)

The necessity of some arrangement which may decrease the patient's

neurotic resistance is a rather common occurrence in rehabilitational work. Such arrangements, of course, represent a form of environmental therapy which may abolish a neurotic symptom without changing the basic neurotic style of life, so that from a strictly psychiatric standpoint, much can be argued against the advisability of such an "expediency" solution.

Similar imaginary interests in disability will often be found in so-called disappointed people. To this group belong a great number of sick and injured patients. Such persons seemed to have had the right start, adequate ambition, endurance, and often abilities as well. For some internal and/or external reasons, however, they remained stagnating at a certain stage of their development and social integration. Finally, they resigned themselves to a disappointed and disappointing passivity. Disability in these cases offers a justifiable and legitimate reason for resignation from a fruitless ambition which has resulted in a vicious spiral of aspiration and disappointment, striving and humiliation, desire and frustration.

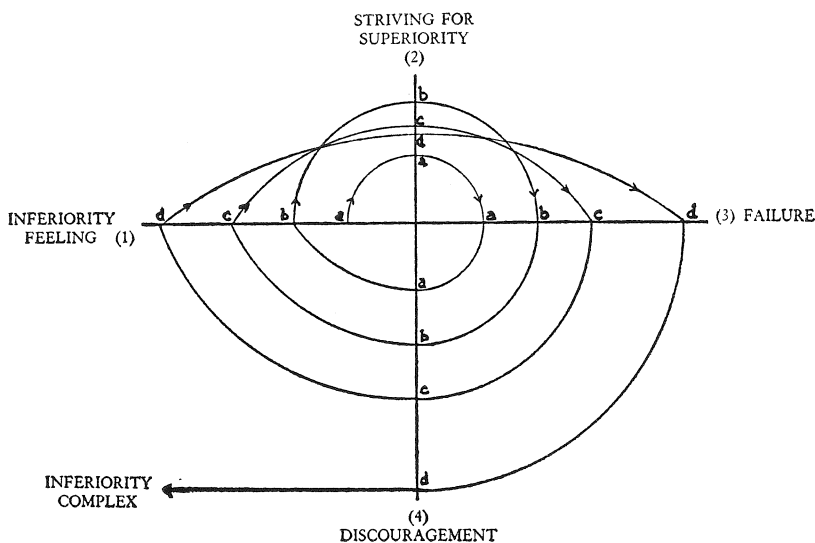
The "vicious spiral of bio-social failure" (58) can be represented by the following sequence of events, four of which comprise a psychodynamic cycle:

Normal inferiority feeling. — Striving for achievement and recognition. — Failure. — Disappointment (because goal of superiority cannot be achieved). — Accentuated inferiority feeling. — Emphatic striving. — Repeated failure. — Increased disappointment. — Still more accentuated inferiority feeling, etc. (Figure 2, p. 58)

Finally, the initial "normal" feeling of inferiority becomes an "inferiority complex" so that compensatory strivings are either paralyzed altogether, or degenerate into misdirected, demoniac, unreposing, or "fake" over-compensatory strivings.

The repeated failures, naturally, fail to compensate for the feelings of inferiority. The mounting irrepressible disappointments stimulate feelings of rebellious hostility, acute anxiety, (28) inexpiable guilt, and apprehensive insecurity, resulting in unresolved psychic tension. The number and intensity of the cycles "inferiority feeling, compensatory striving, failure, disappointment" which eventually result in a complete breakdown of the psycho-dynamic homeostasis, of course, vary from person to person, and from life situation to life situation.

This bio-socially conditioned neurotic complex in "disappointed people" might appropriately be termed "Sisyphus Complex." (58)



- 1 (a,b,c,d,e) Inferiorty feelings gradually deepening.
- 2 (a,b,c,d,e) Strivings for superiority gradually overwhelming.
- 3 (a,b,c,d,e) Failures more and more depressing.
- 4 (a,b,c,d,e) Disappointments, discouragements, de-compensated (instead of compensated) inferiorty feelings, resulting in feelings of unspecified displeasure, anxiety, guilt, insecurity, seclusion, and eventually in complete breakdown of psychic homeostasis.

FIGURE 2—Diagrammatic representation of “vicious spiral of bio-social failure” or of “Sisyphus Complex.”

Sisyphus, a figure in Greek mythology, was damned to roll a heavy stone up a steep mountain. The stone, however, was so heavy that it always rolled back down the mountainside just before he reached the top. This symbolic complex involves many aspects of a neurotic evaluation of bio-social functioning: mainly, the assumption of one's own capacity of strength, endurance, and ingenuity (represented by the heroic figure of Sisyphus); the load to be carried (the stone symbolizing duties, responsibilities); the obstacles against which one has to proceed (the steep mountain symbolizing difficulties in life); and failure (symbolized by the rolling back of the stone).

The above outlined “Sisyphus Complex” is applicable to a great many forms of neurotic behavior patterns to justify pessimism, worth-

lessness of all efforts, anticipation of inevitable failure, martyrdom, fatalism, evasion of unappealing tasks, etc.

It is readily understandable why this group of patients is rather difficult to manage. Resistance to acceptance of the challenges of ability serves a double imaginary purpose for them:

- to avoid* competitive strife (negative purposiveness); and
- to achieve* a state of fallacious peace of mind (positive purposiveness).

Peace of mind—as their imaginary purpose—can be achieved by them only by having a legitimate excuse for evading competitive strife. This peace of mind was not achieved because striving (by physical ability) had met with defeat which they could not “take” in sportsmanlike manner; hence self-esteem was lowered and energy paralyzed. Because of their basic ambitious strivings, however, complete withdrawal from their strivings leaves them restless, tense, and introverted.

How much feeling of inferiority, insecurity, anxiety, guilt, and self-effacement is needed for preferring physical impairment to potential failure—thus obstructing acceptance of the possibility of ability—is not the principal issue. The real issue is whether it is possible to restore the patient’s willingness to accept the possibility of ability which for him means challenge of competition even at the price of occasional defeats. This acceptance, however, cannot be achieved by soothing talks, platonically encouragement, or authoritative orders, etc.

Repeated assurances that a patient’s symptoms are “only” neurotic is the best method of conditioning him to his symptoms—the more so if there is any tangible award for disability involved. Neurotic adherence to symptoms may be even more intense when some, even minimal, financial award for disability is being “unjustly” withheld. A neurotic person may prefer lower living standards with unwelcome, competitive responsibilities. An important factor bringing about such a reversal in his social attitude is the more or less conscious rationalization that if his previous efforts had been so poorly rewarded, how much harder it would be for him, with his limitations, to cope with the difficulties in the competitive social re-integration!

Here again expedient but judicious compromise can effect the desired result. On the one hand, the person’s “Psychological Social Index” must be gradually adjusted so that his desire for self-elevation should

not greatly exceed his social interest. On the other hand, because of his low threshold for enduring defeats, his chances for success have to be improved by some arranged help. To speak in the symbolic terms of the "Sisyphus Complex" concept: the load (the tasks) he has to carry should be less heavy, and the mountain (the obstacles he has to overcome) should be less steep, at least until such time as his self-confidence will make it possible for him to accept the challenge of ability.

B. *Positive Purposiveness of Disability*

A frequent goal of positive purposiveness in disability is neurotic striving for love, sympathy, pampering, attention, martyrdom, devotion, etc. ("Emotional superiority.") This is seen mostly in persons who feel neglected, superfluous, unproductive, or jealous.

Similar positive purposiveness is present in some, especially elderly, people who feel neglected and a burden to their families, and who, rightly or wrongly, believe that they receive love and attention only when affected by some organic ailment. From this standpoint it is significant that in one careful study, approximately 20 per cent of "accident-prone" individuals were characterized as "longing to be pampered." (1)

Positive purposiveness of a given disability is also detected in patients who react to any, even a severe, injury with a seemingly paradoxical satisfaction. It is not unusual to notice calmness, mental balance, and even happiness in severely disabled individuals.

"In exceptional circumstances, it is conceivable that severe injury to an individual might be the factor that would bring about the resolution of a previous maladjustment." (50) Analysis of such seemingly paradoxical reactions may reveal a "curative" effect of injuries in lieu of other neurotic suffering. (45) One explanation of this phenomenon may be a hypothetical "feeling of guilt," the punishment for which has been accomplished through the physical disability.* Another explanation might be that the physical disability resulted in complete withdrawal from life's "firing line" and thus the "previous maladjustment" automatically resolved itself. (58)

Some of these patients may appear surprisingly satisfied and well

* For explanation of the *function* of neurotic guilt feelings, compare Anderson's "basic feeling of guilt" (10) with Dreikurs' "guilt feelings as an excuse" (26) and Hall's "guilt and punishment." (33)

balanced. Actually, however, they hide themselves behind a "mask of pseudo-calmness." Those patients present especially difficult problems. Besides the meaning and the role of their disabilities, one must recognize and evaluate the meaning and role of their pseudo-calmness in order to prevent a threatened complete breakdown of their emotional life and of every effort toward rehabilitation.

All those strongly emotional, imaginary or private goals such as love, pity, sympathy, punishment, pseudo-security, seclusion, which can be achieved by disability, can be better understood and managed if and when they are recognized as products of misdirected or mis-emphasized compensatory tendencies.

Severe inferiority complex, insecurity, and anxiety—resulting not only from somatic disability but also from a biased self-evaluation of one's own abilities—may have disorganizing effects on one's normal compensatory mechanism.

One form of disorganized compensatory mechanism, instead of being directed toward troublesome and doubtful overcompensation through newly developed abilities, is directed toward emotional superiority which apparently is considered less troublesome and less doubtful. Emotional superiority may be achieved:

actively, by feeling spiritually or morally superior to others on the strength of guilt-punishment complexes, heroism, martyrdom, religious complexes, and various forms of obsessive feelings of being better than others; or

passively, by attracting the emotions or attention of others in the environment toward one's self. Feelings of being the most pitiful, the most hated, or the most unfortunate individual provide a sense of emotional superiority as well as do feelings of being the most loved, the most desired, the most envied, etc.

The following case may illustrate the dynamism of striving for emotional superiority as a form of positive purposiveness of physical disability:

W.L., a seventy-year-old white female persistently refused to walk after her hip fracture had long been healed. She was unable to make more than two or three steps on account of "unbearable" pain in her hip and knee. After she had been assured that she should make only as many steps as she could without undue pain, the patient made a few hesitant and guarded steps. After her courage and "willingness" to endure pain had been praised and she had been assured that she walked

remarkably well despite her pain, the patient made noticeable efforts to walk around and progressed rapidly in her rehabilitation.

The attendant's refusal to recognize her suffering was considered by her as complete lack of sympathy and recognition, for which she had been striving. Her imaginary interest was: sympathy, attention, and recognition, which she sought to achieve only by suffering and claiming pity. However, as soon as she achieved her goal—i.e., sympathy, recognition and praise—for *ability*, her imaginary interest in disability became superfluous. Thus, rehabilitation was clearly recognized, accepted, and accomplished by the patient.

Another form of positive purposiveness of disability is found in patients for whom, so to say, the disability seems to represent their "only asset." (By no means does this imply that an accident which might actually have caused the disability was intentionally or even unconsciously staged!) The disability represents not so much a legitimate excuse for retreat from obligations as a source of misconceived security—however vague—against their conscious or unconscious feeling of emotional and/or economic insecurity. Primarily, they do not intend to evade responsibilities but are unwilling to give up whatever token emotional or economic security they might see in their disability. Psychologically, this form of positive purposiveness of disability represents a primitive form of "fight for survival" against a background of severe feelings of inferiority, with or without anxiety, guilt, and insecurity, but certainly without adequately functioning compensatory strivings.

The mechanism of "disability as the only (or main) asset" is frequently seen in patients with relatively low or insecure means of livelihood. The difference in standard of living between that "guaranteed" by the disability and that earned by ability in subordinate and insecure jobs is insufficient to upset the preference given to the security of the disability award. Although this psychic dynamism is usually disguised by an apparently "rationalizing" tendency, it represents a neurotic attempt at dissolution of a combination of more or less conscious feelings of inferiority, insecurity, or anxiety.

Financial advantages expected from disability may oftentimes retard the success of rehabilitation (15, 34, 35). Their actual significance, however, is frequently over-rated. It is the patient's style of life which determines his attitude toward *any* pertinent life-situation (including disability as well as money).

In the majority of cases it is not the actual monetary value, but its

significance in the individual's pattern of life, his sense of justice and fair play, his "totemization" of money, his habitual style of "getting the most for the least," his pre-disability work experiences, his age, and obligations, which play deciding roles in a seemingly "award-hunting" handicapped person's rehabilitation and social re-integration.

Identification of money with "anal-sadistic pre-genital" character traits or with "the greatest substitution for libido" because "problems of hunger and sex can be eliminated by money" has been offered by Brill (15) as an explanation for the role of financial advantages in disability. Attempts to apply this psychology to rehabilitation would often be misleading and prevent a psychological comprehension of the physically handicapped.

C. *Compound Purposiveness of Disability*

This form of imaginary interest in disability obstructing restoration is often found in patients who have considered themselves as failures all along. Their aspirations, usually intellectual ones, had remained unfulfilled and their activities had been by necessity diverted to some other, less intellectual but gainful, occupation. Such a person may or may not have satisfactorily performed his duties, but his unfulfilled aspirations have never ceased to affect his adjustment. Physical disability is regarded by such a person as a just and welcome remuneration for his previous frustration.. This mechanism is clearly seen in patients who, so to say, pamper their disability which serves as a sufficient excuse to give up a disliked occupation in order to be able to take up an unfulfilled aspiration. Avoidance of responsibilities, such as returning to the old disliked job, which are anticipated through rehabilitation (negative purposiveness) is the condition *sine qua non* for achieving their positive goal, as for instance, to become an artist (positive purposiveness). The psychic dynamism in these surprisingly frequent cases does not necessarily presuppose a neurotic character.

C.K., a thirty-year-old white male, working as an auto mechanic, became physically disabled. His rehabilitation seemed to stagnate until he became assured that he could not return to his occupation as an auto mechanic. Although his performance in this occupation was said to be above average, he had always been antagonistic to the work to which he had been forced by family and economic reasons. His aspirations had always been directed toward becoming an artist. After his post-rehabilitational prospects seemed to coincide with his goals, physical

recovery was remarkably enhanced. His rehabilitation as well as his later career as an artist was successful.

A different form of "combined purposiveness" in disability was discussed under "negative purposiveness," the evasion of distressing or competitive responsibilities in order to achieve a state of ill-conceived "peace of mind." In all cases of imaginary interest in disability, it is sound principle for the entire rehabilitation team to stress a handicapped person's abilities rather than his "disability."

CONCLUSION AND SUMMARY

The particular privilege of having been trained and having gained long experience in orthopedic surgery, physical medicine, and psychodynamics has enabled the writer to study not only the psycho-somatic but also the somato-psychic aspects of the orthopedically handicapped.

Active treatment, both surgical and post-operative, rehabilitative procedures, psychological evaluation and guidance carried out by and/or under supervision of one and the same person have afforded a more systematic research into the inter-relation of the somatic and psychic dynamisms within the indivisible personality structure. Not infrequently this approach has been carried out from the very first moment of the somatic impairment until, and often even beyond, the accomplished rehabilitation. On the basis of systematic observation of many thousands of physically handicapped persons, civilian as well as military, it can be stated that, notwithstanding the peculiar individuality of each patient, basic methodological conclusions can be drawn regarding general motivations toward (presumably optimum) biological and social self-preservation.

It would be erroneous to create some "special" psychology of the physically handicapped. Instead, one has to speak of psycho-dynamic principles of optimum bio-social self-preservation and self-perseveration as applied to physically handicapped individuals. In other words, the central problem is one of somato-psychic phenomena. By this is meant the individual reaction, behavior, and adjustmental dynamism of human beings as bio-social entities affected by somatic impairments. Furthermore, in a vast majority of cases it would certainly be not only more proper from a semantic viewpoint but also more advantageous from a psychological standpoint to substitute for the word "disabled," "handicapped," "impaired," or "limited."

The benefits for both the rehabilitant and science derived from the psycho-dynamic and psychotherapeutic preparedness of the entire therapeutic team has been emphasized.

The rehabilitation team must respect and integrate all four areas (physical, psychic, cultural, and economic) of human existence in order to achieve optimum rehabilitation and keep the rehabilitants well functioning beyond the process of rehabilitation.

Post-rehabilitational aspects, as they appear to the disabled, greatly influence the rehabilitant's co-operation. (Teleo-psychological dynamics.)

The post-rehabilitational phase is looked upon by the writer as the "fourth phase of medicine" because of its great influence upon the "third phase" and because its proper supervision, especially in the permanently or progressively handicapped, and in the aged person, is imperative if we are to avoid relapses, psycho-somatic disturbances, accident-proneness, and to promote the patient's welfare as new, improved rehabilitational methods develop.

If and when a rehabilitant recognizes, or can be directed to recognize, his real interest in ability, his rehabilitation will generally be more successful. This is, with a few exceptions, the case in persons with a high "Psychological Social Index."

People with a low "Psychological Social Index," however, attach various fictitious purposes to their limitations so that they are not readily willing to accept the challenges of ability. Imaginary interests in disability may represent either avoidance of undesired situations or tasks (negative purposiveness of disability) or achievement of, usually neurotic, goals, such as pity, attention, and martyrdom (positive purposiveness of disability) or both. Among the various neurotic attitude patterns, two are described as "Midas Complex" and "Sisyphus Complex." The former is found in people who strive to turn everything they can into money. The latter is found in people who suffer from the "vicious spiral of bio-social failure." Handicapped persons who plant imaginary interests in their limitations and/or lack of subjectively appreciated post-rehabilitational goals develop different degrees of "anti-rehabilitational emotional syndrome" (ARES).

These concepts were arrived at and developed by the writer on the basis of long and intense research of the much neglected somato-psychic phenomena. These concepts, however, may be applied not only to somatically impaired persons but also to general psychological problems.

Diagrammatic representation of two of these concepts has been attempted for didactic purposes only.

The rehabilitation team, if it is well prepared, should be able to detect, explain, and eliminate the rehabilitant's subconscious, fictitious interests in his disability and to encourage, direct, and make arrangements for acceptance of ability as his real interest.

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