THE SCOPE OF HEINZ HARTMANN

Some selected comments on his selected Essays on Ego Psychology

An Appreciative Survey on the Occasion of his 70th Birthday

By Leo Rangell, M.D.

By historical circumstance, this occasion represents a double celebration.* When your Committee invited me to address you on the happy occasion of the inauguration of your new Institute, it asked me to present any subject of recent interest to me, or one which I might be currently working upon. It happened that I was at the moment engaged in a review of the work of Heinz Hartmann, in response to a previous invitation by the Editors of the International Journal of Psycho-Analysis to contribute to a forthcoming issue which is to honor Dr. Hartmann on his 70th birthday (which took place last week). Hence it came about that the two converged. I can think of no more auspicious way to launch a new training institution than by a survey of the works of a man considered by most to be the leading living theoretician in our field.

This contribution to the Hartmann Festschrift will concern itself with the content of his psychoanalytic writings. It will not be a biography nor will it tell of the man. It will not benefit

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from having known Heinz Hartmann as a teacher in any formal sense, and will miss the opportunity stemming from sustained intimate conversations, the privileges and advantages of which have recently been pointed out by the Eisslers (1964). We might console ourselves that what this may thus lose in the way of a flavor of intimacy it might conceivably gain by a lessening of the subjectivity which may often go with it. My role can rather be described as aiming to be representative of the readers towards whom the psychoanalytic literature is directed, and who endeavor to use it, Hartmann's included, for 1) clinical and technical guidance and implementation, 2) theoretical conceptualization, and 3) for teaching and didactic activities. In these capacities, or a combination of them, I will try to summarize what the writings of Heinz Hartmann have meant to me.

With reference to these writings, I will attempt an overall survey, an overview of his contributions to the body of psychoanalytical literature, and a view as to their general orientation and their impetus. Since, however, even a horizontal view attempting "to cover" all his work would constitute a staggering task, to be compared in its breath to trying "to survey" all of Freud, I was fortunately shown the way to establish some boundaries, although the scope confined even within these was to prove no less than formidable. My original assignment was, in fact, to produce "an exhaustive review" of a new book, "which should be in the nature of a leading article of appreciation and appraisal of the whole

of Hartmann's contributions, using this book as its specific frame of reference". The book was Hartmann's "Essays on Ego Psychology" (1964) which was about to appear. Hartmann himself did us the service of his own compilation of essays. I cannot plead that I did not know what I was getting into. While the task was as "weighty and arduous" as had been warned, its rewards have certainly been as fruitful as anticipated.

This review will thus center around this monumental collection of Hartmann's Essays. It will not include his two well known Monographs, on the Problem of Adaptation (1939) and on Moral Values (1960), the significant group of papers from the fertile collaboration between himself, Kris and Loewenstein, and a number of his own other publications not included in these collected works. We will happily abide by his own selection as representative of his total edifice.

Before coming, however, to "the book", I would like to lay our first groundwork by referring to the beginning of the creative burst, the first major salvo from Hartmann which, when presented to the Vienna Society in 1937, according to Ruth and Kurt Eissler, left the latter stunned (1964) (this is not to ignore other important earlier papers, which we will come to later). This was his "Ego Psychology and the Problem of Adaptation", which appeared in 1939 and the elaboration of which was to become his own distinctive and unique contribution to the psychoanalytical literature. Here the framework, the raw structure, was laid down, from which future

elaborations were to stem. One cannot help but make comparisons with Freud, and to compare the pattern of this basic work with Freud's original bases (of Dreams (1900), Wit (1905 b), and the Three Contributions (1905 a), etc. - I make an arbitrary selection) from which too elaborations in all directions were to follow. Even the ages were not too dissimilar. Hartmann, now seventy, was then forty-three.

Many of his basic contributions were first expressed here, some in fairly developed form, others as mere hints. Nor was there ever any claim that they sprang, at least many of the individual ideas, completely de novo. Hartmann, as also Kris (1951) and Rapaport (1953), acknowledged extensively Freud's contributions to ego psychology (Chapter 14, 1956, the Freud Centenary Lecture). But just as Hartmann pointed out with regard to those who stressed "the unconscious before Freud" (as Lancelot Whyte, 1960) that it was Freud who systematized it, so can we say that it was Hartmann who, more than anyone else, systematized the existing fragments of ego psychology into a composite whole.

Now to merely mention some of the initial ingredients laid down here by Hartmann, they include: the concept of the undifferentiated phase, the conflict-free spheres of the ego, the concepts of primary and secondary ego autonomy, the idea of inborn ego apparatuses, of autonomous ego development, and of the average expectable environment.

All of these opened the doors to what was to become the next major advance in psychoanalysis, which was to lead to an understanding of what Spitz was to call "the processes through which the species achieves the dignity of the human being" (1957), and what Rapaport referred to as the "achievement of man's estate".

Had this promise of things to come been all, Hartmann would have been assured his place in our literature, but the present book is, in addition, a token of the fulfillment of this promise. It has been described as "the most important book to be published in psychoanalysis today". In a field not yet given to commercial advertising, it means just that and is a statement to which we can all easily subscribe. Its content represents, during the next twenty-five years, the development, elaboration, further exploration and fulfillment of the expectations and the pathways laid down in Hartmann's original monograph.

Now to the book itself. A collection which bridges chronologically from 1939 almost to the present, these publications comprise the major addresses in many of the panels and symposia of the American and the International Psychoanalytic Associations during those years, as well as a number of the Honorary Lectureships of the period (the Freud Centenary, the A. A. Brill Lecture, etc.). These comprise Part I. There is then a flash back, like an interesting dramatic device, which in Part II. brings us back to 1924, and presents four papers from then until 1935, originally published in German, three of them published here in English for the first

time. They provide an extraordinarily interesting look at the historical development of the author during his earlier formative phase, foreshadowing and leading up to the period of our present interest. Rather than being anticlimactic, they provide an engaging finale.

To come now to the content of the book, we are confronted with a dilemma. Standing helplessly before the material which lies between its covers, one is impressed that it defies any attempted simplification from two standpoints, one from the quantitative standpoint of its sheer volume and two from its qualitative complexity. I have decided, therefore, to approach our task in the following manner. My aim will be to divide these writings in accordance with certain of their prominent goals and characteristics, demonstrating Hartmann's intentions and unique style, and to let the contents fall into place as they exemplify such observations.

In this spirit and with this in mind, to give the headings first in a general way, we can say that Hartmann:

a) <u>adds to</u>, – i.e., increases the bulk content, solidifies, consolidates the known existing structures and concepts. Knowledge is added microscopically and in depth to particular specific subjects, such as within the structure ego itself, describing in detail other functions than defense, or other processes such as neutralization; or within the functions or structure of the instinctual drives, adding many new insights, observations, and

orientations.

b) clarifies, — such as the existing concept of sublimation; or the methodology of psychoanalysis; or psychoanalysis as a science.

c) extends, — within the purvey of our own field, as to a normal and general psychology; or to direct child observation.

d) bridges, — i.e., to neighboring fields, to the social sciences, to academic psychology, to experimental psychology, to biology, medicine and philosophy.

e) points the way, — to future studies and future needs.

These will all be commented upon and demonstrated separately. Such divisions are admittedly arbitrary and will of course overlap. It is difficult to separate additions from clarifications, and both from extensions, since the additions clarify and many of the clarifying propositions also add new insights, and both without question extend our knowledge, often to new fields. Such a framework, however, will afford us at least some opportunity for organization and systematization of a richly-hued field, in the very service of the synthetic and integrating functions so central in Hartmann's ego values and goals.

In this recapitulation and within this framework about seventeen of the twenty Chapters will be dealt with in relatively substantial detail, while the remaining few will merely be alluded to in their relevant context. Of course in the face of the wealth of material with which we are dealing, anything we do is to merely skim, but we hope at least to alight on typically significant nodes.

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A) Hartmann adds. There are sheer additions to our knowledge, and many of the contributions are in their essence new raw ideas, adding to our factual armamentarium, and increasing the depth of our understanding. Perhaps the central one of these, notwithstanding Hartmann's typically modest title "Comments on - - - " is on " - - - The Psychoanalytic Theory of the Ego" (Chapter 7, 1950). It is interesting that this is his Chapter Seven.

Hartmann points out how ambiguously the term "ego" is used even in most analytic writings. Three things it is not. It is not synonomous with "personality" or with "individual"; it does not coincide with "subject" as opposed to the "object" of experience; and it is by no means only the "awareness" or the "feeling" of one's self. In analysis, the ego is a concept of quite a different order. It is a substructure of the personality and is defined by its functions. No catalogue of ego functions has ever yet been completely rendered. Out of such a possible complete inventory Hartmann offers at least a partial list, which we certainly do not have the luxury of repeating here. Each must read and absorb such lists for himself.

While functions relating to conflict or defense have until now been more accessible to the psychoanalytic method than others, Hartmann looks now from the wider view of general psychological theory. From this point of view, techniques of achievement and of adjustment to reality emerge in a more explicit way than they do from the angle of pathology. This broader approach is also essential in applying psychoanalysis to the social sciences. While normal

psychology owes much to a study of pathology, the reverse is also true. Psychopathology has benefited greatly from an increasing knowledge of general psychology.

This trend to the normal should not be interpreted as a tendency away from medical or biological aspects. In fact the reverse is true, although this has been misunderstood by many, both among analysts and non-analysts. While a continuity with biology came first from a study of the instinctual drives, ego psychology and especially an investigation of its synthetic or integrating function, that is, the centralization of functional control, has extended the sphere in which a meeting with the concepts of brain physiology may one day become possible.

The ego is more than a developmental by-product of the influence of reality on drives. It has a particularly independent origin, i.e., the autonomous ego factors, just as instinctual drives are also autonomous agents of development. In contrast to the older idea that "the id is older than the ego", Hartmann suggests that both ego and id differentiate out of the matrix of animal instinct. From here man's special organ of adaptation, the ego, develops, as does the id. Ego development then results from three factors: inherited ego characteristics, the influences of instinctual drives, and of outer reality.

Not only are autonomous factors affected by the vicissitudes of conflict, but the converse also takes place. A child's intelligence, gifts and talents can have an effect on the timing and intensity of his conflicts. And by "a change of function",

(a deceptively simple but enormously useful concept which appears quite frequently in Hartmann's writings), some aspects can become secondarily autonomous after having been in conflict situations.

On the puzzling problem of narcissism, Hartmann set out to integrate Freud's early formulations into his later views about mental structure. It is necessary to distinguish the concepts of the ego, the self, and the personality. The opposite of object cathexis is not ego cathexis, but cathexis of the self and, in similar vein, it is useful to apply the term self representation as opposed to object representation. Hartmann prefers to define narcissism as "the libidinal cathexis not of the ego but of the self". This can affect all three psychic systems and is in opposition to (and in reciprocity with) object cathexis.

Concerning the energic aspects of the withdrawal of cathexis from objects, Hartmann quotes Freud's thesis that the ego works with desexualized libido. Using this as a base for a major conceptualization, Hartmann adds deaggressivized energy as well, pointing out that both types of instinctual energy can thus be "neutralized", a process which takes place in both cases through the mediation of the ego. Thus is ushered in a concept which courses its way throughout Hartmann's writings and which is found extraordinarily useful in conceptualizing various aspects and levels of ego functioning. (In a footnote elsewhere, Chapter 12 , Hartmann strictly differentiates his use of the term

"neutralization" from the "indifferente Energie" used by Freud, and translated in the Standard Edition as "neutral energy", or even from the term "to neutralize" which Freud used a number of times not in a technical sense and as interchangeable with a number of other words.) There are also gradations of neutralization as there are different shades or degrees of instinctualization.

Hartmann, elaborating in a clinically useful as well as theoretically satisfying way on the subject of "ego interests", sets out to integrate this "special group of ego tendencies" into the present day psychoanalytic structural psychology. Referring to Freud's term of "egoism" and his early theory of "ego drives", Hartmann points out that since all drives are now considered part of the system id, a reformulation of these phenomena is in order. In addition to the self-preservative tendencies residing primarily in the system ego, such "ego interests", as Hartmann suggests we call them, which comprise strivings for self-assertion and for what is "useful", also belong to the ego and contribute a layer of their own among the factors of motivation. The importance of these tendencies has been relatively neglected in analysis but becomes obvious as soon as we view them from the angle of general psychology or of social science.

These ego interests are not usually unconscious as for example the defenses are, but are mostly preconscious, although we may encounter many difficulties in bringing them into consciousness.

Ego interests, such as strivings for wealth, social prestige, etc. are often rooted in id tendencies, or may be determined by the superego, or by different areas of ego function, but the ego is generally able to use such other elements for its own aims. The type of action directed by such "useful" ego interests should not be confounded with "rational action" and are not necessarily parallel to the achievement of mental health, in spite of a frequently mistaken concept in this direction, a point which Hartmann makes with great cogency in a number of other papers as well (vide infra).

As an example of the ever finer differentiation which is Hartmann's virtue, he then directs a searching inquiry into the realm of the "intrasystemic" conditions within the system ego. Turning our attention to the contests which exist between various ego interests as well as between different ego functions, Hartmann points out that we may well describe these as intrasystemic conflicts, distinguishing them from the better known intersystemic ones. Pointing to the many contrasts within the ego, Hartmann points out that the intrasystemic correlations and conflicts have hardly ever been consistently studied. We should consider the ego from the intrasystemic point of view, especially if we want to establish the validity of concepts such as ego strength or ego control. Strength in one area may become the very source of ego weakness in other spheres, just as in adaptation achievement in one direction may cause disturbance and imbalance in others. All definitions of ego strength will be unsatisfactory if they take into account only the

relations to other mental systems and not the intrasystemic factors and the interrelationships between the different areas of ego functions. As a personal instance of the enormous stimulation provided by Hartmann and the abundant groundwork he laid down for subsequent elaboration by others, I can refer here to my own work on intrapsychic conflict (Rangell, 1963 b and c), for which these paragraphs provided much impetus and direction.

It is to be noted and is enormously to Hartmann's credit that none of these significant advances were followed by the establishment of a "Hartmann School", comparable for example to those of Fairbairn or Klein in modern times and a number of others in earlier periods. In spite of a trend, both among non-analysts who speak of the "ego analysts" as a modification of psychoanalysis (Ford and Urban, 1964), and among some analysts themselves who detach a "school of ego psychology", Hartmann himself remains steadfastly and unequivocally attached to the main body. He himself warns against the growing number of rash generalizations and simplifying propositions which exist at the periphery of analysis, such as in certain trends in child psychology, anthropology, etc. (Chapter VI.), and speaks against the "theories by reduction", in which one factor is selected and made the basis of a "new" theory. Actually, he points out, there is instead a complex interdependence of a great variety of developmental factors. Oversimplified and reductionistic theories, Hartmann believes "can hardly avoid the danger of sterility" (Introduction), and states explicitly that "the emphasis on ego psychology [does not] imply an underrating of other aspects of

analytic theory". "I have consistently aimed at solving the problems of ego psychology by studying them in the framework of the general tenets of psychoanalytic theory. [Any theory], which disregards the basic insights we owe to Freud into the psychology of instinctual drives and into their interactions with ego functions, I would consider - - as definitely unpromising".

To return now to Chapter Seven, Hartmann concludes these fecund contributions by considering that he has "presented a number of synchronizations and reformulations of and additions to some generally accepted tenets of psychoanalytic theory".

But the structure of the ego is not the only locus where Hartmann has made significant and original contributions. His scope ranges over a wide area, indeed over the entire field of psychoanalysis. Many new insights have come, for example in the area of the psychoanalytic theory of instinctual drives themselves (Chapter IV). These too, although historically among the first studied in our field, need to be subjected to re-examination and sharper definition. Progress in analysis grows unevenly, says Hartmann, and there is a need to bring together the relationship of various parts, chronologically speaking, from time to time.

The differences between the definition of instinct by biologists and analysts is that Freud was concerned with human psychology, while the observational data of biologists referred particularly to

lower animals and were then extrapolated to humans. Even, if one could devise a definition which covered everything that biologists, physiologists, psychologists, psychoanalysts, and philosophers call an instinct, it is not necessarily the one best suited for either the biological or analytic approach. Some degree of differentiation in each field might actually be useful. While Freud's term "trieb", which was used in contradistinction to the "instinkt" of biology, was translated into the English "instinct", Hartmann prefers to use the term "drive" or "instinctual drive" in analysis to avoid the conceptual ambiguities which obscure the real differences between these and animal "instinct".

To clarify these problems, they should be viewed - as always - from the standpoint of structural psychology. Psychoanalytic psychology has frequently been considered erroneously a psychology of drives only. That this is not so, even in a genetic sense, is one of Hartmann's major contributions, and in this connection he refers to Freud's last writings in 1937 in which he postulated an autonomous ego development. Once the differentiation into three psychic systems has taken place each dispenses psychic energy. In addition, however, to organizational differences between the three systems, there are differences in "the momentum to activity" and in the dynamic and energic aspects of each.

While no thorough insight into psychic structure or conflicts could have been gained without a knowledge of the psychology of drives, we may today add the reverse. We cannot really understand

the functions of these drives without looking at their position within the total framework of psychic structure. In similar vein, the differences between the instincts of lower animals and the drives of man become clear only if one takes into account the new insights into psychic structure.

The undifferentiated phase of mental development differentiates early into ego and id due to the protracted helplessness of the young of the human species. Hartmann suggests that it is this very process of structural differentiation to which the differences between the instinctual behavior of lower animals and the behavior of human beings are mainly due. Many functions which are taken care of by the instincts in animals become in man functions of the ego. Although there is a genetic continuity between animal instincts and human drive, no less important is the relation and continuity between animal instinct and human ego function. Statements such as these are as rewarding to reflection as they are deceptive in their simplicity.

Hartmann himself limits his aim in this paper to a consideration of only a few aspects of the theory of instincts. One of these is the status of the tendencies for self-preservation, which Hartmann takes up not only here but in a number of other places as well. Self-preservation, as a function of drives, has gradually lost its status as an independent unit in psychoanalytic theory. Certainly the drives, both sexual and aggressive, contribute to self-preservation, but much less directly so than do

the instincts of biology. It is mainly ego functions, which regulate the environment and which find solutions fitting both the environmental situation and the inner psychic systems, which are of primary importance for self-preservation in man. The reality principle and other regulating principles also contribute to it and serve its purpose. The superego also contributes in part, as in social adjustment. Though many elements and factors play a part, Hartmann agrees with Freud's postulation in his final "Outline of Psychoanalysis", that "The ego sets itself the task of self-preservation, which the id appears to neglect".

Freud's various "principles" represent regulating processes which lead to a pluralistic rather than a monistic theory of regulation. Not all of these principles serve self-preservation directly or tend equally toward a state of "adaptive stabilization". Apart from the principles, Hartmann here, as elsewhere, stresses the synthetic or organizing function of the ego as being chiefly responsible in maintaining intrapsychic balance, balancing the individual psychic systems against each other and the relationships of the individual with his environment. In the course of development this is partly added to and partly substituted for earlier forms of regulation. This organizing function seems to be part of a general biological trend towards internalization and helps toward a growing independence of the organism from the immediate impact of stimuli. On the other hand, when

this highly differentiated form of regulation is interfered with, more general and primitive ones may take its place.

Recapitulating Freud's original and then changing concepts of drives, Hartmann gives a central place to the role of the aggressive drive. Structurally, aggression has the same position as sexuality and is as much a part of the id, in contradistinction to the older concept of aggression as used by Alfred Adler. With both drives, their energy can be neutralized in the service of the ego and the superego. Aggressive energy participates equally in the development of psychic structure, but the psychic systems, once formed, also provide it with specific modes of expression. Reality situations in man sometimes appeal for the direct expression of aggression, but more often to its sublimation (K. Menninger). The aims of aggression often run counter to self-preservation, for example in the specific aggression of self-destruction. However, if we accept that neutralized aggressive energy can work within and for the ego, this will run counter to Freud's idea that self-destruction is the only alternative to aggression directed towards outer reality and objects. The latter idea, Hartmann suggests, belongs systematically to Freud's pre-structural stage of thinking. We will remember here that further definitive contributions on the role of the aggressive drive were contributed by Hartmann with Kris and Loewenstein (1949), as was the case with many other extensions of theory.

Even in this microscopic study of instinctual drives, Hartmann

demonstrates the range of his scope from the depth of the individual to the wider external scene. Thus he notes that historically, in respect to drives, aims and objects have outdistanced the importance of their source. The latter, however, remains relevant, both as being of possible help in a classification of drives and also in the hope for a possible future meeting between analysis and physiology. Further, in linking the individual to the external social scene, it is the study of the objects of drives which prove to be the main link for the analytic study of the interdependence of the individual and his environment. Genetic studies of object relations also yield significant insights into specific features of human nature. Thus it is the protracted dependence of the human young that leads to the enormous value for it of the external object and to an early differentiation between the ego and the id, so essential to the vicissitudes of human psychology. The importance of human objects in all their psychic ramifications led the way for analysis to become a fundamental approach to the social sciences.

Most theoretical concepts to Hartmann are open-ended and incomplete. The same holds for the theory of instinctual drives, which to him is neither immutable nor complete. To meet the needs of a dynamic and genetic psychology, it will prove necessary to extend the concept of drives in three respects: first, beyond the physiological substrata; secondly, one cannot be limited to the data of external behavior; and thirdly, one has to transcend

the phenomenologic aspect, which, in this instance, means inner experience. The theory of instincts will probably have to be integrated with whatever proves to be valid from other approaches, such as experimental, ethological and other possible theoretical systems.

Although the essays in this book and indeed most of Hartmann's writings are admittedly weighted on the theoretical side, Hartmann does not lose sight of the technical and clinical implications implicit in his work. While allusions to clinical and technical interrelationships are interspersed liberally throughout the theoretical papers, several chapters are devoted centrally to these issues. In one (Chapter VIII, 1951), the technical implications of the newer insights of ego psychology are taken up directly.

During the development of analysis, an integration has developed among the clinical, technical and theoretical elements into a state of reciprocal interaction, in which mistakes in one lead to distortions in the other. In comparing theoretical and technical developments, the lag today is rather on the side of technique, in contrast to the reverse situation which existed at the beginnings of psychoanalysis. Whenever a lack of integration occurs, both aspects are likely to suffer. For some time now, although genuinely technical discoveries have not been as prevalent as in

the past, one trend in the field of technical problems has been to follow the lead and gradually assimilate the advances which have accrued from the theories of psychoanalytic ego psychology.

Hartmann is as progressive and open-minded in his views on technique as in all others. While we are trying to develop some rules, some "principia media", between the generality of acknowledged technical principles and the specificity of clinical experiences, Hartmann agrees with Ferenczi about the need for flexibility and for spontaneity of technique. We cannot give the student the impression that actually a complete set of rules exists. Nor should we forget that every analyst's work with every patient has an experimental character and that there is a continuous sequence of trials and errors.

The technical implications of ego psychology have enlarged our therapeutic scope to deal more fully with the reality aspects of our patients' behavior, with conflicts with reality as well as with inner conflicts, and with the interaction between the patient's neurosis and his normal and non-conflictual functioning. While it is true that some realization of these factors has always been part of analysis, the shift of accent is considerable enough so that only now are we really dealing with the patient's total personality. Freud's addition to his original topographic layering point of view of the concept of structures and substructures in mental functioning facilitates a multidimensional approach and is more useful in giving account of the dynamic and economic

properties of mental life. The concept of stratification, which was originally useful, led to an over-simplification and to handicaps and rigidity in our technical approach as compared with the implications of the structural viewpoint and approach. Freud's original formula of making the unconscious conscious has remained vital but has been broadened and deepened by the growing insight into the structure of the neurotic conflict.

Here too, as always, theory and practise have been interrelated and mutually fructifying. For example, while the discovery of the unconscious nature of resistance, a fact found through clinical observation, became a cornerstone in Freud's theoretical formulations about the unconscious aspects of the ego, the converse was also true, i.e., the influence of theory on clinical practise has been no less important. Structural theory is an aid to practise, widening its scope to the infinite variety of individual mental characteristics, enabling the discovery of new facts and a recognition of the connections between them, permitting us to appreciate a greater differentiation of ego functions and, on the side of technique, making for more concrete and specific interpretation.

In general, the structural aspects of interpretation are still less completely understood and less explicitly stated than the dynamic and economic aspects. The latter alone, however, may lead us into incomplete areas and would be distinctly deepened and broadened by a fuller understanding of the total structural implications, not only intersystemically but the intrasystemic

correlations as well. Some of the problems involved here can be viewed from the angle of "change of function", a term Hartmann borrowed from biology and has used elsewhere, which is part of his "secondary autonomy". The relative independence achieved by the latter is more or less complete, and it is a question of how much reversibility remains to account not only for dreams and neurosis but also for the potential effectiveness of analysis.

The incidental side effects of interpretation may reach beyond the specific drive—defense set-up under consideration and are not always predictable. The stimulus, here the interpretation, may produce not only a "local" reaction but a distant effect over all the psychic systems, activating elements functionally and genetically connected. These go beyond mere associationism and have to do with the presence of dynamic and structural factors and the principles of organization and structure. Somewhat similar to the "resonance effect" used by brain physiologists, Hartmann would designate this as the "principle of multiple appeal". Much remains here yet to be understood.

Although Hartmann has not particularly addressed himself to the study of specific clinical entities, it is interesting that the one striking exception to this is his article on schizophrenia (Chapter 10, 1953), admittedly the most puzzling syndrome of all, and one the illumination of which would by common agreement spread our understanding over the most basic aspects of profound

mental disturbance. And following his typically understated title "Contribution to the Metapsychology of Schizophrenia", Hartmann proceeds to discuss this almost purely clinical subject with the same bold intensity, deftness and penetrating understanding as he has done regarding the most abstract theoretical topics.

I cannot here go into the detail adequate to the complexity of this subject, but would strongly direct the interested reader to the original. Suffice it to say that while acknowledging fully the role of instinctual factors, of reality, and of superego defects, Hartmann narrows down on the intricacies of disturbances of ego functioning which may play a crucial role in the etiology of the schizophrenic process. Among the possible factors which he singles out for consideration and elaboration are: impairment within the ego in its role as mediator between the drives and reality; a lack of the organizing, integrating stability of the defenses as compared to what exists in neurotics or normals; an increased tendency towards conflict along with an incapacity of the ego to deal with it; a deficiency in the primary autonomous precursors of defense; disturbance in early object relations due to excessive narcissism; disturbances of the ego functions of objectivation, intentionality, attention and anticipation (related to various thought disorganizations in schizophrenia); impairment of the signal function of anxiety; a deficiency of the representational function of language, by virtue of which the word comes to signify the thing; most importantly, impairment of or damage to the ego's capacity for neutralization, a fundamental characteristic

of the ego disorder in schizophrenia; the latter also tends to an excess of free aggression, which itself increases the proclivity for conflict; a breakdown of what Hartmann calls "the basic layers of outer reality testing"; interference with the operation of the displacement or shift of neutralized energy to points where it is needed; "anomalies of primary autonomy", which might represent part of the hereditary core of schizophrenia.

The above presents merely a sketch of the rich content offered for the reader's reflection on this nuclear subject. Some of the metapsychological hypotheses bridge the gap at least in part and establish greater continuity between instinctual and ego aspects. The final and total etiology must be a blend between hereditary predisposition, traumatic and maturational factors, and environmental pressures. While there are still, Hartmann says in conclusion, "a large number of question marks surrounding an island of tentative propositions", the hypotheses suggested are at least not in contradiction with empirical data nor with the main body of tested psychoanalytic theory.

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B) Hartmann clarifies. While the articles quoted above were chosen mainly to exemplify additions to content, original contributions, others of Hartmann's writings in their essence clarify, modify, amend and bring up to date older concepts (being mindful, as stated above, of the great overlapping of these characterizations These aspects will be demonstrated by his work on sublimation and his important clarifications in the areas of the methodology of

psychoanalysis and the place of psychoanalysis as a science.

An example of a major contribution of Hartmann in bringing up to date and revising an older concept is his work on sublimation (Chapter XII, 1955). Hartmann first points out how many concepts first devised to account for more or less occasional observations gradually become more generalized and integrated into the total field and eventually require redefinition. He gives as examples the history of the concepts of defense, aggression, and then narcissism. The same applies to sublimation, in which Freud's newer work on ego psychology was never explicitly applied to this older concept, hence it lacked redefinition in terms of his more recent work. Ambiguity and discontent exist with certain facets of its usage, and it has been called by Brierley "an omnibus term".

Hartmann then quotes a common older definition, which refers to sublimation as a deflection of the sexual drive from instinctual aims to aims which are socially or culturally more acceptable or valued. But some authors, for example Bernfeld and Sterba, have objected to the inclusion of value judgments in the definition of a mental process. Bernfeld therefor eliminated the element of value judgment, to speak of ego syntonic aims and we say then that ego aims are substituted for instinctual aims. Many questions, however, were still left unanswered. Often the distinction between the two processes of sublimation and sexualization is neglected. For a clear differentiation of these we need metapsychological concepts. Also a definition of sublimation based only on the aims of behavior will prove to be quite inadequate, and neglects the

matter of the stability of ego functions, i.e., the degree of secondary ego autonomy. In general, the stability is usually less secure in sexualized ego functions where the pull of regression is greater. One main developmental trend can be characterized as away from instinctualization of ego functions toward greater secondary autonomy. In an overall way, the degree of autonomy is correlated with what we call ego strength.

Introducing some necessary distinctions, Hartmann points out that there is a difference between the sublimated cathexis of an ego function, on the one hand, and the sublimated cathexis of the aims or the objects connected with the function on the other hand. For example, the cathexis of the objects of thought or action is not identical with the cathexis of the functions of thought or action. In line with this, some concepts of sublimation which refer only to the aims and not to functions leave out an important element and are thereby less suitable for the advancement of ego psychology.

We know much more about the origins of specific contents of sublimations, of specific goals or interests, than about the genesis of the process itself within the ego. The former has actually been a central issue of clinical research and observation for a long time. The thesis which considers sublimation a victory of the id over the superego (Roheim), or many other explanations which center around the tracing of the specific contents of sublimation to their sources, fail to distinguish between the function of sublimation and its genetic aspect. This is again an instance of a "genetic fallacy" (Hartmann points to this often), i.e., the actual

function is equated with its history or rather reduced to its genetic precursors, as if genetic continuity were inconsistent with change of function. The distinction between function and genesis and the recognition of the principle of change of function, Hartmann points out in a footnote, are inherent in what in analysis we call the structural point of view. It is one of the significant features of psychoanalytic psychology that Freud has succeeded in integrating the genetic approach with a structural viewpoint.

Fortunately detailed genetic studies usually do more than emphasize the persistence of past conflicts and fantasies in the contents of present sublimations and often show us the functions that sublimation had in statu nascendi. The beginnings of sublimation have variously been considered to coincide with latency or the beginning of the oedipal phase or else, by some, as beginning in much earlier stages. This depends on whether the original narrower concept of sublimation is used, or a much broader point of view, which Hartmann then proceeds to present.

Freud, in "The Ego and the Id" (1923), equated desexualization with sublimation. Somewhat later (1926), and in quite a general way, he stated that the ego works with desexualized energy. Freud's later statements, Hartmann points out, were never systematically integrated into his older ideas and make for sublimation being a continuous process rather than attributable only to the few, or limited only to valuable achievements. The striking expression of creativity may differ quantitatively but also in a subtle qualitative way from other ego achievements. Starting from this

same later passage from Freud, Glover speaks for the idea that "some qualitative change in energy may prove to be the only metapsychologically valid criterion of sublimation". It seems essential, says Hartmann, to clearly conceptualize this basic process of energy transformation and to comprehend its role in the build-up and the functions of the ego. Similar basic conceptualizations have been attempted in regard to other concepts of psychoanalysis with rewarding clarification. To achieve this level of basic definition, we should not confuse sublimation with references to normalcy lest we enter into the same type of misunderstanding as we did when, on the basis of insight into the role of defense in neurosis, it was erroneously deduced that every defense leads to pathology.

To Freud's idea of the ego's use of sublimated libido, Hartmann, in conjunction with Kris and Loewenstein, and in agreement with Klein, Menninger, Lampl de Groot and others, adds the role of aggressive energy as well. Deaggressivized energy is no less important for the formation and function of the ego than is desexualized libido. "We call neutralization the change of both libidinal and aggressive energy away from the instinctual and toward a non-instinctual mode". This process of neutralization is to Hartmann the essential element in what we usually call sublimation, and it is mostly this aspect that he is dealing with in this paper. (I have already referred above (Chapter 7) to Hartmann's differentiation of the meaning of this term from similar terms used by Freud in other connections).

After mentioning a number of possibilities as to the terminological relationship between the two terms sublimation and neutralization, Hartmann concludes that "a decision between these alternatives does not seem necessary". Much of what was said before about sublimation refers to the process now defined as neutralization. There is probably a continuum of gradations of energy from the fully instinctual to the fully neutralized mode.

Once the ego has accumulated a reservoir of neutralized energy of its own, it develops aims and functions whose cathexis can be derived from this reservoir and do not have to depend on ad hoc neutralization. Ego aims are fed by neutralized energy and achieve a certain amount of secondary autonomy. Different degrees of neutralization are not equally well suited for all aims and functions of the ego. There are variations in this respect from one individual to the other and in the same individual the level of neutralization for one specific function is not constant. Moreover, neutralization of libidinal and aggressive energy can vary partly independently (Berta Bornstein).

Differences in mobility exist not only between primary and secondary processes, but also between various ego functions themselves. There is no simple correlation between this and various degrees of neutralization. It is probable that the process by which the ego shifts various reserves of neutralized energy to wherever they may be needed may be interfered with in certain psychoses concomitantly with impairment of neutralization. This has been referred to above in discussing schizophrenia (Chapter 10).

Neutralization plays a decisive part in the mastery of reality, in the formation of object relations, and in the institution of the reality principle. In the function of self-preservation, neutralization is a powerful tool for the ego in the service of this central biological quest of man rather than its opponent, as has been occasionally thought. The integrating functions which share in the maintenance of self-preservation use neutralized energy for their work.

Taking up the matter of psychic energy, and referring to the thesis, Freud's as well as Hartmann's, of a hereditary ego core, it is here that Hartmann makes his most definitive statement, hinted at elsewhere (Chapter 7), of the possibility of a primary and independent ego source of mental energy. "How much or how little we can hardly estimate", and "It is true that such a hypothesis - - - - - cannot today be proved. But this is equally true of the hypothesis that really all mental energy stems from the drives. Both assumptions lead ultimately back to physiology".

The process of neutralization, Hartmann contends, begins early, even before the ego exists as a definite system and before constant object relations are achieved. Renunciation from love is more likely to promote neutralization than is that stemming from fear (Hart). While the superego and especially the ego ideal historically have been an important aspect of psychoanalytic research and conclusions on the subject of sublimation, Hartmann has broadened the concept to make it maximally fruitful for our understanding of ego functioning and of ego-id relations.

In summary, Hartmann has broadened the conceptualization of sublimation to include especially the process of deinstinctualization or neutralization. This has followed Freud's later formulations on desexualization and has opened the way to many problems in the metapsychology of the ego and in ego-id relationships. Situations which give rise to neutralization must be separated from the process itself. We must also consider the probably trifold origin of neutralized energy, in the two instinctual drives and the ego, the individual variations in the capacity to neutralize, the various incentives to neutralize, whether under the pressure of the id or under the direction of the ego or later of the superego, the ontogenesis of neutralization, the neutralized cathexis of aims of the ego as opposed to ego functions, the role of neutralization in defensive as well as non-defensive functions, the gradations of neutralization, the differences between neutralized libido and neutralized aggression, and the correlation of neutralization with secondary ego autonomy.

The entire concept has been intricately interwoven with the structural point of view, with an elimination of value judgments and a much more intricate and total metapsychological consideration. As usual, Hartmann considers his discussion incomplete, tentative, and open for future investigation, to which he points the ways.

Another area in which we may consider Hartmann as perhaps the leading clarifier is that of the methodology of psychoanalysis and

the place of psychoanalysis as a science. Two important contributions on this subject are included in this volume (Chapter XV, 1958; Chapter XVI, 1959).

Noting a reluctance among analysts to discuss questions of the scientific aspects of psychoanalysis with representatives of the more highly systematized and methodologically more firmly established fields of science, Hartmann points out that due to the special nature of our field the major part of this work of clarification and testing will fall to the lot of the analysts themselves. For Freud, analysis meant a conquest for scientific study of aspects of human behavior which had never before been touched by scientific exploration. Even the therapeutic aspect of analysis would in the long run, Freud felt, be overshadowed by its importance for a science of man. Freud never considered analysis a completed system and was aware of the tentative character of many of his statements. Nevertheless, though in analysis we introduce "uncertain assumptions and unproven guesses", Freud never doubted the superiority of analysis over all other approaches to explain a broader sector of human behavior than heretofore.

It is the special features of our subject matter which dictate the complex theorizing and the comparatively low level of systematization which obtains. Yet it is not wise to limit our field to only those parts which can be methodologically met in a non-controversial way. Some hypotheses which have been questionable from the standpoint of a philosophy of science have in the case of analysis proved their heuristic value.

Hartmann describes the special scientific aspects of clinical research in our field and the constant mutual interaction between observations and theoretical thinking. There is a continuum from clinical contributions which are actually directed by a high level of abstraction to essays formulated in terms of theory which are actually closely geared to observation. With hints which would be found of value to anyone aspiring to creative writing in our field, Hartmann points out that the demarcation between clinical and theoretical is often not traceable in analytic writings. Almost every article poses the need for the reader to apply a labor of reconstruction to ask which are the observables and which the hypotheses. One cannot expect, states Hartmann, to find in every analyst the beautiful harmony of theoretical, clinical and technical insights which was the hallmark of one genius.

Interpretation is tentative explanation and therefor close to hypothesis. Pitting himself always against the easy answer, Hartmann points out that there is no simple correlation between the ratio of observational and hypothetical elements and the scientific value of an interpretation. "Interpretations introducing even a great many variables often prove superior — if they are based on an adequate constructive power of the analyst who integrates his knowledge and theoretical thinking".

To reach the period of pre-verbal development, concepts which facilitate the relationship between reconstructive data and the data of direct observation are imperative. The possibility of such a unifying theory has become greater since Freud's reformu-

lation of anxiety theory, emphasizing the genetic role of external danger, and also such later concepts as the conflict-free sphere, the ego apparatuses and primary autonomy.

To those who argue that analysis deals with only a small number of cases, Hartmann points out that the actual data obtained is overwhelming and that each case, scientifically speaking, is actually equivalent to hundreds of cases. The problem indeed is the difficulty of imparting satisfactorily this knowledge, this wealth of data, to make it intersubjective. Hartmann points out many of the features of analysis which counteract an easy "scientification" of our field, such as, to mention but one, the remoteness of our explanatory concepts, which are based on meanings and motivations, from actual behavioral data and also from immediate experience. I myself am brought to mind of an experience recently with educators who were speaking of the desirability of and the methods for objectifying and quantifying data with respect to certain types of behavior related in this instance to the learning process. Aware of the difficulties which faced the observing teacher who was trying to interpret movies of childrens' behavior, the idea was hit upon to "solve" the problem by presenting the pictures to the children themselves and asking them what they were doing, i.e., "the answers" to the problems in question. Analysts, of course, know how little these "answers" themselves mean. We, in fact, start from this point. What is the end result to the educators would be the beginning for the analyst. It is reminiscent of the motto in the Army, "The impossible we do everyday,

miracles take a bit longer".

Returning to Hartmann, he points out by numerous examples the need to take a middle position between two extreme of attitudes, one in which, for the sake of closeness to colorful clinical experience, the analyst lets the wealth of clinical phenomena stand unformed and insufficiently connected, and the other in which one forces their variety precociously into too narrow theorizing.

Today the role of imagination in science has come to be clearly recognized (Einstein, and others). But it is not too well appreciated how far imagination based on self-observation can contribute to hypothesis formation in the field of psychology. Actually Freud opposed psychoanalytic psychology to intuitive psychology and strove for scientific discipline, a patient accumulation of observational data and conceptual tools to account for them. He was not shy, however, of theorizing, and regarded "intuitions" as the result of mostly pre-conscious observation and induction. Too puritanical an attitude towards the introduction of hypotheses had not proved beneficial to the development of scientific psychology. The complexity of our theoretical structure is not based on theorizing for theory's sake, but is in response to and an outcome of the comprehensiveness of our concept of personality. All attempts at simplification are paid for by a severe limitation of the explanatory reach and of the predictive value of the hypotheses. Possibly at some future time, states Hartmann, "we may reach a decidedly more beautiful and satisfactory stage, when simple formulations will become of equal or superior value".

The sticky issue of quantification is attended to. "The business of pinning numbers on things is not equally easy in every field of science". We cannot use numeration, but only such expressions as "more or less" or "greater than", in talking about or comparing strength of impulses, tenacity of resistances, or the impact of rational tendencies. Measurement at all cost, as some would have it, would sacrifice an essential aspect of analytic research. However, quantification is implied in many analytic concepts, such as the force of drives or strength of ego, etc. While such quantifying concept formations, without the possibility of measurement, pose a widely discussed problem, they are nevertheless not logically unacceptable.

The endeavor to validate analytic hypotheses by all means which are suitable is welcome in analysis and might help towards a clarification of its theories. Hartmann points to the contributory experimental work already done by analysts themselves outside of the analytic situation, such as, among others, his own work with Betlheim and more recently that by Charles Fisher and by George Klein.

Many critics of analytic methods and experimentation are ignorant of the specific complexities of our subject matter and overlook the essential insight that hypotheses are primarily tools to be adapted to the demands of a given field. To accept their directions would be for analysts to become "acceptable" in the sense of methodological standing, but to pay for it by a disastrous curtailment of the reach and depth of our work. Greater clarification and system-

atization will therefor rest primarily on the analysts themselves. But every step will in turn increase the relevance of contributions which come from outside of psychoanalysis. Hartmann concludes one of these papers (Chapter 15) with "a practical suggestion". In order to further develop "the analyst as a scientist", aside from the question of gifts and of interest, the personal analysis and the present analytic training leave much incomplete. One would hope that special attention to the methodological aspects of psychoanalysis as a science could find its way into our curricula, since there is a great deal available about this that is both teachable and learnable.

It might be appropriate in this connection to refer to some of Hartmann's observations on Freud the scientist made at the Freud Centenary Meeting in 1956 (Chapter 14). We can do not better than to quote: "Freud's psychological research method could not build on methodological models, hallowed by tradition, as is the case in other fields. In scientific psychology there was hardly anything, at least in the time of Freud's beginnings, that he used, or for that matter could have used, to uncover and deal with the phenomena he was the first to perceive. With Freud, even his creativity as a discoverer did not surpass his creativity in devising concepts and hypotheses that fit his observational material and direct research to meaningful questions. Among great scientists there are those who confront the world with strikingly new facts. But there are also those who not only demonstrate new facts but also teach the world to look at them in an entirely new way, thereby also

changing the forms or modes of our thinking. There are only a few in our time whom we would put into this second category. But there is no doubt that Freud is among them".

The above was Hartmann on Freud. We can add the following. Of those who followed Freud, who share now what can hardly yet be called his "tradition", there are not many to whom it is given to significantly shape the directions and deepen the paths which he carved out. And among those there are few, very few, and a dwindling number, who possess not only the scientific rigor but the breath of knowledge reminiscent, like Freud, of "The Renaissance Man". Hartmann is one of those.

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C) Hartmann <u>extends</u>. In another segment of his writings Hartmann extends the borders as well as the reach of psychoanalysis - - - I am referring here to advances both at the periphery and in the interior, but under the aegis of our own rather than contiguous or ancillary or other-disciplinary fields. I have in mind as examples Hartmann's consistent and systematic extensions into the field of a normal, general psychology; and his stimulation of work by analysts in extra-analytic pursuits and observations, such as in direct child observation, experimental work by psychoanalysts (already referred to in B) above), and in the field of longitudinal developmental studies, which have since been undertaken and are now ongoing in so many Centers (Benjamin; Escalona; Wolff; the Yale group; Tidd, Call, et al.)

As the first example of such advances within our own field is

the consistent emphasis by Hartmann extending psychoanalysis from a concern solely with the pathological to a more general normal psychology. While this trend was implicit in Freud's very beginnings and explicitly stated by him a number of times, this again is an area which was most systematically and consistently pursued in Hartmann's work. Among the several papers which center specifically on this concept is one which concerns the concept of health, the first in the volume (Chapter I, 1939).

Hartmann devotes himself as much to pointing out the negatives of this problem as he does towards arriving at any possible solutions. In this as in many other of his papers, he explodes myths, opposes clichés and resists platitudes. He points out consistently the erroneous conclusions too easily arrived at, not only by the lay public but even within some sophisticated intellectual disciplines close to or even within our own field.

Health is not a statistical average, he observes, as witness for example the exceptional achievements of single individuals, whom we would have to regard as pathological, or, in opposite vein, the prevalence of caries of the teeth in a majority of people, which we would have to regard as normal. "Abnormal" in the sense of a deviation from the average is therefor by no means synonymous with "pathological". Freedom from symptoms is also not enough of a criterion and is certainly not the main goal sought after by analysts in the course of their work. We have come to expect much more. Hartmann points out how difficult indeed it is at times

to differentiate a symptom from an achievement, as is the case with pedantry or ambition.

Many deep, abiding and touching truths are verbalized for us by Hartmann, which appeal not only to our sense of scientific appreciation but to our subjective and affective responsive chords as well. Thus, "the healthy person must have the capacity to suffer and be depressed" or "a limited amount of suffering and illness forms an integral part of the scheme of health". Adaptations can lead to maladaptations and vice versa. Hartmann points out the complexity always. There is no easy formula to encompass such diffuse and subtle areas of problems.

Hartmann gives due credit to the existence of a number of useful theoretical formulations on the subject of health, such as Freud's "where id was, there shall ego be", or Nunberg's "the energies of the id become more mobile, the superego becomes more tolerant, the ego is freer from anxiety and its synthetic function is restored". However, he also points out the regrettable distance between any such necessarily schematic formulations and the measurements of the actual states of mental health in individual human beings.

Here, as always, Hartmann stresses the need for empirical and objective observations rather than being dependent on our moral preoccupations or other subjective aspirations. This need for empiricism and for overcoming preconceived prejudices is a characteristic attitude of Hartmann's which runs through all his ideas about

methodology. It is clearly essential, he states, to proceed for our purposes on purely empirical lines, i.e., to examine from the point of view of their structure and development those personalities who are actually considered healthy, instead of allowing our theoretical speculations to dictate to us what we "ought" to regard as healthy. This is precisely the attitude that psychoanalysis adopts toward the normative disciplines.

Undue prominence is often given to the need for rational behavior, just as among the romanticists there was too much of a glorification of instinctual man. The ideal of a perfectly rational man is overdone. We should not take it for granted that recognition of reality is the equivalent of adaptation to reality. The most rational attitude is not necessarily an optimum one for the purposes of adaptation. Similarly, a correct view of reality is not the sole criterion of whether a particular action is in accordance with reality. Hartmann draws fine distinctions throughout and directs our attention to undeniable, although too easily overlooked, truths. His work abounds in "quotables". "The rational must incorporate the irrational as an element in its design". Progression and partial regression may well occur simultaneously in favorable situations and indeed both are prerequisite.

Hartmann also points out the error of correlating conflict-ridden and peaceful development with illness and health respectively. It is important to recognize the roles of conflict and defense in normal development, although they were first known in their pathogenic aspects.

Pointing here as elsewhere to the future, Hartmann points out that an analytic normal psychology is very much needed and that the concept of adaptation is too ill defined. The criterion of conduct adapted to reality has offered too little opportunity for a psychoanalytic approach.

Adaptation is in relation to something else, and the characteristics of the environment itself must not be overlooked. The capacity for achievement and enjoyment must be in relation to the "typical average environment" (another original and oft-quoted Hartmann term). The effects emanating from abnormal environments must also be taken into account, in which case a pathological development may offer a more satisfactory solution than a normal one. Under such conditions, we can understand Goethe's "Reason becomes unreason, benefits a torment", which no longer presents a paradox.

Any opposition between biological and sociological conceptions in this as in other problems is fundamentally sterile. It is only when we consider the social phenomena of adaptation in their biological aspects that we can really start "getting psychology rightfully placed in the hierarchy of science, namely as one of the biological sciences". (Jones, 1936).

Hartmann never says unequivocally what he considers health and normalcy to be. As was to be a cornerstone, however, throughout most of his writings he draws our attention to "the close connection between adaptation and synthesis". From this, the closest which

he then comes to a definition is that the biologically-rooted "organization of the organism", the specific representative of which in the mental sphere we bring into relation with the synthetic function of the ego, "is a prerequisite of successful adaptation". At the same time its efficacy is doubtless dependent on the measure of adaptation achieved. Adaptation and especially synthesis is thus considered by him as the basis of our concept of health. While id psychology has failed to provide us with a key to the problems of mental health, Hartmann believes that, although we are not yet able "to formulate a concept of mental health in simple unequivocal definitive terms", an increased knowledge of the psychology of the ego will probably lead in the direction of a future analytic theory of health.

Another essay which I would single out with respect to its emphasis on normal behavior has to do with an exploration of rational and irrational action (Chapter III, 1947). No systematic presentation of an analytic "theory of action" as yet exists and Hartmann reaches out toward such a general theory, although again without feeling at the end that he has achieved it.

Problems of rational and irrational behavior are at the crossroads of many branches of science, psychology, history, sociology and economics. (Here begins the "bridging" - to be taken up in the next section). While the theories of action of these latter fields limit themselves to certain typical and model

situations, psychoanalysis may one day add a theory based upon a knowledge of the structural aspects of personality and of its motivations.

Insight into reality guides action and action is an important instrument for the development of insight. The role of such factors as anticipation, postponement of gratification, etc., in the development of action gives action its place in a general trend in human development, the trend towards a growing independence from the impact of present stimuli, from the "hic et nunc". This is a general trend towards internalization, which was described by Hartmann in 1939 and which we have heard stressed in a number of other places above. To it belong the danger signal of anxiety, directed and organized action, thinking and the formation of the superego.

While action is an ego function, there are a variety of types of action which are influenced by and derive characteristics from the other psychic systems as well. Aristotle described the basic goals of human action as "profit, pleasure and morality". Hartmann shows an uncanny sense of correlation, not only linking our field to the philosophers but bridging the modern to the ancient (See Section D) below). This triad, Hartmann shows, corresponds impressively with the analytic ego, id and superego influences.

Ambiguities are pointed to here as elsewhere. Rational and irrational, reason and unreason are equivocal and poorly defined concepts based on value and moral judgments and therefor poor

terms to use either in a psychological or in a scientific sense. In the history of philosophy, both the rationalistic approach as well as romantic irrationalism left something wanting. The confusion is to be laid not only at the doors of the old philosophers but to a tendency even among us to equate rational with healthy and good and irrational with their opposites. Even analytic authors find it difficult to realize that rational behavior may be put to destructive aims.

The mechanisms behind such falsifying trends are well put and ingeniously crystallized by Hartmann when he describes the general tendencies to a) "agglutinization of values", in which we put together what we value in the same way, what we know somehow to belong together, b) irradiation of values. Both lead to well known errors in judgment wherever there are highly invested value judgments, such as for example in political thought. Another responsible factor may be the tendency towards isolation, by which the good may not be contaminated with the bad. All of these lead to a disruption of the causal nexus between facts.

According to the sociologist, M. Weber, an action is purposively rational if one "considers the goals, the means and the side effects, and weighs rationally means against goals, goals against side effects [consequences] , and also various possible goals against each other". Considering reality, there are two ways in which an action can be reality syntonic, objectively

reality syntonic if it attains a certain aim although it may not have been calculated to do so, or subjectively syntonic if it was calculated to reach that aim. To demonstrate the obscurity which comes from over-simplifying dichotomies between rational and irrational behavior, Hartmann describes certain actions in totalitarian societies in which both rationalization and purposively rational calculated actions are brought about in accordance with the aims of the planners. In the formation of the collective mythologies which then result, the breakthrough of instinctual drives can be the result of such purposive planning. Kris has shown how these are brought about in such societies by the increased use of broadcasts from mass meetings, by which social reality is made to provoke a wide existence of "mass-psychological behavior" even in physically isolated individuals. Similar mechanisms, although less intense and with a different goal structure, can occur in non-totalitarian systems under certain conditions, such as in times of war or in religious "fanatization" or in some political parties. Under such circumstances, actions which would ordinarily be regarded as regressive fit into the new social reality and are both objectively and subjectively reality syntonic. (My secretary mistyped this first as "satanic"!). Such behavior is an example of "social compliance", a concept which Hartmann uses also in his papers on sociology (vide infra), analogous to the concept of "somatic compliance".

From close clinical analytic observations we find that the

relationship between rationality and adaptation is a complex one. Freud's attitude towards this relationship was also one of cautious optimism. Pointing out how achievements in respect to one function may be disturbances of adjustment in respect to others, Hartmann quotes Freud: "Each of the mental differentiations that we have become acquainted with represents a fresh aggravation of the difficulties of mental functioning, increasing its instability, and may become the starting point for its breakdown, that is, for the onset of a disease". The picture of a totally rational human being is a caricature and, quoting Freud, even from the most complete analysis we would not expect an individual to be one who "shall never again feel the stirrings of passion".

Again as in the previous paper, for conditions of health Hartmann thinks "in terms of the equilibrium that exists between the substructures of personality on the one hand, and between these and the environment on the other". It is here, in describing the coordinating tendencies and the synthesizing or balancing functions within the ego, that Hartmann expresses his preference for the term "organizing function" to that of the "synthetic function" which was advanced by Nunberg. Organizing, which at times may consist of synthesizing, may at other times include differentiation as well as integration.

As has been brought out in a previous reference, here too Hartmann makes contact with philosophical concepts of ancient times. Concepts of organization, equilibrium and harmony have been used

since the days of Socrates, Aristotle and the Stoics. The similarity to the analytic concept of organization is clear, but the latter is neither philosophical nor moral but, as pointed out by Hartmann, is based on empirical findings.

Another paper which devotes itself centrally to features of normal development and of a general psychology, is a study of ("Notes on" - - - ;) the reality principle (Chapter 13, 1956). While I would have wished to bypass this one entirely solely for reasons of space, any perusal of its contents immediately prevents a discussant from doing so. Hartmann, to use his own words, introduces "a bewildering number of differentiations and complexities into a basically simple question". But it is for the reason of this very variety of ego functions and their interactions with which Hartmann deals that Freud long ago spoke of the ego as a "representative" of reality.

Without going into detail, I would like merely to list a few of the types of insights revealed here which demonstrate, by way of an almost iconoclastic "realism" on Hartmann's part, certain surprising but inescapable truths.

Thus, for example, there is no single correlation between objective insight and degree of adaptedness of the corresponding action. Action in line with "common sense" which is practically oriented can be more efficient than scientific knowledge.

Analysts sometimes tend to forget this, probably because in our analytic work the relation between truth finding and therapeutic change is a particularly close one.

Or, there is interference with objective cognizance of the world, not only through the action of instinctual needs but also sometimes by ego and superego influences, even by functions which in other circumstances can lead to adjustment. Thus the dependence of the human child on the object, which is an essential factor in his learning about reality, can also leave "not-objective" imprints, when for example the child is rewarded by taking on the biased and erroneous views of his parents. Or the superego, which can add motivations for objectivity, truthfulness, etc., also can narrow the child's knowledge not only of inner reality but of outer reality as well. The child adjusts to a world which is not only to a considerable extent man-made but also man-thought. There are thus two types of reality, objective reality and "socialized reality".

In a paper on the "Sense of Reality", Zilboorg asks the thoughtful question: "What is 'external' and what is 'externalized'? While we know projection as a pathogenic mechanism, it is also part of normal functioning. Hartmann stresses the differences between and the importance of both inner and outer worlds. He makes it clear though that to him "inner reality" is not the same as Freud's "psychic reality", which referred mainly to fantasies. Hartmann's "inner reality" includes not only these but also all mental functions tendencies and contents which acquire a "realness" of their own.

Then, in clinically potent observations, he points out that distortions can occur to both "realities" and that there are also two types of reality-testing. While in the psychoses outer reality-testing breaks down, in the neurotic and even in the normal there are many impediments to the testing of inner reality.

The above examples have demonstrated Hartmann's steady and systematic extension of the working area of psychoanalysis into the realm of a general psychology. Another area of extension within our field which Hartmann has pioneered has been the stimulation and direction he has consistently provided for a detailed study by analysts of the pre-verbal period of the earliest years of life. It has been his repeated contention that the clinical and theoretical gaps in our knowledge which inevitably remain from reconstructive data in adults can only be filled in by direct studies of young children, including direct child observation, longitudinal studies and clinical child analysis.

As his own direct contributions to this area, three of the chapters are directed centrally towards early developmental problems and the role of developmental psychology in general (Chapters 6, 9 and 11). The first two examine such problems minutely from the point of view of the normal developmental process and the third from the standpoint of the relationship between infantile neurotic phenomena and later neurosis, character development or positive achievement.

In the first of these (Chapter 6), Hartmann takes note of Freud's complaints about the difficulties inherent in direct child observation on the one hand and the complicated reconstructions and detours which come from adult analysis on the other. This gap, Hartmann feels, can be partly but not completely closed by child analysis. Combinations of both direct and reconstructive data are of vital importance and are made possible as a result of ego psychology and of structural psychology in general, which provide an indispensable frame of reference and the necessary tools for a fruitful collaboration.

Because the analyst is not only an observer but also an actor in the field of his observation, analysis has been called a kind of "technosophy" and its place as a regular science thereby questioned. But data has been made accessible by that method which had not been accessible before and we have come to understand the personal relationship which is at the basis of the observational situation. Kris has distinguished such "action research" from "pure research" and the former has become ever more important not only in the social sciences but in some disciplines of natural science as well. Many childhood situations of incisive significance have a low "probability of direct manifestation" and would be missed by many non-analytic methods of observation. The cross checking of data from reconstruction and direct observation gives promise of a greater possibility of complete understanding. There must be not simply an addition of data from one field to the other, but rather a

"meaningful interpenetration", a concept which Hartmann has brought to our attention not only in elucidating the relationships between analysis and contiguous fields but also, in this instance, within the analytic field of operation itself.

Each approach in itself is selective and has limitations. Analysis does not provide data or memories about the undifferentiated phase nor direct information about the preverbal stage. The latter is a testing ground for many of our assumptions and also a prerequisite for many theoretical advances. There is therefor a continuity between discussions about theories of analysis and their interrelations with developmental psychology. A renewed interest in the latter, stemming in large part from advances in our understanding of ego psychology and in the relationship of ego development to object relations, can be of aid to us in the field of prevention or education.

Sometimes we confuse a part for the whole and speak of involvement of "the ego" when, for the purpose of developmental studies, a differential consideration of various ego functions would be indicated. The separate and specific ego functions can be observed selectively in developmental progression, as well as the interaction between crucial phases of maturation and crucial phases of environmental influences (Erikson, 1940). The impact of the environment on development and of earlier on later maturational phases are all indispensable to bear in mind for proper genetic research. Simplifying them and accenting too exclusively either maturation or object

relations, or any other single factor, leads to a one-sided picture. Such may be the case, Hartmann points out, in Melanie Klein's over-emphasis of the biological or, in the opposite overemphasis by others of cultural factors. Pointing to the great variability of factors, both in their timing as well as in their content, Hartmann makes "an appeal to observation" and points out that analytic theory can help not only reconstruction but can inform and guide developmental observational research.

Keeping us ever alert to the possibility of artefacts, Hartmann stresses here too the importance of differentiating genetic continu ity from phase specificity. The pitfall of describing what is a specific disposition of a later phase as characteristic of its genetic antecedents, widely done in some analytic writings, is exemplified. Cases in point are interpreting very early object relations in terms of specific features of the later oedipal phase, or referring to early prohibiting functions of the ego in terms which are specific only later to the superego.

The need for such accuracy of knowledge about phase specificity applies not only to points of vulnerability and potential pathology, but equally to positive influences and potentials for normal and adaptive behavior. There are optimal phases for every step in development, including those which have to do with adjustment, integration and the overcoming of conflicts, and knowledge of this can help towards our understanding of child rearing, education and prophylaxis.

Hartmann does not let us forget the complexity of developmental problems and the complexity of concept formation which is in direct relation to it. And, as always, integrating the relationships between theory, technique and therapy, Hartmann points out here what he was to say again some years later (Chapter XV), that theory is not an "occasional by-product of clinical experience or an intellectual hobby of some analysts", but is rather of vital importance in pointing ways not only to therapy but also to prevention.

In another chapter, discussing the mutual influences in development between the ego and the id (Chapter IX, 1952), Hartmann notes how the development of Freud's ego concepts in their richer and wider phases (in the 1920s), had a revolutionizing impact on the development of many other aspects of analysis, including the theory of instinctual drives. Always integrating such developments with wider spheres of knowledge, Hartmann sees this as a clear example of a tenet of the philosophy of Hegel, who saw the evolution of concepts in terms of thesis, antithesis and synthesis. The synthesis then of the intricate aspects of the ego-id relationships, which were seen by Freud in their many technical as well as theoretical implications, is then followed up and expanded by Hartmann in many rich and varied directions.

In speaking of the mutual influences in the development of

the ego and the id, we are used to considering the ego as the dependent one and the id more often as the independent variable. We are impressed by the flexibility and the learning capacities of at least part of the ego and at the same time by the stubborn opposition to change of the instinctual drives. Yet the latter are also subject to change. First there are changes in the id brought about by the maturational development of the drives themselves through subsequent phases. Also, the ego influences the vicissitudes of drives by draining or damming-up the instinctual energies. Via the ego, analysis can induce modifications in the id. Finally, there is also the occurrence of changes in the id itself as an outcome of repression. In 1926 Freud changed his original idea that repressed impulses remained unchanged in the id, observing that there can be "mere repression and the true disappearance of an old desire or impulse". Flexibility, development and change are therefor seen as occurrences which unfold in both of the structures, id and ego.

Regarding the mutuality of relationships, just as some aspects of the earliest ego-id relationships can be better understood from clinical studies of regressive phenomena in psychosis, as well as the phenomena during falling asleep, the Isakower phenomena, the opposite can also be true, i.e., that a knowledge of infancy can lead to a better understanding, for example, of psychosis.

While Hartmann, following Freud, utilizes ontogenetic and phylogenetic hypotheses liberally regarding the evolution of ego and id differentiation, an elucidation of such maturational

processes in no way lessens the importance of learning experiences for the development of the ego. On the other hand, the ego aspect of development is no less biological than the id aspect. It is hard to call non-biological the functions of adaptation, synthesis and organization, or the centralization of functional control, all of which we attribute to the ego.

A rather wide field of phenomena are Janus-faced in that they may show the effect of primary process in one aspect and secondary process in another. Thus, as an example, displacement as a mechanism of defense uses a characteristic of primary process for the purposes of the ego (Anna Freud, 1936). The same is clearly seen in dreams. Melanie Klein thought along similar lines in emphasizing the relevance of symbol formation for ego development.

In the history of psychoanalysis, modifications of concepts or new formulations of hypotheses often follow the opening up of new areas of research, as in other branches of science. At the present time the integration of reconstructive data with data from direct observation of young children represents one of the more pressing demands on our analytic work. The various aspects of Hartmann's ego psychology provide useful tools to facilitate the interrelation of these two sets of data and to deal with these developmental problems. Anna Freud, in her book, "The Ego and the Mechanisms of Defense", refuted the idea, held by many at the time, that stigmatized the theoretical study of the ego as non-analytic or even anti-analytic. Such studies have now acquired full

citizenship in analysis on a level equal with the study of the id. It remains for this area to be as systematically developed as Freud did with our understanding of dreams or the process of libidinal development.

Observing here as in many other places on the function of theory in psychoanalysis, Hartmann points out that to many an emphasis on clinical data turns into a distrust of theory. But Freud's supreme capacity for observation and for unflinching objectivity was added to by his ability to form crucial theoretical concepts and useful hypotheses which aided his discoveries as well as their meaningful interrelationships. How much poorer in dimension would his clinical and technical work be had his power of theorizing failed to equal the power of his clinical insight. This is no less true today, states Hartmann, than it was in Freud's time. And we might add that no one more than Hartmann has continued to supply such necessary and indispensable theoretical amplifications into the second half of our psychoanalytic history.

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D) Hartmann <u>bridges</u>. The group of papers just discussed were by way of demonstrating Hartmann's extension of psychoanalytic interest to new frontiers within our own field and our own domain. However, he also was one to bridge across into other disciplines and to establish connections, or at least to indicate that they exist, with many wider relevant contiguous fields. Thus through-

out the totality of his contributions, references are made and linkages established to biology and medicine, to physiology, experimental psychology and philosophy, and to the broad field of the social sciences in general, to sociology, history, anthropology and economics. Always he shows how analysis can meet with and relate to the others and how, while keeping firm the psychoanalytic body, mutual enrichment can ensue.

Two papers in this collection refer specifically to the relationship between psychoanalysis and the social sciences (Chapter II, 1944; Chapter V, 1950). Pointing out how psychoanalysis is interested in man's love relationships in the widest sense, Hartmann comments that few would have anticipated that the basis for a psychology of the relationships between human beings would come from a study of the neuroses. From a brief genetic description of the development of human object relations, the importance of analytic findings for sociology is made evident. However, many of the same phenomena can also be viewed in their biological context, and as a matter of fact psychoanalysis is particularly interested in the psychological study of such "social" factors which are of "biological" importance as well. Under the influence of psychoanalysis, anthropology came to have a certain experimental value in being able to verify or negate psychoanalytic assumptions, besides being able to uncover new facts. Psychoanalysis concerns itself with all the modifications which changing conditions can exert on human situations and attributes. Among these, social

factors play a unique role. Freud was the first to give these factors a scientifically comprehensible place in psychology and psychopathology.

Social and cultural factors can affect the development and conduct of the individual in a great variety of ways and from at least two different viewpoints. They can, on the one hand, co-determine or influence the central structure of the personality or, on the other, their effects can take place in the more distant and superficial layers. Just as there is "somatic compliance", so there is an analogous "social compliance" in which social factors operate selectively to effectuate certain tendencies among those which are potentially demonstrable in the structure of the individual These selective processes operate at every stage of human development

Just as analysis is concerned with the relations between man and his social environment, sociologists today are increasingly using life histories of individuals in their studies; thus both fields are interested in the mutual relations between man and his fellows. Freud's last version of his theory of anxiety relates the internal danger to the external one (1926), and Anna Freud described the types of defenses which the child develops against the dangers from the outside world (1936). Listing a group of penetrating works of Freud's which concerned themselves with cultural factors, i.e., " 'Civilized' Sexual Morality and Modern Nervous Illness" (1908), "Totem and Taboo" (1913-14), "Group Psychology and the Analysis of the Ego" (1921), and "Civilization and its Discontents"

(1930), Hartmann points out that "these ideas represent the first major invasion on a wide front of the psychology of the core of personality into the realm of the social sciences".

However, in applying psychoanalysis to sociology, we must take into account sociological patterns in addition to psychological ones. And a differentiation must be made between sociological problems which are more and those which are less accessible to psychoanalysis. In all situations in which the id, the superego or the unconscious part of the ego play an important role, statements will be reliable only if they are based on psychoanalytic findings. In spite of the recent contributions about conflict-free spheres of the ego, in applying psychoanalysis to sociological problems the theory of human conflicts is still its most important contribution to that science. Even if we state as a principle that sociology is based on psychology, "we have to admit that the two realms have different centers". The relation between psychoanalysis and the social sciences, Hartmann closes one of these two essays (Chapter 2), should be "not merely an exchange of findings, but rather a dynamic process of mutual inspiration aiming toward new investigations which can prove fertile for both sides".

In the other (Chapter 5), Hartmann stresses again that analysis includes within its scope of interest the structure of reality. Since human beings are by far the most important of real objects, the structure of reality most interesting to analysts is the structure of society. Society is not a projection of unconscious

fantasies, though it offers many possibilities for such projection. We must accept social reality as a factor in its own right. Hartmann tends to agree with Parsons in warning against too direct an explanation of sociological phenomena by psychological methods. A sounder methodological foundation between the two fields is needed. While analysts should not neglect the importance of reality to the individual, so should we also not interpret social institutions solely as the expressions of the conscious and unconscious desires of the people within them, as if reality were no more than a wish fulfillment. Although the goal is a mutuality which Hartmann feels can be achieved, he repeatedly exposes the pitfalls which must be avoided. To "apply" psychoanalytic findings and theories to sociological phenomena is not sufficient. We must rather aim at "a mutual penetration" of the theories and data from each field.

In addition to the "bridging" demonstrated above to the social sciences, Hartmann makes contact with many other complementary disciplines in a less organized way in many frequent and scattered references. Thus, for example, his references to physiology, biology and medicine are abundant and his assignation to them of the further development of some of our mutual problems is frequent: the importance of the source of instinctual drives lies in a hope for a possible future meeting between analysis and physiology (Chapter 4); the assumptions about psychic energy, whether instinctual or independently from the ego, lead ultimately back to physiology (Chapters 7 and 12);

ego psychology and especially its synthetic and organizing functions, i.e., the centralization of functional control, extend our sphere to a possible meeting one day with the concepts of brain physiology (Chapter 7); ego psychology, as formerly the instinctual drives, make for a continuity with biology (Chapter 7).

At the opposite pole, his wide and classical orientation enables him to join hands equally with insights which have come from philosophers, both modern and ancient, referred to in passing in a number of places above. Thus, tracing the history and vicissitudes of Freud's ego concept, Hartmann sees this as a clear example of the philosophy of Hegel, who saw the evolution of concepts in terms of thesis, antithesis, and synthesis (Chapter 9). Aristotle described the basic human goals as "profit, pleasure, morality", parallel to our ego, id and superego distinctions (Chapter 3). And concepts of organization, equilibrium and harmony, not unlike our concept of synthesis and organization, have been used in explaining human behavior since Socrates, Aristotle and the Stoics (Chapter 3).

Hartmann's links to experimentation, experimental psychology, scientific methodology and the philosophy of science are also too self-evident at this point in this essay to need documentation. His own analytically-oriented experimental work (with Betlheim, Chapter 17; and his own, Chapter 19; vide infra) were among the first in our field, and were noteworthy preludes to the current work of Charles Fisher, George Klein, and others. And scattered throughout all of his theoretical papers are hints, guides and

directions found indispensable to the many workers, both inside and outside of analysis, now engaged in extra-analytic direct observations of a variety of types on children and adults.

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E) And finally, in accordance with the divisions which I am submitting, Hartmann points - - - to the future.

Not only is almost every contribution, by his own words, open-ended, tentative and incomplete, with the way open for future exploration and amplification, but the body of his works are replete with specific sign-posts pointing to such future directions. A multitude of research workers, of clinical investigators and of theoretical formulators can and will be kept busy for many years to come, working these trails.

Thus again to give only a few examples: "it seems probable that a theory of action based upon the knowledge of the structural aspects of personality and of its motivations is the most important contribution psychoanalysis will one day be able to make in this field" (i.e., the social sciences) (Chapter 3). A theory of adaptation, which is not yet fully existent, in turn will mean a theory of object relationships and of social relationships in general (Introduction). He later gives a very good start to anyone who wishes to work on such a "future theory of object relations" (Chapter 9), the details of which we cannot go into here. I myself can vouch for the tortuous vicissitudes of this path of development

from having studied the subject of "Friendship" (Rangell, 1963 a). An analytic normal and general psychology is still very largely nonexistent (Chapter 1). His own contribution "does not yet enable us to formulate a concept of mental health in simple, unequivocal, definitive terms", but some of the directions of "a future analytic theory of health" appear clearer (Chapter 1). A more detailed study of specific ego functions and their interrelatedness, and not only the "negative" aspect of the ego in its role as adversary of the drives, "is a decisive step toward a general analytic theory of motivation" (Chapter 9). A greater refinement of knowledge about the early developmental stages of the ego and of early object relations can be expected to be of the greatest help in the fields of prediction, prevention, child-rearing and education (Chapter 6).

Indicative of his view of his own work, Hartmann observes "there is little doubt that [Freud] considered his outline of ego psychology, monumental as it appears to us as a beginning rather than as a systematic presentation - in contrast to, let us say, his psychology of the dream, or of libidinal development; and that he considered this outline in need, but also capable, of reformulation and elaboration" (Chapter 9). And of his own work, in the Introduction to these collected essays, all of the thoughts advanced in these papers, he states, "do not amount to a systematic presentation of ego psychology, much less to a systematic presentation of the theories of psychoanalysis in general. The textbook on ego psychology remains to be written".

We can only say that when it is written, Hartmann will have provided most of its contents.

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All that has been written so far is about Part I. In the last section of the book, which is "Part II", we come in for a rather interesting surprise. We find in this literary and scientific presentation the equivalent of a flash-back in a dramatic piece which goes way back and comes to an end at the beginning. While one might think that he is in for a period of relaxation here, after the consuming work of the previous Part I of the volume, this proves to be by no means the case. However, while the work is almost as arduous, the rewards are as copious and as prolific as they are from the contents of Part I.

We find in these pages not only material of interest with regard to the status of psychoanalysis at the time, but especially for our purposes glimpses into the evolutionary process taking place within the mind of the man whom we celebrate here today. Four papers are included, from 1924 to 1935. Three of these are translated from the German into English here for the first time. The fourth was singled out by David Rapaport for inclusion in his definitive volume on the "Organization and Pathology of Thought" (1951), which itself is a testament to the originality and the historical interest which it contains. This chapter (Chapter XVII), on the Korsakoff psychosis, is the only chapter in the book for

which there was a co-author, in this case Stefan Betlheim.

The same tight style, the same packed contributions, prevail as in all of Hartmann's later writings. Of particular interest to us is how they indicate the seeds of the future proliferation which we have come to know.

In the first of these chapters (Chapter 17, 1924), the much younger Hartmann is moved to try the experimental approach to apply and test the then relatively new psychoanalytic propositions. Following up on previous work by Pötzl and Schilder on aphasia, Hartmann uses as his subjects another type of organic-cerebral disorder, namely cases of Korsakoff psychosis, to see whether the processes of regression, displacement and condensation may play a part here. By presenting stories to these patients in a series of experiments, it was shown how such psychological factors may well be responsible for the distortions and parapraxes which result. "Thus we have demonstrated that in learning experiments the undoubtedly organically anchored registration disorder of the Korsakoff psychosis leads to substitute formations". Observations are made from these about displacement, symbolism and the specific vulnerability of sexual material. Such distortion processes are familiar "from the analysis of parapraxes, dreams, neurotic symptoms, and schizophrenic thinking". The authors considered their methods and their results to be "experimental verifications of the validity of certain Freudian symbol interpretations".

Much is presaged here for the future, the empirical approach,

the experimental method and, above all, the deeply abiding scientific belief in the validity of the then young psychoanalytic hypotheses.

From an historical standpoint, it is interesting that, like Freud, Hartmann's early case material came from the field of rather serious pathology and was only later to extend into the more normal realms. His early interest in organic conditions, moreover, was never to be eliminated and leads, as again it did with Freud, to the conviction of the ultimate close relationship between psychoanalysis and biology.

The next chapter (Chapter XVIII, 1927), is equally interesting from the historical and developmental points of view. In this essay Hartmann undertakes to explain the differences between the psychoanalytic way of thinking and that of a German school of psychology (verstehende Psychologie), which can best be translated as "understanding psychology". While this school has never had much influence on American or British psychiatry and psychology, it was prominent, at least at the time, in influencing German psychology and psychiatry. Hartmann selects this essay as instructive of the method and concept formation of psychoanalysis at that period.

What was meant by "understanding" in that context apparently refers to what we would today call empathy, or "empathetic understanding" or "empathetic experience". The authors of this school felt that "explanation" and causality are limited to the natural sciences, while "understanding", in an empathetic sense, is what provides the clues in the elucidation of mental processes.

Hartmann, extending our knowledge of the latter into the richer horizons of psychoanalysis and its explanatory causal concepts in depth, goes beyond this in an effort to break the bond of constriction imposed by this school of German psychology on mental processes. Discussing the works of such proponents of this school as Dilthey, Husserl and Jaspers, Hartmann goes beyond the school of descriptive or phenomenologic psychology into the realm of "explanatory psychology". "Psychoanalysis has come to see the most essential processes of the human mind from the causal point of view". Empathy itself is not knowledge or explanation, and "self-evidence" alone can lead to the most serious errors when we judge a psychological connection. The understandable connection can prove to be a pseudo connection. The implications of unconscious processes are recognized and stressed. "It is primarily the psychology of unconscious processes which forces us to cast a highly distrustful eye upon the reliability of understanding". Contrasting the two schools of thought, "for psychoanalysis the experience of the patient - - - is the starting point of scientific work and not, as it is for understanding psychology, the goal".

One sees much in this early essay which is exquisitely applicable and pertinent today. The arguments against phenomenology and descriptive psychology perhaps apply as specifically today to the current existentialist school. And Hartmann's observations about the limitations of empathic experience alone, without the indispensable accompanying elucidation of causal and explanatory links, can

be reiterated with equal conviction today in relation to such modern schools as one which stresses "the corrective emotional experience", or else the almost purely experiential school of Carl Rogers, which exerts an influence on the non-analytic psychological world of today perhaps equivalent to the German school of his day to which Hartmann addresses this essay.

This is an essay on methodology, on validation and on theory, so much to be amplified and elaborated in the future works of Heinz Hartmann. It is also interesting from an historical point of view that the examples and demonstrations which he calls upon here are conspicuously in the pre-ego psychology days and derive mainly from observations relating to instincts and affects.

Typically, Hartmann here too is inclusive, empirical, and open-ended. Concerned here with the border between instinctual and organic processes, this "can be decided only by empirical data, which for the most part are still lacking". And, while rejecting understanding as the method of psychology, "no psychology of the more complex aspects of the mind can fully dispense with understanding". The limits of its reliability, however, must be established and "the sphere within which understanding and causal connections coincide is one of the essential tasks of psychoanalysis". This paper is very much a forerunner of the two much later papers on psychoanalysis as a science referred to above.

The following chapter (Chapter XIX, 1933) is an example of a neat and circumscribed piece of experimental work performed by

Hartmann of a type which to my knowledge he subsequently had neither the time nor the luxury to repeat. One can think today, however, how much such works were the forerunners and perhaps among the stimulants to some of the modern current experimental work in our field. Interestingly enough, Hartmann goes back to the experiments of Pötzl, and of Allers and Teler and their tachistoscopic experiments, which were the same significant experiments from which Charles Fisher started his present well known experimental psychoanalytic work.

This particular study concerned the role of incompletion or interruption of ideas and the influence of this on their recall. This question had been of interest for some time in the special area of the psychology of dreams, and Hartmann quotes the impressions of a number of pre-analytic writers in this field and then weaves these into the theoretical constructs of Freud's theory of dreams. Other theories of various experimental workers in this field also served Hartmann as stimulants for this work. Finally, based on certain "dynamic-energetic concepts of psychoanalysis" and in particular on the theoretical formulations about the quality of the thought processes in obsessive-compulsive neurotics, Hartmann performed these experiments on obsessive compulsive patients.

Without going into the details of the method or the results, the observations led to conclusions about the inability of closure and the tendency to incompleteness and to repetition as characteristics of obsessional neurosis. From these investigations as a

base, Hartmann points out at the end the desirability of going beyond the idea of "quasi-needs" as postulated by Kurt Lewin, to the more comprehensive theory of drives as provided by psychoanalytic theory.

The final chapter (Chapter XX, 1934-35), on a psychiatric study of twins, is essentially a clinical study but again, in true Hartmann style, abounds with rich insights of considerable theoretical and methodological significance. Proceeding from the well known dichotomy between anlage and environment, Hartmann observes that debates about many such dichotomies are steeped in factors which are far from rational. Often these are conflicts of pre-conceived ideas, or of influences which come from a philosophy of life, or political considerations or certain professional interests, such as therapeutic, educational, eugenic, etc. He then points out as more scientific Stern's convergence theory (1919) or Freud's idea of the complementary series promulgated in 1916-1917.

Applying these considerations to the field of characterology, some consider this to be entirely a branch of genetics, while the opposing camp understands man entirely "from the outside" and knows "hardly any limits to the optimistic expectations which they attach to establishing a rational order of environmental factors". However, characterology is but incompletely explained by humanistic schools, or those derived from philosophies of life or from value systems, or by "understanding psychology" or the phenomenological school. Rather a science of characterology owes much to psychoanalysis and to

medical psychology in general. Both somatic and psychic processes must be subjected to a scientific approach and both factors, as well as the environmental and the biogenetic, are in principle open to research.

Hartmann studied ten pairs of identical twins. I would say that the results of the study are not as important or as significantly contributory as the historical fact that it was made, and that the methodology and the pitfalls were carefully thought out and commented upon. Hartmann, for example, points out the difficulties in making distinctions between and separate measurements of specific traits or temperaments. Commenting upon experiments and conclusions by others (such as Newman, who concluded that "anlage is about twice as important as environment"), Hartmann points out the difficulties in evaluating "identical environments", and the frequency with which essential environmental factors are missed in ordinary anamneses. The role of identification also plays an important part and there is a tendency of identical twins to identify with each other.

Such careful and thoughtful considerations, the neglect of which might well lead others into pitfalls, are studiously anticipated and objectively spelled out. His own emphasis is on factors which relate to control of reality and of instinctual drives rather than weighing one individual trait against another. Quoting Lange, "The original character is decisive in crucial moments of existence". The relationship of character development with underlying neuroses also came in for observation and psychoanalytic

explanations of the latter proved valuable in understanding the former. Further confirmations, however, of these relationships will have to wait for "other investigators and further research".

From this paper in 1934-1935 there followed four or five years of significant scientific silence. The burst in 1939 brings us back to the point from which we started.

SUMMARY

If one can attempt a summary of the most salient features of what the Hartmann psychoanalytic edifice represents to us, we might say that it contributes the following:

1) Emphasis on the normal, the conflict-free, the processes of adaptation (these are not the same).
2) The use of autonomous ego apparatuses, independent of conflict and of drive activity.
3) The existence of a hereditary constitutional ego core.
4) The possible availability of separate energy for use by the ego from the beginning, "primary ego energy".
5) Elaboration of the structure of the ego, both of its interior and a finer definition of its borders. Appreciation of the whole ensemble of ego functions.
6) Within these functions, stresses the central role of the synthetic and organizing functions of the ego.

7) From the economic point of view, the role of neutralized energy in serving the ego throughout life and for a variety of psychic functions. The accumulation of a reservoir of such energy.

8) Emphasizes the significance of the structural point of view in general and follows its consequences through all of psychic functioning.

9) Separates function, genesis, structure and contents.

10) Systematically extends psychoanalysis from psychopathology to a general psychology.

11) Adds insight into the details of the genetic developmental evolutionary continuum from "animal instincts" to the differentiation of the id and the ego in humans.

12) Within the id organization, adds the role of the aggressive instinct on a par with that of the libidinal.

13) Stresses the constant relationship and interaction between the inner psychic organization and the "average expectable environment" or its variations.

14) In terms of the above elaborations, rewrites some specific psychological phenomena, such as, for example, sublimation, which may well be a model for other mechanisms.

15) Some application of the above also to certain specific clinical situations, such as, for example, to schizophrenia or the infantile neuroses. Also implications of ego psychology for technique.

16) Clarifies problems of scientific methodology and theory formation, and establishes the role of psychoanalysis as a science. The need is emphasized throughout for both empirical observations and hypothesis formation.

17) Extends analytic activity itself to extra-analytic methods, such as mainly direct child observation and observations by experimentation. Analysis can both enrich such other methods and have its propositions checked and possibly validated by them.

18) Bridges across to other fields and establishes the relationships of psychoanalysis to wider contiguous disciplines, such as academic and experimental psychology, the social sciences — sociology, anthropology, history, economics, — philosophy, and to physiology, medicine and the biological sciences. Emphasizes equally the interest of analysis in biology and sociology.

19) While adding the details of ego psychology, Hartmann retains historical perspective at all times and keeps in mind the total psychoanalytic metapsychological system.

20) Points ways to the future: to such specific needs yet to be fulfilled, as a psychoanalytic theory of action or of object relations. In all, aims at a complete psychoanalytic theory of human behavior, to take its place within the family of science.

Hartmann does all this, and much more. And he does it in his own distinctive style, characterized by a profundity of concept and a copiousness of content which will for a long time challenge and reward the psychoanalytic scholar.

We salute Heinz Hartmann on this his 70th birthday and extend to him our gratitude for his work and our best wishes for the years ahead.

REFERENCES

EISSLER, R. S., and EISSLER, K. R. (1964). 'Heinz Hartmann: A Biographical Sketch.' Bull. Menn. Clin., 28.

FORD, D. H., and URBAN, H. B. (1964). Systems of Psychotherapy. (New York: Wiley.)

FREUD, S. (1900). The Interpretation of Dreams. S. E., 4-5.

—— (1905a). Three Essays on the Theory of Sexuality. S. E., 7.

—— (1905b). Jokes and their Relation to the Unconscious. S. E., 8.

HARTMANN, H. (1939). Ego Psychology and the Problem of Adaptation. (New York: Int. Univ. Press.)

—— (1960). Psychoanalysis and Moral Values. (New York: Int. Univ. Press.)

—— (1964). Essays on Ego Psychology. (New York: Int. Univ. Press.)

HARTMANN, H., KRIS, E., and LOEWENSTEIN, R. M. (1949). 'Notes on the Theory of Aggression.' Psychoanal. Study Child 3/4.

KRIS, E. (1951). 'The Development of Ego Psychology.' Samiksa, 5.

RANGELL, L. (1963a). 'On Friendship.' J. Amer. Psychoanal. Assoc., 11.

—— (1963b). 'The Scope of Intrapsychic Conflict.' Psychoanal. Study Child, 18.

—— (1963c). 'Structural Problems in Intrapsychic Conflict.' Psychoanal. Study Child, 18.

RAPAPORT, D. (1951). Organization and Pathology of Thought. (New York: Columbia Univ. Press.)

—— (1953). 'On the Psychoanalytic Theory of Affects.' Int. J. Psychoanal., 34.

SPITZ, R. A. (1957). No and Yes. (New York: Int. Univ. Press.)

WHYTE, L. L. (1960). The Unconscious before Freud. (New York: Basic Books.)