

Autumn 1956

Artificial Limbs

*A Review of
Current Developments*

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Artificial Limbs

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CONTENTS

ARTIFICIAL LIMBS—THEIR HUMAN OWNERS David Shakow	1
ADJUSTMENT TO MISFORTUNE—A PROBLEM OF SOCIAL-PSYCHOLOGICAL REHABILITATION Tamara Dembo, Gloria Ladieu Leviton, and Beatrice A. Wright	4
TECHNICAL NOTES FROM THE ARTIFICIAL LIMB PROGRAM	63
ABSTRACTS OF CURRENT LITERATURE	66
DIGEST OF MAJOR ACTIVITIES OF THE ARTIFICIAL LIMB PROGRAM	68

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Artificial Limbs—Their Human Owners

DAVID SHAKOW, Ph.D.¹

IN ALL areas of medicine and engineering where psychological factors are important, consideration of matters of the mind comes late. Physical problems are so obvious, urgent, and definable—mental problems so frequently cryptic, postponable, and unclear. But it usually develops that, soon after some control has been achieved over the immediate physical problems, the psychological problems obtrude themselves and call persistently for solution. Thus, in the field of amputations and artificial limbs, the primary effort has to date been directed quite naturally toward the achievement of physical restoration of function. Proportionately little thought has been directed toward the understanding and handling of the psychological problems which, in the amputee, the markedly altered adjustment situation creates. Although mechanics and the biomechanics of the amputee have many important identical principles, there is a whole area of needed activity of a quite different order.

The psychological problems of the amputee are, of course, not merely problems of the physically disabled person himself. The new situations that are created with loss of limb are clearly social-psychological in character—situations where not only the manifold attitudes of the patient, both implicit and explicit, toward the loss and the replacement are important but also where the attitudes of family and associates toward him and his difficulty are equally significant. Hence, any full psychological study of the problem of physical handicap must involve three aspects: the attitudes of the disabled person toward the changes created in him by his new situation, as it affects his previous concepts of himself and the image he has of his body; the attitudes of others, especially *significant* others, toward his differentness; and, finally, the interaction of these two in the social context in which it occurs.

In a recent evaluation of studies in this general area, Roger Barker and associates deplore the inadequacy and rarity of satisfactory investigations. Whatever the importance of adjustment problems, not only in the amputee but in all persons suffering a misfortune, it is only when problems become prominent and when social obligations are keenly felt that there appears a

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readiness to pay attention to what appear on the surface to be secondary aspects of problems. Just such a situation arose during World War II, when disabled veterans were returning from the battlefields in great numbers but when, although much thought was being given to physical rehabilitation, little had been done to face the problems associated with psychological readjustment. In response to this need, there was established at Stanford University on February 1, 1945, a study group to inquire into the social-emotional relationships between injured and noninjured people. Conducted partially under contract between Stanford and the wartime Office of Scientific Research and Development (recommended by the Committee on Medical Research), partially under a contract between the University and the Army Medical Research and Development Board of the Office of the Surgeon General, War Department, the work continued until April 1, 1948. By far the majority of the handicapped subjects studied were amputees.

Despite the technical significance of the final report of the project, only a few mimeographed copies were distributed. It is only now—more than eight years later—that the results are seeing the light of print. Because it recognizes the basic nature of the contribution and its significance in the presentation of important problems in the psychology of handicap, the Prosthetics Research Board of the National Academy of Sciences—National Research Council has seen fit to devote an entire issue of *ARTIFICIAL LIMBS* to the reproduction of a single, exceptional monograph otherwise long since obscure and inaccessible. From one point of view, the departure reflects a considerable advance in the field of limb prosthetics—an acceptance of the importance of psychics as well as of the long-recognized importance of mechanics. For this major step forward, the Prosthetics Research Board merits the thanks of all.

With regard to the unusual content of the monograph itself, a few remarks are in order. Barker and associates point out, for example, that physically deviant persons appear not to be a homogeneous group psychologically and that “so far as the somatopsychological relation is concerned there is no direct univocal link between physique and behavior.” They state further that “lawful somatopsychological relations between physique and behavior are mediated by the psychological situation...” These affirmations are especially pertinent to the report we are here studying. Indeed, the present material should properly be viewed in the context of these generalizations about the field as a whole. Although many questions are raised, and although many “I-wish-they-had’s” remain unfulfilled, it is important to recognize the pioneering character of the study, the complexity of the field, and the reasons for the absence of more objective data and for the limited statistical treatment of the material. We should be grateful for the broad attack on the area, the commonsenseness and humanness of the molar approach used, its consistent emphasis on the total person, and the attempt to tackle the problems broadly in the context of a *general* theory of loss and maladjustment.

We should perhaps not pass by the opportunity of calling attention to a few additional topics of especial interest that are dealt with in the monograph. For one thing, there is the emphasis on the emotional aspects of physical handicap rather than on the intellectual and the attempt to deal systematically with such difficult, though apparently commonplace, topics as misfortune and sympathy, seen from both the standpoint of the stricken person and of the outsider. There is, too, an important discussion on some of the methodological problems, particularly the place of measurement and the interview as a tool, in the present status of psychological study in the field. The presentation is made more effective by the liberal quotations from interviews and the inclusion of records of actual interviews in the appendices.

The authors would, to be sure, be the last persons to claim any definitiveness for their study. Its major contribution lies in opening up questions and delineating areas clamoring for further psychological investigation both by more precise methods and with greater intensity. The authors' own attitudes in this respect may be gathered from the fact that they conclude the body of the monograph with a chapter headed *Direction of Further Research*.

It is to be hoped that the recognition given at this time by the Prosthetics Research Board to this area of study will be the stimulus that the field needs for the multiplication of studies on this important aspect of the adjustment of the disabled person and of the noninjured people with whom he comes in contact.

Adjustment to Misfortune—A Problem of Social-Psychological Rehabilitation¹

Dedicated to the memory of Kurt Lewin

TAMARA DEMBO, Ph.D.,²
GLORIA LADIEU LEVITON, Ph.D.,³ AND
BEATRICE A. WRIGHT, Ph.D.⁴

AT PARTICULAR times in the history of science, particular problems become ripe for investigation. A precipitating event brings them to the attention of a single person and sometimes to that of several at the same time. It is therefore understandable that during World War II the need was felt to investigate the problems of social-psychological rehabilitation of the physically handicapped and that someone should look for a place and the means to set up a research project that would try to solve some of these problems. In pursuit of such a goal a research group was established at Stanford University on February 1, 1945. Conducted partially under a contract between Stanford University and the wartime Office of Scientific Research and Development (recommended by the Committee on Medical Research), partially under a contract between the University and the Army Medical Research and Development Board of the Office of the Surgeon General, War Department, the work continued until April 1, 1948.

¹ A study in the social-emotional relationships between injured and noninjured people. Based on the final report of Project W-49-007-MD-325, Supplement 5, to the Army Medical Research and Development Board, Office of the Surgeon General, War Department, April 1, 1948.

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To investigate the personal and social problems of the physically handicapped, two groups of subjects were needed—people who were considered handicapped and people around them. Therefore, as subjects of the research both visibly injured and noninjured people were used. Interviews were employed as the primary method of investigation, the great majority of the 177 injured persons interviewed being servicemen or veterans of World War II. More than half the subjects had suffered amputations and almost one fourth facial disfigurements. The injured man was asked questions designed to elicit his expectations, experiences, and feelings in his dealings with people around him. Sixty-five noninjured people also were interviewed in regard to their feelings toward the injured man.

A first task in the research project was to determine the meaning of the relationship between the injured and the noninjured. Was it primarily that of the helper and the helped, of the curious onlooker and the one who is looked upon, of the independent and dependent person, the one who rejects and the one who is rejected, the person who pities and the one who is pitied? All these relationships exist between the injured and the noninjured. Some of them were described during the first period of the research program (1,5,8). As the research proceeded, it was seen that one particular relationship between the injured and the noninjured was more "basic" than others—basic in the sense that it underlies and determines the character of other relationships. This

underlying relationship is the one which exists when a person who regards himself as fortunate regards another as unfortunate. We learned that to understand this relationship one has to see "being unfortunate" as a value loss and, furthermore, that the adjustment of this relationship involves the problem of acceptance of loss—a case of value change.

In current psychology, the problem of acceptance of loss is hardly investigated. Loss is usually seen as an end-point of unsuccessful, goal-directed behavior (failure) or else it is investigated in terms of the effect of failure on further goal-directed behavior (such as on setting the next "level of aspiration"). But it is important to know what loss means to the person himself, how it affects the opinions and behavior of others toward him, and what acceptance of loss implies. Too often life is seen as a series of goal-directed acts, whereas the *consumption of gains* and the *acceptance* (or nonacceptance) of losses which result from those acts are disregarded.

Almost all people are at some time faced with the necessity of adjusting to loss. In investigating the problems of injured people, therefore, we are dealing not only with special problems of a special group but with problems important to all. If we state that the injured need psychological rehabilitation or adjustment, this in no way implies that they are not "normal." The impact of loss which they experience produces suffering and difficulties. The overcoming of psychological suffering, whether or not it threatens mental illness, is a problem of adjustment.

This monograph is written as a scientific paper and no attempts at popularization are made. Popularization of our findings is a special task—a task which, if skillfully done, would indeed be useful for the information and education of the general public. Those who are not specially concerned with methodological and theoretical considerations may still find the less technical chapters (Chapters V through VII) of interest. The first four chapters and the last one will be of greater interest to the theoretical psychologist.

Part I introduces the general field of social-emotional relationships. It deals with our ap-

proach and viewpoints regarding problems, data, theory, and measurement. We tried to examine the appropriateness of scientific beliefs and attitudes for the new area investigated. Part II deals with the investigation of the visibly injured, a group which, in our culture, is frequently considered unfortunate. Chapter IV presents the procedures used and their rationale. Chapter V discusses devaluation, by the noninjured, of the injured as people who have experienced a misfortune—a value loss. Chapter VI is concerned with the reactions of the noninjured to the suffering aspect of misfortune rather than to its value-loss aspect. The structure or nature of the genuine, positive feelings of sympathy is outlined. Chapter VII deals with the problem of overcoming suffering through acceptance of loss. In Chapter VIII we attempt to point out the direction which future research may take. The appendices include sample interviews with injured and noninjured subjects and a brief summary of methods other than interviews that were tried out in our study.⁵

Three years in a new and relatively unexplored field has to be considered a pilot period. After exploration the field is seen to be fruitful, both for the growth of ideas on the specific topics and also for the development of more general theoretical problems in psychology. But only a beginning has been made, and the material here presented is therefore properly viewed only in the light of its pioneer character.

Many of our findings may from the theoretical standpoint be seen as more precise statements of problems awaiting further investigation. From the practical standpoint, the study may be useful to those who critically examine the findings, not with the orientation of translating them into rules of behavior but so that their understanding of the problems involved in loss may be broadened. The injured, we hope, will find this type of investigation promising in its attempts to lead people to feel that it is not the AMPUTATED LIMB and John Doe but John Doe, the person, who really exists.

⁵ For other methods used in the area of adjustment to physical handicaps, see the critical review of the literature by Barker, Wright, Myerson, and Gonick (2).

Part I

Methodological and Theoretical Considerations Concerning
Social-Emotional Relationships

CHAPTER I

SOME CHARACTERISTICS OF SOCIAL-EMOTIONAL
RELATIONSHIPS

We shall present a list of pairs of words designating social-emotional relationships. We ask you, the reader, to think about the feelings connoted. Specific points to consider may be seen in the first example, the idea of "abandonment." How does the abandoner feel? How does the abandoned feel? How do they feel toward each other? How do you, as a person not involved in the interaction, evaluate abandonment? As you proceed down the list, you should ask yourself these and any other questions you think of which bring out the emotional meanings of the interaction concerned. We ask you to work hard because in so doing we think that you will see the problems of the psychology of emotions in a very different way from the orientation given them traditionally. You will see this field not only as unexplored but also as full of psychological resources available to those who are ready to dig. Here is the list:

To abandon—to be abandoned.
 To abhor—to be abhorred.
 To feel that someone is able—to feel that another considers you able.
 To consider someone abnormal—to be considered abnormal.
 To be abrupt—to be exposed to abruptness.
 To consider someone absurd—to be considered absurd.
 To abuse—to be abused.
 To accept another person—to be accepted.
 To feel in accord with someone—to feel that another person is in accord with you.
 To accuse—to be accused.
 To become accustomed to someone—to have someone become accustomed to you.
 To consider someone as an acquaintance—to be considered an acquaintance.
 To acquit someone—to be acquitted.
 To act in a given way, without actually feeling that way—to feel that someone is just acting.
 To adapt yourself to someone—to feel that another person is adapting himself to you.
 To help someone become adjusted—to have someone try to adjust you.

To admire—to be admired.
 To admit to someone—to get an admission.
 To adopt—to be adopted.
 To adore—to be adored.
 To advise—to be advised.
 To feel affable—to feel that another person is affable.
 To give affection—to get affection.
 To affront—to be affronted.
 To be against someone—to feel that another person is against you.
 To aggravate someone—to be aggravated by someone.
 To be aggressive toward someone—to feel that another person is aggressive toward you.
 To agree with someone—to feel that another person agrees with you.
 To aid someone—to be aided.
 To alarm someone—to be alarmed by someone.
 To give an alibi—to get an alibi.
 To consider someone an alien—to be considered an alien.
 To allow someone to do something—to be allowed.

Only a few of the diverse emotions or feelings are mentioned above. They were selected from the first 20 pages of *The Pocket Oxford Dictionary* (New York, 1927), which has 1010 pages. The list might have impressed you with the tremendous number of unexplored problems in the area of emotions. You might have wanted to take stock of the actual concern shown them in textbooks and courses and in current research in the field of emotions. The psychological structure and the functions of the majority of emotional relationships are unknown. Yet these problems practically do not exist as topics of systematic investigation. At the 1947 meeting of the American Psychological Association, only four of some 200 papers fell under the program headed *Emotions*. The program on *Emotions* was sponsored by the Division of Physiological and Comparative Psychology.

We do not wish to imply that emotional problems are completely disregarded by psychologists. The psychology of personality, social psychology, and abnormal psychology *do* take them into account, but within these divisions other problems, particularly problems of needs and goal-directed behavior, have been in the center of attention.

EVALUATION BY THE OUTSIDER

When you were asked to evaluate the emotional relationships given in the list, you may have felt uncomfortable because of a vague feeling indoctrinated into all of us that in science one should be nonevaluative. Whether a psychologist should or can be nonevaluative is not our present topic. Rather, we are concerned with emotional relationships which are considered by people at large, with or without the permission of the scientist, as desirable or undesirable, good or bad. It is simply an undeniable psychological phenomenon that evaluations are made, and as phenomena they cannot be disregarded. In fact, these evaluations, as shall be seen, are important for the understanding of the dynamics of emotional interpersonal relationships and the problem of adjustment of these relationships.

If one considers the relationships in the list, it is noticed that, even though no specification is given of the conditions under which they exist, some of them connote undesirable feelings and states, others more desirable ones. Examples which fall into the negatively evaluated group are "to abuse," "to abhor," "to accuse," "to affront." Examples which fall into the positively evaluated group are "to accommodate," "to admire," "to allow." There are others which seem less definitely to belong to the negative or positive group. For example, "to get accustomed," "to admit." Such abstract evaluations are not made specifically in terms of the meaning of the relationship to either of the partners. They are given by a person who psychologically takes the position of an outsider.

Evaluations of outsiders very often show a high level of agreement, as is easily demonstrated by a simple experiment. The list of words can be presented rapidly to a group of subjects who are asked to evaluate the relationship as positive or negative from the standpoint of an outsider to the relationship. In only a few instances will there be disagreement, and these disagreements will be due largely to what amounts to a violation of the instructions: for instance, the subject may "take sides" with one of the partners, or the subject may base his reply on the circumstances of particular situations.

Evaluations of outsiders might be considered standards of cultural judgment. It may be the high agreement in the evaluations of outsiders which make them appear to have the role of common cultural standards. It might be interesting to investigate whether some of them are not, in fact, intercultural. The common cultural standards play a not unimportant role in the life of human beings. For example, they strongly determine reputations and the jury's verdict of life or death.

EVALUATIONS BY DONOR AND RECIPIENT

In any relationship, the person who bestows the emotion may be called the "donor," and the person upon whom the emotion is bestowed may be called the "recipient." The difference in the meaning of the relationship for the donor and the recipient is frequently very great. To give an appreciation of this difference, the list was arranged in pairs. You were asked to feel the way the donor in the relationship might feel and the way the recipient might feel. "To abuse or to be abused, to accept or to be accepted" are emotionally far apart. Sometimes both donor and recipient will evaluate a given relationship in the same way. But since the meaning which the relationship has for one partner is not the same as that given to it by the other, their evaluations often differ, and this difference may produce difficulties in the relationship. Help, for example, is almost always seen as positive for the recipient as judged by the donor, but as judged by the recipient it often has both positive and negative aspects. It is important for adjustment of relationships to know the conditions under which the donor and the recipient give the same evaluations and, when they do not, to find ways of producing a change which will lead to agreement in evaluation.

The donor and recipient not infrequently attempt to overcome the difficulties resulting from their different evaluations by urging each other to "be objective." But objectivity, in the sense of assuming the position of an outsider and giving abstract evaluations, is not what is really desired. What each *really* wants is that the partner should "understand" him, *i.e.*, should understand the meanings the relationship has for him. He wants the other

to take his (the first's) position and from this standpoint to think, evaluate, and act.

SCOPE OF MEANINGS AND STRUCTURE OF RELATIONSHIP

It is seen from the list that a great variety of social-emotional relationships exist and that each is characterized not merely by pleasantness or unpleasantness but by a diversity of qualitative connotations. It might be agreed, for example, that one feels lost and hurt when abandoned or that one may feel free and at the same time guilty when abandoning someone. It may also be agreed that one will feel aversion for, and a desire to escape from, one abhorred and that one would feel rejected and resentful if a person abhorred him. Each connotation will be referred to as a "meaning" of an emotional relationship. The diverse, sometimes apparently contradictory meanings which an emotional relationship can have for different people under different circumstances build the "scope of meanings of a social-emotional relationship."

As an illustration, we present some of the meanings which "being helped" has for the injured: it means that a goal is made accessible; it means that another person is courteous and polite; it means that the injured person is in a position of lower status; it means dependence, burden, etc. (5). We assume that these meanings are not merely a congeries of separate entities attached to the same word. Instead, we believe analysis will show that many of them hang together, that they may be integrated within one or more coherent structures.⁶ When the structure of a relationship has been determined, it is sometimes found that some of the meanings which subjects give to the word do not belong to the relationship in question but to a different one. For instance, in the case of the sympathy relationship, the structure of which is described in Chapter VI (page 27), some of the subjects gave meanings which belong to the relationship of "pity," a relationship which has a different structure.

The determination of the scope of meanings

⁶ By "structure of a social-emotional relationship" we mean those characteristics which, when interrelated, are necessary and sufficient to describe the nature of the relationship.

seems to us an essential problem because it is the first step toward determining structures of relationships. The structure is a better description of the social-emotional relationship than is the scope of meanings. Even before the development of the structure of a relationship, however, the determination of the scope of meanings has practical value. It permits realization of possibly disturbing connotations and encourages precautions and safeguards against them.

CHAPTER II

QUALITATIVE VERSUS QUANTITATIVE APPROACHES IN A NEW FIELD

In a new field, the formulation of meaningful problems is a task in itself—a task which often takes much time and effort. It is easy within an hour or two to state a hundred questions, in a few days to state many more. Yet only a few of these will prove to be fruitful. The selection of problems which are scientifically promising is an extensive qualitative research job.

Essential questions are those which promise to become an integral part of an interrelated group of problems and to lead to the development of corresponding systems of concepts. In a new field neither the problems nor the systems are known. They have to be discovered by giving a "qualifying examination" to the problems and preconcepts which occur to us, since these include both promising and unpromising ones.⁷ The qualifying examination consists of a test which shows whether a particular problem and preconcept with other "candidates" promise to form an interdependent team. When they not only develop but also add to the development of the emerging system, they acquire the position of fruitful essential problems and preconcepts.

Consider an example of a problem which does not seem promising, in the sense that it is likely to remain an isolated problem. It is noted that some of the items in the list connote what may more frequently be called feelings (e.g., "to abhor," "admire," "adore"). Others

⁷ By "preconcept" we mean a term which lacks either a rigid conceptual definition or a precise operational definition.

have the character of emotional acts (e.g., "to accuse," "advise," "acquiesce," "admit"). Still others reflect social distance (e.g., "to consider someone an acquaintance or an alien"). These categorizations seem, however, not to lead to further understanding. They simply fix the different relationships into more or less neat cubbyholes, which are, as far as we can see at the present time, blind alleys. In this example, categories rather than preconcepts are relied upon to "order" the facts. Only an orderly catalog instead of a system of interrelated dynamic concepts can be built up in such a way.

An example of a problem which we consider promising is the determination of value structures held by those people who are undergoing difficulties and by those who have overcome these difficulties. This, we believe, is one of the first steps in conceptualizing adjustive change (Chapters V, VII, VIII).

Another example of what might be considered promising for future investigation relates to the "mutual" relationship. When discussing the relationships in the previous chapter, all of our examples were of "one-sided relationships." Each involved one donor and one recipient. But partners may abuse each other, accept each other, or admire each other. Each may be in the position of donor and recipient at the same time. Mutual and one-sided relationships are not merely convenient methods of classification. They bring into focus a number of questions important dynamically.

It frequently happens that when a one-sided relationship is unpleasant for the recipient, he will try to change it to a mutual one. For example, if he is being abused he may begin to abuse the other. What effect does this change produce? The question will be sharpened if we consider the following hypothetical statement:

$$R_p^{rd} = R_p^r + R_p^d,$$

where R_p indicates the person p 's relationships, and d and r indicate the donor and recipient positions, respectively. In this statement, p 's mutual relationship is a simple summation of his relationships as donor and recipient. Can this actually be the case? Are

the meanings for p in the mutual relationships (R_p^{rd}) equal to the sum of meanings which the one-sided relationship has for him when he is only a recipient (R_p^r) plus the meanings it has for him when he is a donor (R_p^d)? This question is important, for if the addition of the new meanings of the donor relationship does not change the old meanings of the recipient relationship, then the addition will not diminish the previously existing conflicts or difficulties.⁸ Actually, the "adding" of new meanings may not be an addition at all but rather a restructurization of the first one-sided relationship (i.e., a change in some of the meanings which the relationship originally had for the person). In the latter case we would have to study the type of change produced by the restructurization and the circumstances under which the change is adjustive.

At different stages of research, the "candidate problems" must be subjected to further test. For a time they might drop out from the "team," and then later their participation may again become fruitful. Within this process they may change their character and gain a new role.

The "candidate problems" are thoughts of the investigator, fed by qualitative observations and checked by them. For this type of work, an armchair and a pencil are more appropriate than a straight chair and a calculating machine. It might require self-control on the part of the investigator to go on with conceptualization and qualitative analysis of data when he is constantly lured by more easily quantifiable, nonsystematic, isolated problems.

THE POSITION OF MEASUREMENT IN PSYCHOLOGICAL RESEARCH

The attitude, "Investigate what you can measure," is not infrequently found in psychological research practice. But there is such a thing as primitive quantification. Quantification of data on systematically unimportant questions is primitive. And there is also such a thing as premature quantification. That quantification which is done before the laborious task of qualitative description of problems and concepts is sufficiently advanced is premature.

⁸ Though it may increase them.

The determination of statistically significant differences between two sets of data does not ensure that these data are important either practically or for further theoretical advance. Instead of regarding the statistical fact as an observation which needs anchoring in an explanatory system before its import can be judged, all too frequently such observations, by sheer virtue of their statistical nature, are held up as contributions in themselves. We do not declare that measurement should not be done without a well-developed theoretical framework. But we do assert that such measurement often produces statistically significant differences on inessential details. And we further assert that where problems well grounded in theory have not as yet been formulated, data analyzed qualitatively may contribute far more to the understanding of important problems.

Where there is a well-defined theoretical system, however, measurement has a very important and different position. Measurement in this case, as we see it, means measurement of conceptually defined constructs and the determination of interrelationships among those constructs. Preliminary to such measurements, one has to determine whether the constructs used permit metrization or whether nonmetrical mathematical (topological) statements should be made. The particular problems involved in this type of mathematical determination in psychology were first realized by Kurt Lewin (6, 7) in regard to problems of goal-directed behavior. Such mathematical determination will have to be made in the field of emotions as in any other field, though it may take years before it is possible. In the meantime, sound investigation, systematic in nature, will have to be primarily qualitative.

There also may be considerable practical value in qualitative investigation before quantification is possible. The knowledge of *what* affects a given social-emotional relationship, even if we are unable to indicate the strength of that factor, is of value. For example, we may not be able to state the extent to which sympathy reminds an injured person of the negative implications of his injury. The fact that sympathy *may* remind, however, immediately calls for caution in conveying compassion to the injured.

CONCERNING FREQUENCY COUNTS

At any stage in theoretical development, one may tally the number of times a given observation occurs in the sample studied. But the meaning of such frequencies needs to be examined. The sheer number of occurrences does not indicate the relative importance of the event. We do not consider more important the fact that a person dealt honestly with us ten times than that he once cheated us. Nor can we say, without further proof, that there is a one-to-one relation between the strength of a factor and the frequency of its occurrence.

One function of frequency counts is to permit a more accurate prediction of the number of occurrences of like events in like populations. This function, however, is often limited by failure to define the research population in terms of systematically important factors.

SOME PROBLEMS OF SAMPLING

To "select" a population for research in a new field which lacks systematization is harmless but also meaningless and therefore to be rejected as impractical. The traditional parameters of age, IQ, socioeconomic status, and geographic location should not be thought of as automatic principles of selection. Their usefulness for the particular research has to be determined in each case. It may be, for example, that in research on the injured it would be more appropriate to define the sample in terms of preinjury attitudes toward the handicapped, relative evaluation of beauty and physical prowess as compared with other personality characteristics, and sensitivity to status position. A group which is homogeneous with regard to some arbitrarily selected factors will actually be heterogeneous with regard to those factors which prove to be of systematic importance.

Heterogeneity is, however, not a disadvantage. In an unstructured, new field, where the first task is to determine fruitful problems and the concepts to be used in their solution, the danger lies in overlooking diversities which should be taken into account. Heterogeneous groups which yield a wide range of differences in behavior are therefore welcomed. To narrow down the range of subjects is permissible only for a good reason. This reason has to be specified. In the beginning stages of our research

on the social-emotional relationships between visibly injured and noninjured persons, it was legitimate to include a variety of subjects. To have limited the investigation to, say, leg-amputation cases, for the sole reason that in the interests of homogeneity the type of disability should be uniform, would have been groundless.

In later stages of research, the original sample might legitimately be narrowed down or enlarged, depending on the particular problem being pursued. For example, we have indications that a person's status values affect his attitudes toward such social-emotional interactions as sympathy, help, curiosity, and so on. This suggested systematic relationship could be tested by narrowing down the sample so that but two groups would be included, one strongly status-minded and the other not, according to certain criteria. Whether the expected differences are to be found could then be determined. As an example where an even more heterogeneous sample than the original one is indicated, we can present again an instance from our research. The understanding of problems of loss became clearer to us when the concept of misfortune was introduced. In light of this theoretical orientation, it undoubtedly would be fruitful for further research to enlarge the sample to include, in addition to the injured, other persons regarded as being in an unfortunate situation. In short, throughout research, the sample taken for study should be determined by the requirements of the problem being studied and not by applying sampling procedures which are either extraneous to the purpose of the research or else actually interfere with it.

CHAPTER III

THE INTERVIEW AS A TOOL FOR INVESTIGATING EMOTIONAL CONTENTS

The interview as an experimental tool is in dispute with many present-day investigators. Some investigators will go as far as to withdraw the honorable title of "real scientific endeavor" from a study which uses "just interviews" because interviews do not deal with how the person "actually behaves." In this chapter we shall examine the validity of this argument.

REFLECTION UNITS AND INTERACTION UNITS

Consider this example: A young girl gets an invitation to a ball. She is full of anticipation—perhaps she will be the belle. Perhaps a certain young man will dance often with her. She decides what gown she will wear and how to arrange her hair. She plans imaginary conversations with gallant partners. But she is anxious too. Maybe she will be a wallflower; maybe the young man will not even notice her. Finally, after a succession of alternating moods, the ball arrives. The social interaction which has occasioned so much thought and feeling actually takes place.

If, in the investigation of social-emotional relationships, only interaction units were studied, a large part of the course of events would be neglected. Periods of reflection which include planning, expectations, evaluations, struggle with one's feelings and moods, would be excluded from study. Similarly, if in the investigation of personal-emotional events only action units were studied, periods of reflection would be overlooked. The interactions or actions themselves might not be fully understood without the consideration of reflection units.

The high status position of interaction data as compared with the data of reflection units seems in part to be based upon a vague feeling that only interactions are "real facts." But the types of reflection units enumerated above are all *real in the sense that they exist as psychological phenomena*. Even if reflection units had a segregated existence and did not influence interaction units, they would still have to be studied as real psychological phenomena within the life of the person. The reflections themselves may produce pain and consequently require adjustment; for instance, a man with a scarred face believed that "no woman in her right mind could possibly accept me now."

Is it meaningful to ask whether interaction units are *scientifically more real* than reflection units? The frequently stated criterion of scientific reality, "What is real is what has effects," concerns not observable facts but the reality of descriptive, explanatory concepts. The reality of the effects is not under discussion in the criterion; nothing is implied about them but their virtue of being available for

observation. Scientifically, reflection units and interaction units are both legitimate observable facts. It is true that in the case of reflection units the content must be communicated to the interviewer. But this mediation should be no more disturbing than that of other instruments. The criterion cited does not specify that the observable facts must be observed directly.⁹

What conclusions can be drawn as to the relative merits of the two types of units for study? Both interactions and reflections are real phenomena and legitimate observable facts; psychological difficulties requiring adjustment may exist in either case. They differ in that interactions can be observed directly, whereas the content of reflections must be communicated to the investigator by the subject. For an investigator, the difference between them is simply one of kind and not of value.

INTERVIEWS VERSUS BEHAVIOR OBSERVATIONS

We submit that the richness of emotional life can be more fully realized through the use of the interview than through observation of behavior. It is true that we can infer something about underlying emotions from behavioral observations, but the understanding gained in this way is usually more limited. If we could have observed the girl smiling over the invitation, taking from her wardrobe first one gown and then another, being absent-minded about her everyday tasks, and so on, we might have been able to infer something about her feelings. But the complexity of her feelings, the content of her hopes and fears, remains largely unappreciated. On the other hand, for particular problems observation of behavior would be required, for example in order to study the effects of reflections on behavior, such as how fear of failure affects performance, or whether verbal attitudes correspond to behavior.¹⁰ Only when a particular

problem is specified may one method be judged better or worse than another.

VALIDITY OF INTERVIEWS VERSUS VALIDITY OF BEHAVIOR OBSERVATIONS

It is frequently stated that the subject willfully or otherwise does not tell the interviewer what he actually feels. But one cannot claim superiority for behavioral observations on these grounds. Hiding emotional contents is not limited to interviews. One can cover up one's real feelings with actions just as easily as with words. One can smile when he is sad just as easily as he can say he is well when he feels bad. Friendly acts may be due to bad intentions. They may be performed to cover up the real feelings behind them. One covers up if there is a *need* for it.

The need to hide during an interview, it might be argued, may frequently be less strong than in interaction units. It might be considered whether hiding of feelings from a person with whom they are connected is not frequently more necessary than when discussing or reflecting about these feelings with a third person. It is likely that feelings of guilt or shame will be less strong in regard to statements than to acts. Especially if the third person takes a nonjudgmental position or the position of an ally will the true feelings as far as they are recognized by the subject be expressed more openly than in interaction units. Of course the need to hide particular emotions will exist during interviews, but the interaction units cannot be turned to as the better ones in this respect.

KNOWLEDGE OF THE SUBJECT ABOUT HIS OWN EMOTIONS

Interviews are sometimes held in disrepute on grounds that people do not know their own feelings. Has not depth psychology taught that people fool themselves? Does not the subject need first to be analyzed and to be an experienced psychiatrist or to have special training in psychological matters in order to be able to make pertinent statements? Fortunately, people do not learn to cognize feelings in college only. Much of what one feels when

⁹ The validity of the interview as an instrument is a separate problem. See next column.

¹⁰ One would wish that instead of imputing a lower quality to interview data, instead of stressing that "How a person thinks he will act does not always correspond to how he will act," attention would be given to the specific conditions under which intentions and

attitudes, given an "action test," either are or are not carried out.

someone nags him, for example, or helps him, or when he is jealous, can be perceived without special psychological training.¹¹ If the objection is raised that the conscious meanings which feelings have for the subject are less important and more superficial than those of which he is not aware, we would say that such a statement is premature. Explicit criteria of importance have first to be given.

If important feelings are those which affect a person's behavior, we say that those consciously given share the same honors as the hidden. And if it is asserted that unconscious feelings are more important because they explain *more* of a person's behavior, one is called upon to compare counts. This has never been done, nor does it make sense to do so. For immediately the question arises as to what weights to assign to the individual behavior units. Are they more important because they are resisted? Then what is the rationale for considering the resisted more important? We suspect that all too often the hidden is identified with the important by sheer virtue of the fact of its covertness. Clearly missing is a link which must be supplied before such an evaluation can have scientific merit.

As far as we can see, it is scientifically meaningless to argue about the importance or superficiality of perceived meanings of feelings before the criteria of such judgments are made clear. One criterion does exist. If important problems are those which are essential in the sense discussed on page 8, *i.e.*, problems which attempt to relate observable facts to systems of concepts, then there is nothing which leads us to exclude feelings as perceived by the subject as "candidates." Criticisms regarding essentiality of problems are applicable to overt and covert meanings alike.

FEELING LEVEL VERSUS INTELLECTUAL LEVEL OF DISCUSSION

Emotional topics can be discussed with almost anyone who is willing to participate in an interview. The discussion, however, may

take place on an intellectual level or on a feeling level. One can "just talk about" feelings, in an abstract, impersonal way (intellectual level), or one can analyze one's feelings in terms of the particular intimate meanings they have for the individual (feeling level). Psychotherapy, whether directive or non-directive, strives for such a feeling analysis by the patient. It has been commonly recognized that, in order for feeling analysis to take place, the person must have a need to examine his feelings, and he must expect the interviewer to be tactful, understanding, trustworthy, etc. In the study of the meanings which social-emotional relations have for the donor and for the recipient, however, a further important condition must be realized. To approach such meanings on the feeling level, the subject must *actually feel* the position of a partner in the relationship. He must feel something of the hurt involved in being stared at, for example; or in the case of the donor position, something of the curiosity. It is more advantageous to select subjects who in actual life are donors or recipients in the relationship investigated. Otherwise the subject tends to discuss on the intellectual level or evaluate as an outsider, and in neither case can he convey the emotional impact which the relationship has for a partner.

ANALYSIS OF DATA IN THE AREA OF EMOTIONS

The principles which guided us in choosing methods of collecting data apply no less to its handling after it has been gathered. The whole flavor of the emotional meanings which one was at such pains to obtain can be lost if the approach to the data is unwisely rigid. The investigator is forced to perceive and to feel emotional relationships from the point of view of the donor and recipient before he can understand the meanings and evaluations ascribed to them. Not being involved in the particular relationship, the investigator has to find equivalent relationships in his own experience. Frequently in our research we had to feel through relationships from our own personal histories in order to be able emotionally to understand the subject's comments. Though the occasion at which sympathy, for instance, was given to us differed from the occasion leading to sympathy relationships in our

¹¹ In no way do we believe that the subjects' conscious perceptions of their feelings are the only data worthy of study. Many other clues during an interview give us indications of hidden meanings which broaden the understanding of the person's feelings.

subjects, the tool of self-analysis was useful. There is an obvious danger of analyzing superficially similar relationships instead of equivalent ones. Self-analysis, therefore, should be used for the purpose of getting "hunches" which can be applied to the data obtained from the subjects. Such an approach leads to aspects of data which an investigator, viewing the data as an outsider, will overlook or misinterpret.

There is nothing unscientific about being a subject and an investigator at the same time. In perception psychology, for example, the investigator frequently takes this double role. He can perceive and then cognize what he is perceiving. In the area of emotional problems, the investigator should try to feel the emotional situations being studied and then to examine what he is feeling. Physical, physiological, and psychological laws which hold for the object of the investigation hold for the investigator also. In investigating emotional relationships, to feel is at least as essential as to think.

If we state that one has to do not only a thorough job of thinking but also of feeling we make a realistic statement concerning the method of studying emotional relationships. Our view on the necessity of emotional understanding is not as radical as it may seem. Frequently in psychology statements are made

that we have to investigate contents as they "exist for the subject," "what it means to the subject," "to see with the eyes of the subject." The need for feeling "like the subject feels" was long felt by therapists. The requirement of psychoanalysts that they themselves be analyzed is partially for the purpose of facilitating emotional understanding.

In attempting to find aspects under which the data may be fruitfully seen, complete freedom should be given to the investigator. He cannot be free enough and "wild" enough in looking for interpretations and possible implications of the raw data which might lead to hunches, hypotheses, and conceptual formulations. Hunches are freedom-loving birds which do not hatch in supervised, restricted areas. This does not mean that the data will be distorted or that the results will be "only speculation" and not "facts." The test is whether, when a category has been well defined, independent observers will agree that given items of the raw data fit the category. If they do agree, then this aspect is indeed "an observable fact." If we are too "wild" in our interpretations, then we shall be caught by another observer. But if we are unwisely rigid we shall not be able to make a step in the direction of theoretical progress.

Part II

Study on the Visibly Injured

A Group Considered Unfortunate

CHAPTER IV

RESEARCH PROCEDURES

Our approach to the problems of the social-emotional relationships of the visibly injured was based on the theoretical and methodological considerations discussed in Part I. Because the task was that of determining essential problems in the new field of social-emotional relationships, qualitative methods were chosen as the appropriate ones. Measurements at this time would have been premature. Frequencies of observations and statistical analysis are

therefore not presented, since they would only be misleading.

SUBJECTS

Heterogeneity of subjects, as has been seen, is an asset for such a study. The subjects (177 visibly injured and 65 noninjured persons) varied as to age, race, intelligence, socioeconomic background, occupational interests, marital status, and so on. The injuries varied. The relationship of the noninjured to the injured persons varied. To have narrowed the groups for the sole reason that they should be

homogeneous would have given us a more limited picture of the emotional meanings of the relationships existing between the injured and the noninjured.

If, at the beginning of our investigation rather than at the end of it, we had known that the relationship of misfortune was especially important to the understanding of the problems studied, we would have considered it profitable to have included persons who experienced misfortunes other than injuries. But our research was an outgrowth of interest in the problems of the injured, and thus misfortunes other than visible injuries were not studied. Orthopedic cases and cases involving plastic surgery were chosen because the visibility of the injury is important in relationships with noninjured who are not close to the in-

Table 1

DISTRIBUTION OF INJURED SUBJECTS WITH REGARD TO INJURY

Physical Defect	Hospitalized Service- men	Veter- ans of World War II	Civil- ians
Amputations: leg			
below-knee	20	16	1
above-knee	18	13	1
bilateral	3	1	—
Amputations: arm			
below-elbow	10	2	2
above-elbow	6	1	3
bilateral	2	—	—
Amputations: one arm and one leg	1	—	—
Facial injuries: (plastic surgery)	38	2	—
Injuries:			
leg	4	1	1
arm	—	1	—
hand	14	—	1
Residua of:			
arthritis	—	1	—
poliomyelitis	—	—	3
spinal meningitis	—	—	1
tuberculosis of bones	—	—	1
Congenital deformity	—	—	3
Transverse myelitis (in wheel- chair)	5	—	—
Multiple sclerosis (in wheel- chair)	—	—	1
Total	121	38	18

Table 2

DISTRIBUTION OF NONINJURED SUBJECTS ACCORDING TO RELATIONSHIP WITH INJURED PERSONS

Wives of injured men	18
Other close relatives	4
Professional personnel dealing with injured (surgeons, occupational therapists, manu- facturers of artificial limbs)	12
Other noninjured (friends, acquaintances, distant relatives)	31
Total	65

jured. Blind and deaf persons were excluded as subjects since it was felt at the time that the specific additional problem of communication between them and the noninjured would have in the beginning of the research unnecessarily complicated the data.

The ages of the injured subjects ranged from 19 to 58 years, the duration of their disabilities from two months to 33 years. Of the 177 injured subjects, 121 were hospitalized servicemen of World War II and four were women. Table 1 presents the distribution of the subjects according to type of disability; Table 2 gives the distribution of the noninjured according to relationship with injured persons.

INTERVIEW PROCEDURES

After having tried out several techniques of investigation, a summary of which is given in Appendix I, we found that the scope of meanings of social-emotional relationships could most adequately be determined by interviews. Prior to the interview much work was done on the selection and formulation of questions, the purpose being not to set up a questionnaire for the interviewer to follow rigidly but rather to prepare him for the interview. We wish first to point out why we think it unnecessary and often disadvantageous to follow a rigid order and formulation of questions; then we would like to explain what we mean by "preparing the interviewer for the interview."

It was observed that, for at least three reasons, the actual course of events in an interview might require deviations from a pre-arranged interview. In the first place, identity

of questions and order does not ensure that the psychological situation will be the same for different subjects. In many instances, a question will have the same meaning for each subject only when it is put in a different form. Thus, in our study, as well as in many investigations where comparisons among the subjects are made, rigid interview procedure is contraindicated. That we deny the necessity of maintaining a rigid formulation and order of questions does not imply that we disregard the influence of preceding events upon a given question. Rather, we assert that this kind of influence can be validly determined only when the analysis of data is made. A rigid order gives an "appearance" of the same conditions and illegitimately relieves the experimenter from investigating the effects of the actual psychological conditions upon the responses of the subject.

Secondly, a rigid interview leads in many cases to a more superficial intellectual discussion than is the case when the interviewer follows the natural course of the discussion. If a subject is developing a topic in a given direction and the interviewer goes on to the next question on the list, the interruption might be emotionally disturbing. Such interruptions promote the feeling that the interviewer is not really interested in what the subject is saying but just has to complete the task of getting answers to "twenty questions."

Finally, in a nonrigid interview the subject may introduce new topics which, in the exploratory stage of research, are often worthy of consideration.

To "prepare" or train the interviewer, the design and redesign of questions that might be asked in the interview is of extreme value. First, the process of developing questions sharpens the sensitivity of the interviewer to the scope of meanings which may be implied in a question and in possible answers to it. It prepares him to listen for the shades of meanings which the subject may bring out. Secondly, the interviewer, when later analyzing the interviews, will also be more sensitive to the shades of meanings implied in the subjects' statements. Third, the attention given in the training to the problem of the logic of transitions from one question to another and to the

possible negative effects implied in some transitions is also important. The interviewer is then better able, when the subject waits for him to take the lead, to introduce a new topic without disrupting the relationship. And finally, the training on design of questions makes the interviewer realize what questions may be seriously disturbing to the subjects, a matter especially important with the injured subjects and their sharers for whom the injury is a vital problem not limited to the interview situation.

The design of questions to be used as guides for interviews in a new area is a serious and laborious task. During the research, changes in the original questions were made; some were dropped, others added. In successive interviews, the improved interview form served to suggest the areas to be brought up for discussion, but when and how they were to be introduced was left to the judgment of the trained interviewer. We present below one of the prearranged lists of questions which was developed during the training period and used as a guide in some interviews with injured subjects:

1. How do people act?
 - 1a. How should they treat you?
2. How about their asking questions?
3. How about help?
4. Do you think that noninjured people are uncomfortable when they are with you—for instance are they at a loss for words?
 - 4a. Do you think they are afraid of hurting your feelings?
 - 4b. Do you try to put them at ease?
5. Do you think it wise for the uninjured to make light of the injury?
 - 5a. Do you think a person who is not injured should kid the man about the injury?
 - 5b. Is it good for them to tell an injured man about all the things that another injured man can do?
 - 5c. Is it good for them to tell a man that his injury is not noticeable?
6. Do you like to hear it said that the injured man is courageous?
7. What do you think comes into a person's mind when he sees someone with an amputation?
 - 7a. Do you think many people would feel sorry for him?
 - 7b. Would many people feel respect for him?
 - 7c. Is the opposite ever true? Would anybody look down on him?
8. Do other people react any differently from what you expected at first?

9. What percentage of people do you think act very well and really badly? How many in between?
10. How would you check whether a person has the right feeling toward injured people? Do you do anything like that?
11. Did you ever know anybody who was injured, before you were hurt?
 - 11a. How did you feel about him?
 - 11b. Do you feel differently about them now?
12. What would you be careful of now when you're with another injured person?
13. Do you ever feel sorry for anyone around here?
14. Is there a bad kind of sympathy and a good kind?
 - 14a. Is there a kind you can't help?
15. Is pity different from feeling sorry?
16. Quite a number of things may be important for other people who are injured to know about—the stages one goes through. It would help them to know they are not the only ones who have these feelings in the beginning. How was it at the beginning? What are the stages one has to go through and the things you have to get used to?
17. Do you think a person should try not to think about his injury?
18. Is it better if he thinks and talks about his injury in a matter-of-fact way, whenever there is any reason to think or talk about it?
19. What would you do if you saw a fellow patient who was feeling sorry for himself?
20. What kind of person will let his injury lick him, or get him down?
21. Do you think you would have been able to take it if it had been worse?
22. Does it help to know that another person was injured worse than you?
 - 22a. Is it because the other person is in a worse condition, or because even though he is in a worse condition he can still take it?
23. What things have you learned to do since you were wounded?
 - 23a. What things do you still have to learn?
24. Which is more important, the looks, or the things you can't do?
 - 24a. Does it matter much how it looks, either to other people, or to you? Do you have to get used to it?
25. Is an injury easier to take for a woman or a man?
 - 25a. Would you object to marrying an injured woman?
26. Do the men feel that their injuries will make a difference in their getting married?
 - 26a. Let's say that about 70 out of 100 men are married in the general population. What would you expect about wounded people, would there be more of them married, or less, or about the same?
27. Are you satisfied with your stump?
 - 27a. Some people say that they get mad at the stump and try to hurt it. What do you think the reason might be?
 - 27b. Have you ever felt that way?
28. Are there some words you object to?
 - 28a. How about the word, stump?
29. Do you think that after an injury a man gets more interested in new things that didn't interest him before—that he looks on life differently or that things that were important before don't seem important now while new things do?
 - 29a. Do you have any new plans for a job?
 - 29b. Do the same kind of people interest you?
30. There are a good many things we haven't talked about that might be very important, and we'd be glad to have your suggestions. Is there anything else that occurs to you that would be good for us to talk about?
 - 30a. Anything you think the wounded man ought to know?
 - 30b. Anything the public ought to know?

The interview usually lasted about an hour and a half. In a few instances, there were repeated interviews with the same subject. About half of the interviews were recorded by the interviewer himself as verbatim as possible, the others by a stenographer or a trained recorder. A sample interview with a noninjured subject is given in Appendix II. Sample interviews with three injured subjects are given in Appendix III.

The cooperation of the injured subjects was obtained by telling them that the purpose of the study was to determine difficulties existing in the relationships between injured and noninjured people and how these difficulties could be overcome. The subjects were asked to help in finding out "how people act" and "how they should act." The injured considered the endeavor a worthy one. Many of them challenged the usefulness of current magazine articles, and some felt that correct information might improve matters. The social-emotional relationships discussed had a high potency for them. Many of the subjects were recently injured, but all of them had had contacts with the noninjured—contacts in which they were the recipients of help, of curiosity, of sympathy, of being considered an unfortunate person. For them, such relationships were real and vital. Because they mattered to them they discussed problems not only intellectually but also on the feeling level.

In the interview the injured subjects were first asked "how the noninjured behave and how they should behave." This confirmed the feeling which we had attempted to convey when we first approached them—that we valued their opinions and knowledge as they "are the ones who really know." This open-

ended question was also a precaution against feelings in the subject of intrusion into his privacy. Later in the interview, when the subjects became involved and felt secure and free with the experimenter, they frequently shifted to their own personal feelings and were even willing to discuss private matters brought up by the interviewer.

Since particularly during the war the feeling that something should be done to help the injured was strong, cooperation was also readily secured with the noninjured subjects when the purpose of the study was explained to them. At the beginning of the interview, however, it was a difficult task to achieve real emotional involvement on the part of those noninjured who were not close to injured persons. Noninjured persons who are in the position of sharers, wives and mothers of the injured for example, do feel that relationships between the injured and noninjured really concern them. But for other noninjured, the area of problems is not a vital one. Some time was therefore spent with subjects of this group at the beginning of the interview in discussion of injured persons they knew and how they felt about them in an attempt to bring the discussion to a more basic feeling level. In order to keep the subject on the feeling level, the interviewer also attempted to bring out the conflict in the noninjured between ethical demands and emotional feelings. Because it is considered "good" by the noninjured to believe that the injury does not matter to them, they may try to convince the interviewer and themselves that they do not have any "special feelings toward an injured person." When the interviewer responded to the underlying emotional feelings rather than to the overt ideological statements, the noninjured not infrequently became aware that the relationships involved important meanings for them and not merely intellectual or ideological ones. Discussion on the feeling level could then take place.

ANALYSIS OF DATA

The analysis of data in a new field, where the aim is to discover essential problems, requires a great flexibility on the part of the investigator. Because the search is for "hunches" and connections among them and not for fre-

quencies of occurrences, an attitude of a single subject in its ramifications requires much thought and understanding. For those who will work further in this field, we wish to mention some points which are well to keep in mind when analyzing interview material.

The understanding of the emotional meanings implied in the statements of the subject requires taking into account the context of the discussion. It is important to consider the interplay between the responses of the subject and those of the interviewer. Sometimes contradictory statements made by the subject in different portions of the interview lead to understanding of basic feelings. Always it is necessary to try to put oneself in the position of the subject and to feel with him. Often, in order to appreciate the subject's subtle feelings, it helps to examine one's own feelings in situations similar to those evaluated by the subject. Frequently the impact of the subject's own feelings is further enhanced if the investigator assumes the position of the other partner in the relationship he was talking about. In our work this was especially true in analyzing the noninjured records. The covert meanings appeared most clearly if we tried to see the implications which a superficially innocuous statement might have if an injured person were to read it.

A rigid scheme of analysis of interview material may lead to superficial conclusions; since in such a case one is obliged to cover the material in a technical, automatic way, the many-meaningfulness of the single answer of the subjects is apt to be overlooked. Thus, for our purpose, the interview material was more fruitfully analyzed by developing categories as the analysis proceeded rather than by following a predetermined scheme. This meant categorizing, recategorizing, and again recategorizing. When a new category was added it sometimes required a re-examination of parts of interviews in the light of the new insight gained. Not all of our theoretical statements, however, are based on category analysis of all the interviews. Sometimes the attitudes expressed in single cases gave us hunches which led to the development of hypotheses and theoretical understanding. In these ways we tried to determine the scopes of meanings and structures of social-emotional relationships.

CHAPTER V

MISFORTUNE

Many kinds of social-emotional relationships exist between injured and noninjured people. Which should be investigated as more essential? We began with those which were frequently pointed out by the injured themselves, namely, "to help—to be helped," "to question—to be questioned," "to stare—to be stared at," "to sympathize—to be sympathized with," "to accept—to be accepted."¹² During the analysis of data, a different relationship emerged as more basic for understanding the social-psychological problems of the injured—the relationship "to consider someone unfortunate—to be considered unfortunate." This relationship enables us to tie together many of the phenomena observed and indicates the direction which further research should take. The finding and description of this essential relationship is a *result* rather than the historical beginning of our investigation.

AN EXPERIMENT FOR THE READER

The line below represents a scale. The letter *F* designates the position of the most fortunate person and *U* the position of the most *unfortunate*. The sign in the middle of the scale designates the average position. Before reading the text further, quickly and going simply by feeling rather than on the basis of intellectual consideration indicate your own position on the line.



This experiment was performed with a group of 30 students at Stanford University but not in the context of a discussion about the injured. Only one of the group placed himself in the average position, none below this point. In a variation of the experiment with 10 other subjects, the instructions were changed so that the middle of the scale represented the average position for members of the subject's own social group. The "fortune phenomenon" still held in this case.¹³

We expect that you too will have put yourself somewhere above the average position. It would seem that there must be a "terrible misfortune," and even this may not suffice, to lead one to put himself below the average. One feels also that should somebody judge him to be unfortunate and place him low on the scale he would resist accepting such a judgment. Yet very easily does the noninjured make such a judgment regarding the injured.

It is our task to specify further the feelings of the person who considers himself fortunate toward the one whom he considers unfortunate and also the feelings of the person who is considered unfortunate when he knows that he is so considered. Though the relationship as it concerns the injured is in the focus of our attention, the discussion has implications for anyone who is judged unfortunate.

MISFORTUNE AS AN EVENT

A painful event which does not have far-reaching consequences may be called "a mishap." If the event produces prolonged and more inclusive suffering, if it affects a large part of the life space of the person, it is called "a misfortune." Other people will tend to shift the position of the sufferer downward on the fortune scale. The circumstances surrounding the event may themselves be important. They may affect the feelings of the person himself and the relationship between

graph) have been reported by Ladieu, Hanfmann, and Dembo (5), by White, Wright, and Dembo (8), and by Adler, Ladieu, and Dembo (1).

¹³ It would be worth while to study this phenomenon further and, in the search for those who might put themselves below the average, to take as subjects prisoners and different groups of mental patients. Interviews in connection with such experiments are indicated.

¹² The findings concerning these relationships (except sympathy, which is discussed in the present mono-

him and others. But this is a special problem, and fruitful investigation of it presupposes knowledge of the nature of the misfortune relationship. We shall, therefore, in this first study of misfortune, disregard such differences as whether an arm was lost in a car accident or because of shrapnel wounds.

For an investigation of the effect of the circumstances surrounding the event upon the feelings of the person himself, simple grouping into war and accident casualties, for example, would be too superficial. The groupings have rather to be made in terms of the intimate psychological meanings which the circumstances have for the person. For example, in the case of the war-wounded: I volunteered and therefore I caused my injury; I was not careful enough—I handled explosives too automatically; I got shot when I went out to help my friend—it just came; I wanted to be wounded in order to return to the mainland. Moreover, one would have to know whether after his injury the person believes that his loss was for a worthy cause, or whether he became disillusioned, and so on. Similarly, psychologically meaningful subgroups would have to be distinguished for the investigation of the effect of the circumstances upon the evaluation of the event which produced the change in position on the fortune scale but the consequences of the persisting difference in position between those who are considered fortunate and those who are considered unfortunate.

MISFORTUNE AND SUFFERING

That an unfortunate person suffers is the fact which is outstanding from the point of view of common-sense observation. It is also the suffering aspect of misfortune to which people who are close to the sufferer and who share his difficulties predominantly react. We can then ask, "Is the judgment that a person is in an unfortunate position only a statement that he suffers and nothing more?" Are "unfortunate" and "suffering" equivalent? We shall see that there are instances in which the judgment of unfortunate is made in spite of the fact that the person does not suffer, at least not directly from the event itself, and that there are other instances in which suffer-

ing occurs and yet the judgment of unfortunate is withheld.

Let us first consider the fact that when suffering is not perceived the person may still be considered unfortunate. This is true, for instance, in the case of a person having a facial disfigurement. It may be objected that, even if the suffering is not perceived, people "realize" that he suffers, and this may have something to do with considering him unfortunate. But, we ask in a provoking way, may it not be this "realization," the opinion of others that he is unfortunate, which makes him suffer, rather than anything independent of these opinions?

It is also puzzling that not all people who experience suffering are considered unfortunate. Boxers, pioneers, members of an arctic expedition are not considered unfortunate. The argument that in such cases the suffering is of short duration does not always hold; the hardships of the pioneers lasted a lifetime. Nor does it help to point out that these sufferings are self-imposed and are therefore not misfortunes. It is not strictly true that they are self-imposed, especially when they are necessary to gain a livelihood. Moreover, someone who imposes an injury upon himself in attempting to commit suicide is still judged by many to be an unfortunate person.

It should be clear from the foregoing that the statement, "One considers somebody unfortunate when one perceives that he suffers," is unprecise. We shall see in a subsequent section (p. 21) that a statement which is almost the reverse will, paradoxical as it seems, lead us further: "When one considers somebody unfortunate, one will not only expect him to suffer but may even feel that he *ought* to suffer!"

MISFORTUNE AS A VALUE LOSS

In order to understand many of the social-emotional relationships arising between the fortunate and the unfortunate we must make explicit one important aspect of misfortune: a misfortune involves, in the eyes of the judge, a loss or absence of something valuable. But the word "misfortune" is sometimes used when the person has experienced no unfortunate event, for example when the injury is congenital. In this case, the absence of a value may be felt psychologically as a loss.

The judgment of misfortune is an expression of personal and social values which the donor holds high. In our culture, most persons do not consider an amputation, a facial scar, or other injuries simply neutral variations, like color of eyes or length of hair. Instead, these variations of "body-whole," "body-competent," and "body-beautiful" are *considered* disfigurements and handicaps. That is, they are judged to be misfortunes—value losses.

THE REQUIREMENT OF MOURNING

Since a misfortune is, in the eyes of the judge, a loss of something valuable, the person who experiences a misfortune is generally expected to suffer and mourn his loss. An injured man described the expectations of his visitors in the hospital as follows: "They expected to see me in a worse mental state. I was pretty cheerful and cheered *them* up." Sometimes these expectations may even have the character of a judgment as to what is proper: it is *natural* and *normal* to mourn one's loss when struck by misfortune. It may therefore be disturbing and uncanny to the noninjured to find an injured person who is not distressed, who does not feel and act like an unfortunate person. The noninjured will tend to suspect that the injured person is putting on a good act, or they may conclude that he does not yet realize what has happened to him but "will in time."

We venture to say that these feelings of the donor do not arise solely from the possible intellectual consideration that emotional acceptance of a loss is inconceivable. It is likely that they stem also from the need on the part of the fortunate to keep high those personal and social values which he possesses or cherishes. He therefore objects to the apparent disrespect shown these values as implied in the nonacceptance of the unfortunate position by the person who is deprived of them. When the recipient does not show that he feels unfortunate, the implication is that the loss is not so great, and therefore the donor requires that the recipient mourn. We are now ready to state the following hypothesis: When the fortunate person has a need to safeguard his values, he will either (a) insist that the person he considers unfortunate is suffering (even when he seems not

to be suffering) and that he ought to suffer or (b) devalue the unfortunate person because he ought to suffer and does not.

We expect that the noninjured will resist the implications of this hypothesis. It implies that they *want* the unfortunate to suffer, which is in direct conflict with prevailing ethical codes. An analysis of several examples will, however, make the hypothesis more convincing.

Consider a woman to whom "position is everything in life." She must consider as unfortunate those who are omitted from the social register. If she does not it would mean that her position is not so valuable after all. If they do not accept the fact that they are unfortunate, she must consider them either too stupid to know better, or insensitive, or shamming; otherwise her own position is threatened.

Or take the attitude of a married woman toward her spinster sister. Perhaps the duties of a wife and mother make up her whole life. If these are not important, then what is she? Nothing. It would be an intolerable state. She must consider single women unfortunate and require that they recognize this position. Otherwise how can she escape insecurity, anxieties, conflicts, and the necessity for revaluation which might increase the importance of other value scales on which she has a low position?

To one who is proud of her beauty, whose sole stock in trade it is, the ugly duckling who flirts and seems happy would be disturbing. The beauty may laugh at the plain one and comment on her appearance so that she will "know her place." If she accepts this place, then she supports and does not challenge the values of the beauty.

For like reasons, it is considered scandalous if a widower remarries too soon. He should have observed a "decent" period of mourning. He is heartless and disrespectful. He threatens the value of strong interpersonal ties. He undermines the value of dependence upon each other in close relationships.

The feelings of the judge which are implicit in the requirement of mourning will tend to be expressed, however, only in covert ways because of the conflict between these feelings and ethical demands. Thus in the fol-

lowing example, though the demand for suffering is not overt, the noninjured subject makes it clear that an injury is devaluating and that the injured should be ashamed of and hide the injury:

The last place I worked there was a girl there who had been born without an arm. It was about to here [indicates above-elbow]. And she had fingers on it. She didn't care. She used it to hold bobbie pins, etc. . . . I didn't think it was very nice. Right in front of the other girls she would uncover it. Would you think that was all right? [Interviewer: What did you feel about it?] It was repulsive. If it had been an amputation it would have seemed cleaner. I thought at the time that I would have gone into the dressing room and do that and not be where so many people could see it.

MISFORTUNE AND DEVALUATION

It has been seen that if a person does not mourn his loss when the donor believes that he ought to he will be devaluated. Mourning his loss does not, however, insure the unfortunate against devaluation. He may be devaluated whether he mourns or not. There remains then the task of determining other conditions under which a person who experienced a misfortune is devaluated.

Devaluation of a person implies comparison. The comparison may be made between two persons in respect to particular characteristics, or between the current state and a previously existing or predicted future state of the same person, or a person may be compared with some abstract norm. The standard of comparison has a position which is evaluated positively and below which any position is negative. Thus, when there is devaluation, the comparisons are not made in neutral terms indicating likeness or difference. Instead, there is always a judgment of better or worse. The position of the person being judged and the standard against which he is compared may be represented on a value scale.

Summarizing, we may say that devaluation presupposes comparison on a value scale on which a person is judged to be in position *x*, the standard occupying position *y*, which is higher on the scale. Close consideration of this statement, which sounds so self-evident, will show the problems actually involved. Several terms used require further specification. These specifications will help in the task of determining the conditions which lead

to devaluation. The terms are "value," "person," "position of the person," and "standard."

Value

We raise the question: Does devaluation occur when a person has lost or lacks *any* value, or does it occur only when particular values are involved? It would seem that even when something is evaluated highly, the nonpossessor is not necessarily devaluated. Two kinds of values which preclude devaluation can be distinguished—possession values and asset values.

Possession Values. If a value is seen only as a possession of a person and not as a personal characteristic, devaluation of the person cannot take place. Thus beautiful pictures may be evaluated highly, yet those whose homes do not boast of even one old master are not devaluated. Though this seems clear, the terms "personal characteristic" and "possession" are in themselves problematic. Psychologists are uncomfortable when they have to draw a boundary between the person and the environment. Whether something is seen as a part or characteristic of a person or as a possession seems to depend upon the judge. The person who has lost someone dear to him may feel that he has lost part of himself. Clothes may be thought of as a material possession and "being well dressed" as a personal characteristic. Where some judges would perceive a "man who owns a house," others would perceive a "home-owner," a substantial and responsible member of the community. Even a part of the body may be thought of simply as a possession rather than as a characteristic of the person, as the following statement of an injured man would seem to imply:

In other words, I kind of think now that the hands and legs are just merely tools. Where if you haven't got the right tool there are some jobs you cannot do. It is not the handicap that holds a man down. It is his head. In the beginning one does not see it—that they are tools.

The general problem will have to be solved: What are the conditions under which a value will be seen as a personal characteristic or simply as a possession?

Asset Values. Even when a value is seen as a personal characteristic, the nonpossessor is

not devaluated if the value is regarded as an asset value. When asset values are involved, the person does not base his evaluation upon comparison with any standard. He may, for example, simply enjoy the musical performance of his acquaintance without comparing it with the performance of anyone else. Should the judge not be talented in this regard, he is not disturbed because he is inferior to another. Musical ability in others and himself is seen as an asset value. More generally, the existing state of a person may be felt to be satisfying (or disturbing) without comparing it with a standard. A woman, for example, who is forced because of family and children to give up a vocation which until then had made up a large part of her life will not feel inferior if a vocation represents to her an asset value which is a "fine thing to have" if circumstances permit.

From the above, it is clear that it is not inherent in a value to be considered an asset value. Among other things, the needs of the judge will determine whether or not he is in a comparison frame of reference. Thus, though musical ability may be an asset value under certain circumstances, when the judge is in a comparison frame of reference because he has to select members of an orchestra it is not. In the latter case, we may speak of musical ability as a comparative value, a value used in making comparisons for the purpose of evaluating the person.

We wish to make a sharp distinction between comparative values and the possibility of making comparisons when asset values are in question. In the latter case, comparisons which might be made are intellectual ones which do not affect the evaluation of the person. In the former case, the comparison is the main aspect; whether or not the person is meeting the standard with all its consequences is most important.

Person

We have to distinguish between what we call "total person" and "characteristics of a person." By "total person" we mean all the characteristics which are taken into account by the judge at a given time whether they are clearly or only vaguely perceived. Devaluation can exist in regard to single characteristics

and not in regard to others. If the characteristics on which the person is devaluated are "decisive" for the judgment of the total person, total devaluation will take place. But if these characteristics are seen as unimportant, then the person is not devaluated as a total person though he is devaluated on single scales. Moreover, when the single characteristics on which the person is devaluated are the only ones that enter the evaluation of the judge, then "total person" is equivalent to these characteristics and total devaluation takes place.

Consider the example of the noninjured girl who said:

He's correct in not proposing if he couldn't earn a living because of his handicap.

This subject evaluated the injured person as a husband in terms of a single characteristic or scale on which she feels he has an inferior position. Because other characteristics of a good husband are not taken into account, he is necessarily devaluated as a husband. If other characteristics which are felt to be the decisive ones are considered, such as affection and understanding, he may be judged equal to whatever is taken as the standard. He will be devaluated only if the girl feels that earning a living is of primary importance.

Examine similarly the self-devaluation of an amputee who says:

You feel like a heel lots of times when kids are playing on the street with their sleds. Other fathers can play with their kids.

The subject devaluates himself because other characteristics which may be considered more important for a good father than those on which he falls short are not considered at the moment.

Devaluation of the injured is not limited to bodily values only. When the injured person is devaluated because of physical performance, appearance, or aptitude for particular roles, a jump is not infrequently made so that he is also devaluated in regard to assumed mental characteristics. Some people directly indicate that abnormality of the body means abnormality of the psychological make-up. Thus we have the following statements made by noninjured subjects:

You'd be very conscious of your own deformity; it would hurt you psychologically.

Some have a disposition to arrogance. "You are going to accept me whether you like it or not" like a midget, you know, inferiority complex. Some overdo the matter of being congenial. [Note that even positive traits are seen as negative.]

After she [girl with short bowed legs] had been with us for a short while, we accepted her as normal, except for that handicap. [This implies that at first they didn't accept her as normal.]

We should like also to point out that devaluation of the total person does not always occur by way of single characteristics. Sometimes there seems to be a direct, all-inclusive judgment of devaluation of the total person. It seems that the broader the meaning of the word "person" the less clearly does the judge perceive how the single scales determine his evaluation of the person. He has a vague feeling, for example, that a "cripple" is somehow "an inferior person."

In speaking about devaluation of a person, then, we must ask two questions. Is his devaluation limited to particular characteristics or is he devaluated as a total person? Is he devaluated because only those scales on which he has a low position are taken into account or because these scales are given considerable weight when the scope of values is enlarged to include other characteristics of the person.

Position of the Person

To a judge, the permanence of a person's position with respect to the standard is important in his evaluation of the person. We may expect that devaluation will be less severe if, when taking the "time perspective" into account, the position of the person is seen to shift in the direction of the standard.¹⁴ The judge may expect the shift for different reasons. In some cases, he may feel that the loss can be replaced in whole or in part. Thus, even a person who considers "home-owner" as a characteristic of the person, and a minimum requirement for the role of a responsible community member, may not devalue someone who suffers the misfortune of having his house destroyed. The judge may expect that he will

again be able to establish a home and thereby to regain his former position. The loss is only temporary.

In other cases, the person may be expected to adjust to his loss even though the lost value cannot be regained. The position of the person, then, is felt to shift so that he can meet the standards in regard to such values as, for example, adequate personality, social usefulness, and the like. For problems of injuries, the shift due to perception of adjustability is of particular importance. Even in those instances in which physical improvement can be limited only, the recognition that one can adjust to the injured state will minimize devaluative feelings. A noninjured woman says:

When I thought of the courage it took to ignore those handicaps, I felt humble. I felt that anyone who overcomes a handicap like that wins an added amount of respect from everyone.

For this subject, the fact that the injured men were able to adjust to their handicaps led her to evaluate them not as inferior but, on the contrary, as persons meriting respect.

We believe further that the judgment of adjustability will depend upon the adjustment of the judge. A person who feels in essence "What a terrible misfortune to be injured, I could never stand it. I would rather die," we consider maladjusted with respect to injuries. The following comments were made by noninjured people:

It wouldn't be worth while to live.

I'd develop a complex and go off in my little hole.

I'd go into hiding and not show my face for the rest of my life.

To such people it will seem impossible that one can adjust to injuries.

Standard

In connection with the term "standard," we have previously noted that the standard may be another person, the same person at a different time, or some abstract norm. Frequently the abstract norm has the character of the minimum requirement for a certain role. If the person does not meet the minimum requirement, he will be judged as an unacceptable candidate for whatever role is in question (for example, that of husband, employee, team

¹⁴ For a discussion of time perspective, see Frank (4).

member, etc.) or he will be devaluated as unfit to continue in the role. This is illustrated by the noninjured girl who said:

He's correct in not proposing if he couldn't earn a living because of his handicap.

In the extreme case of devaluation of the total person, the person will be thought of as an outcast. He does not meet the minimum requirements on a value scale which, in the opinion of the judge, everyone "ought to possess" in order to be a normal human being. Though such extreme devaluation is not often directly expressed, we do find, in the records of the noninjured, statements such as the following when severe handicaps are being discussed:

If you have no limbs you are not a person really.

With both arms and legs gone the person isn't of any use, a detriment to society.

When a person is above the level of minimum requirements or "ought-standard" (either for a particular role or for a "normal" human being), he may still be devaluated as inferior, for example in comparison with some other person, but the devaluation will not be as severe.

There are individual differences in regard to where the ought-standard is set. For some it is simply undeniable that a man ought to be able to support his family entirely by his own efforts. If he is disabled so that his wife must work, or if state assistance is required, he will be seen to fall short of this minimum requirement and will be judged unworthy to have a family. Some people may not see this as an ought-standard at all; others may apply it to themselves and yet not require anyone else to meet it.

We can now state that the most severe type of devaluation (devaluation as unworthy or unacceptable) will occur when the person, in the eyes of the judge, falls below the ought-standard on a value scale.

Conclusion

It is obvious by now that the value structure of the judge is of utmost importance. Devaluation will depend upon whether the judge regards the values in question as possessions

or as personal characteristics. It will depend upon whether the judge considers the values as comparative values or as asset values. It will depend upon whether the judge regards the person only in terms of single value scales on which he has a low position; whether the judge regards these values as decisive in the context of other characteristics of the person, that is, when the scope of values is enlarged; or whether in this context they are felt to be nonessential. It will depend upon whether or not the judge regards the state of the person as an unadjustable one. It is up to the judge how high the standards will be set, whether he considers a particular standard an ought-standard for *his* concept of the role of husband, father, etc., or of a "normal" person, and whether the standards are flexible or rigid. It is not the objective loss but the values of the judge which determine devaluation. A remedy, therefore, is a change in the value system of the judge. The judge may be another person, or the person himself who experiences the loss. In the first case we speak of the devaluation of someone else, in the second case of self-devaluation.

CONFLICT IN THE NONINJURED

Devaluation of the injured, like the requirement of mourning, conflicts with ethical precepts as well as with spontaneous, positive feelings toward the injured. The noninjured person does not want to hurt the injured. He tries to be tactful. He will not address the injured with an emotionally loaded word like "cripple." He will be reluctant to say that the injured man is inferior, to be pitied, etc. He will not point to the injured part of the body. He will hesitate to mention handicaps in the presence of the handicapped person. He might sometimes dare to mention handicapped people who "get along amazingly well" (almost as good as a noninjured person) or who, like Roosevelt, are as good as the best noninjured. He might dare to say that he "would never have noticed it" or that someone else has not noticed it. He might feel a strong positive tie with the injured person and feel genuinely sympathetic toward him.

Because negative, devaluating attitudes conflict with positive feelings toward the injured

which are ethically prompted or which are spontaneous and genuine, we can expect that devaluation will seldom be manifested simply and directly but will tend, instead, to be covered up. For example, a noninjured subject who showed concern and warmth toward the injured could not admit his attitude that a handicapped person is less acceptable. But this status-discriminatory attitude is covertly expressed when he says:

I can readily understand how they [people with less severe handicaps] might resent being classed with those who are totally handicapped.

Another subject is able to express his devaluative feelings when speaking about himself if he were injured:

Without doubt I would be tremendously depressed [if I had an arm or a leg off] at the thought that your usefulness is over now and that you will be nothing but a burden from now on.

But he is unable to leave the discussion on this negative level. He hastens to right the situation, to pay deference to the other side of the conflict, and adds:

But I presume that that would pass and with a little bit of expert help one could return to a normal life.

It is also often difficult to disentangle just when the favorable, verbalized attitudes correspond to the underlying feelings and when they do not. When our subjects speak of the courage of the injured, their cheerfulness, perseverance, etc., they are expressing attitudes which overtly are favorable. Sometimes these attitudes seem to be prompted by ethical demands and sometimes they seem to reflect genuine feelings. One suspects that the positive feelings expressed by the following subject are glib and superficial:

I have met one woman in particular with both legs gone and she had artificial limbs and she got along beautifully. She lost her legs about a year before I met her. And she was very happy. I have more sympathy, and I thought she was very brave.

On the other hand, in the following account a noninjured subject reveals a feeling of warmth and respect for the injured:

I went to a dinner party the other night for the wounded Japanese soldiers at ——— Hospital. There

were about a dozen of them—one completely blind, two with partial sight, another with a leg off, another without an arm. When I first arrived I thought, "I can't bear this. I have never been able to look at suffering." I wanted to go away. I stayed. I got acquainted with these boys. They not only had the physical handicap. They had the racial handicap which is a serious one in this country. I stayed until midnight. I felt each one could have been a friend of my son. They were so courageous, so gay, so sympathetic and generous with the blind boy. They helped him so unobtrusively. I felt I had learned a great deal. I felt there was nothing we could do for them. They were doing for us . . . The way I felt about those boys—I felt inferior.

The conflict in the noninjured may be evaded or diminished in different ways. We should like to mention two phenomena which might be less obvious than simple avoidance of the injured as a means of escaping the conflict. These phenomena are aversion and spread—emotional reactions which make it easier for the noninjured to avoid the injured. Aversions have the useful quality of enabling the noninjured person to feel that he does not voluntarily avoid the injured but that he does so for reasons beyond his control.¹⁵ Spread, or the exaggeration of negative effects of an injury, may provide the noninjured with an excellent reason for excluding the injured from participation in activities which might, for example, be somewhat strenuous. And if one exaggerates the injured person's sensitiveness and withdrawing tendencies, ethical demands will not be obviously violated, since one can assert that the injured person would feel uncomfortable in the group or decline the invitation anyway.

In the following chapter we discuss in detail one type of genuine and spontaneous positive feeling toward the injured—that of sympathy.

¹⁵ We do not imply that *the* reason for aversions is a need to escape the conflict. Nor is the reason something inherent in humans which makes it natural for them to be filled with aversion at the sight of deviations from the "normal" human form. The ideal of beauty, the Venus de Milo, is a bilateral amputee. The stunted feet of Chinese women were considered beautiful. The heavily padded shoulders of a few years ago exceeded the normal body form. Aversions are "visual allergies," symptoms of more general psychological maladjustment and not only of conflict between positive and negative feelings toward the injured.

CHAPTER VI

SYMPATHY

Sympathy is brought about in the donor by the suffering aspect of misfortune rather than by the value-loss aspect. As stated on page 8, our approach to the study of the sympathy relationship was to consider the total scope of meanings assigned to the word "sympathy" and then to extract those which were tied together by a coherent underlying structure. Pity and other devaluative meanings which the subjects sometimes give to the word "sympathy" do not belong to the same structure.

PRIMACY OF NEEDS AND EMOTIONS

In the older treatises, sympathy was considered an instinctive, or at least an immediate, response to the perception of emotion in another; the perception of pain would bring about discomfort in the observer, the perception of joy would give him satisfaction. We would have no great objection to such a "theory" as far as it goes, but there are difficulties in its incompleteness. For example, we would be reluctant to term "sympathetic" one who, because of his discomfort on perceiving the distress of another, tries to escape the situation.

It is essential for the sympathy relationship that the donor set aside his own needs and feelings in favor of those of the suffering member. The recipient will then feel that his needs and emotions are given primacy, and only then will he feel that the donor is sympathetic. The conditions leading to the existence of primacy of needs and emotions of the other are not known to us and require further study. Most frequently it arises in what we call "we-groups." The partners in a we-group feel bound together by strong ties of friendship, family, etc. They like each other, enjoy being together, need each other. But relative contributions are not measured; comparison of values possessed is not in order; what is important is "we" rather than "you as compared with me." The group is characterized by the sharing of the feelings of one member by the other. The partner is pleased with the joy of the recipient; he is made sorry by the recipient's sorrow. As an injured man says:

Love for a certain person, that is why you feel sorry. I know my mother feels awfully sorry that I lost my arm. Every time something happened to me my father too felt awfully sorry for me. It was just that he loved me. You just can't get away from it I guess.

Instead of putting one's own needs always first, primacy is given to those of the other when they are felt to be more urgent. Exceptional stress and exceptional happiness of the other take precedence over the everyday level of feelings of the donor. He sets them aside and participates in the intense joys and sorrows of the partner.

Primacy of needs and emotions, however, does not arise in we-groups only. It may exist between people who have no lasting relationship with each other, whose relationships are as tenuous as being fellow-Americans in a foreign country or even passers-by. What the forces are which keep the donor in the negative distress situation in these instances are not known.

What primacy of needs and emotions implies in the sympathy relationship may be described under the headings *Congruence*, *Understanding*, and *Readiness to Help*.¹⁶

Congruence

The injured sometimes state that no one can ever really know what it is like to be injured unless he is himself injured. Those who would urge this against the possibility of real sympathy would probably subscribe to the "identity theory" of sympathy. This as usually stated is "seeing and feeling the distress as the other person sees and feels it." An injured person who rejects sympathy gave this as a reason:

It's very easy for a person to sympathize who hasn't had the experience himself. It would be a very shallow thing. It wouldn't mean anything to me How can you sympathize with me if you haven't lost your father and I have? You wouldn't know what it is like. How can a fellow sympathize with you if he hasn't lost the leg or the arm? I don't think he could do it.

It should be clear that primacy of needs and emotions does not imply identity of feel-

¹⁶ This study deals with loss, and therefore with distress situations. Omitted in the rest of this chapter are the modifications and extensions which would be necessary to take account of joy and other emotions that could be shared.

ing. We doubt that the feelings of the donor and recipient can be identical. Nor would identity have advantages. The donor cannot see the situation as the recipient sees it. He cannot know all the emotional ramifications of being injured. And even if he were to understand much of what it means to be injured, he would not feel the suffering in the same way as the injured person does. He does not suffer the actual social deprivation nor the self-devaluative feelings of the recipient. The recipient is distressed over the loss itself, the donor because the recipient suffers. The *content* of their distress is therefore different. Even in the case of a sharer (e.g., a wife or mother) who may himself experience loss, the content is still different.

The donor need not approach the *mood* of the recipient in intensity, nor is it necessary that his mood be the same qualitatively, as long as it is not incongruous. If someone is depressed, a sympathizer need not also become depressed. There are other manifestations of concern sufficiently in harmony with the mood of the recipient to be considered sympathy. On the other hand, gay attempts to divert him will seem incongruous and may be considered an indication that the donor does not give primacy to the needs and emotions of the recipient.

Moreover, were the donor to feel precisely the same way as the recipient, it is questionable whether any *action* he could take would be effective in diminishing the distress. The anxiety and fearfulness of the recipient, for example, would prevent him from realistically evaluating his situation. A similar anxiety and fearfulness in the donor would also act as a barrier to adjustive effort.

Thus the donor and the recipient *perceive* differently, *feel* differently, and *act* differently. Congruence rather than identity is required in each of these instances. What makes for congruence is an important problem meriting special investigation.

Understanding

In a distress situation there are in the recipient two conflicting needs that must be taken into account by the donor. On the one hand the recipient wishes to remain in the

area of preoccupation with his loss because of attachment to the object of loss, desire for clarification, etc. On the other hand, he wishes to leave the area because of the negative character of the situation (the unpleasantness of the state of depression, a feeling of unproductiveness, etc.). A clear example of both tendencies is found in a bereavement situation in which, in spite of the negative characteristics of grief, one wishes to continue to mourn as an expression of devotion to the person he loves.

The first thing the donor must understand, then, is this conflict in the recipient. He must not only be concerned about the emotional state of the recipient in the sense of wishing to help him leave the negative area; he must also give sufficient weight or respect to the reasons which produced the distress and which keep the recipient in the area of preoccupation with the loss. When either of these attitudes is felt to be lacking, the recipient feels that he is not understood. For example, a mother may be genuinely concerned over the unhappiness of her adolescent daughter, but if she tries to soothe her by saying, "It's only puppy love. You'll soon forget all about him," the daughter, even when recognizing her mother's concern, will feel that she doesn't understand and thus that she is not really sympathetic. Similarly, if someone tries to "cheer up" an injured friend by saying, "Oh, you'll soon get a new leg," he may be felt to take lightly the feeling of loss which the injured man experiences. It is equivalent to saying to someone bereaved, "You'll soon get a new wife"! In the following instance an injured man defines sympathy entirely in terms of giving sufficient weight to the reasons for distress:

Sympathy is appreciating the difficulties you might have.

The wish for respect to the cause of distress is seen in the following statements made by injured subjects:

[People say] "Now before long you'll be as good as new." That's a bunch of posies all for naught They don't know what they're talking about Though people say, "Oh you'll forget it in a few years," they're always the people who aren't injured.

People would come in and tell me how lucky I was. It was just that they were trying to put a whole new

set of values on my misfortune. If there is anything you feel about it, it is that it was not lucky.

The sympathizer cannot take lightly any features of the situation which are of great moment to the injured even though, in his efforts to bring about emotional relief, he may try to emphasize certain positive aspects.

It is important to point out that the word "understanding" is misleading when it is taken to imply only a conscious intellectual appreciation of the diverse meanings which the loss has for the injured. When the injured speak of a person who understands, they sometimes speak in these terms:

Probably that girl could not answer your questions but she just knew. Some people are like that. . . . There is a person that just has an instinctive good taste and quality in her.

It seems as though there is such a thing as emotional understanding—that is, grasping the emotions of the other person directly on the emotional level without the intermediate step of intellectual realization of these emotions. The distinction between intellectual and emotional understanding is clearly brought out in the following statement of a noninjured woman:

Every mother thinks about the possibility of her son coming back wounded or disabled. . . . I don't know just how I would react. . . . You would have to feel your way along and learn every day. But if you really love and understand them, you would learn very quickly, by experimentation, and I think you would have to give it a great deal of deep thought, and you would have to have a lot of wisdom, but wisdom comes in an emergency of that sort. [Interviewer: When you said wisdom, that implied intellectual knowledge.] Not necessarily. I would say more a wisdom of the heart.

There is nothing mystical in the fact that one may react before having time to understand intellectually. We spontaneously catch a ball suddenly thrown to us without intellectually deciding on a course of action. Similarly, in the case of emotional relationships we frequently react in an appropriate way which is called "intuitive." It seems necessary to assume that the speed of emotional processes is greater than the speed of intellectual ones and that, in communication, emotional grasping of the feelings of another person is faster

than intellectual grasping.¹⁷ Intellectual understanding may, however, enhance the relationship in which emotional understanding already exists. It may increase the effectiveness of the help offered because intellectual understanding may lead to useful suggestions which the recipient may be ready to accept.

Readiness to Help

It is not by chance that expressions of sympathy are usually followed by some such statement as, "If there is anything I can do, let me know." Such readiness to help should be considered as much a part of the structure of sympathy as congruence of feelings and understanding. This is demonstrated when the injured inveigh against the "so-called sympathy which is nothing but words." For example:

The good kind you try to do what you can for them to help them out. The bad kind they just say they feel sorry and let it go at that.

Oh, absolutely [there is a good and bad kind of sympathy]. But it can be expressed through actions rather than through words—fidelity, sticking by you through thick and thin.

The kind of physical help which is acceptable is elaborated elsewhere (5). In the sympathy relationship, we are especially concerned with emotional help in overcoming feelings of distress. Whether or not this type of help will be acceptable will depend upon whether the donor continues to be guided by the recipient's wishes and also upon his knowledge of the relative strength of the momentary tendencies toward and away from the distress area. The donor should be passive or active depending on these wishes and tendencies.

¹⁷ The postulate that the speed of emotional processes is greater than the speed of intellectual ones leads us to further statements. First, in a unit of communication in which a single intellectual thought is conveyed, we can expect to find several emotional meanings. Second, the speed of emotional processes is greater than the speed of intellectual control of them (if we assume that intellectual realization is a prerequisite for intellectual control). Thus, in communication we sometimes convey more than we intend since intellectual control cannot keep pace with feelings. The phenomena of the piling up of emotional meanings (first statement) and of covert meanings (second statement) can be shown if a record of communication is made and if we have enough time to analyze each emotional connotation separately.

When the tendency to stay in the area of concern with loss is very strong, the recipient may want nothing more than assurance of concern, an understanding listener, or the comfort of bodily contact with a person with whom strong ties exist. The word "passive" should be taken very seriously. Expressions of concern which are uncontrolled and immoderate may be very disturbing. A few subjects give hints as to why demonstrative manifestations of sympathy are disturbing:

1. The injured person may be so keyed up emotionally in regard to the whole injury situation that additional emotionality is difficult to bear:

Sympathy is disagreeable to the man because of the state of emotion he is already in.

2. Any strong emotional expression may make the man feel that his situation is even more unfortunate than he thought it to be. It can easily lead to a feeling of futility of his attempts to adjust:

I don't want them to cry. It makes me feel sick. I can do anything anybody else can but when they do that I would have to feel that I would have to give up trying to do things.

3. The man does not know how to act when strong emotionality is shown. The situation tends to become unstructured. Embarrassment results:

Sometimes a motherly old gal embarrasses you with how sorry she feels for you.

4. Strong emotionality may arouse feelings of guilt in the man at having caused so much distress:

I don't want anybody to feel sorry for me. Sorrow isn't a thing to share.

Further, there are other important reasons why the injured objects to excessive emotionality. The injured may doubt the sincerity of the feeling, and any demonstration may convey to the injured that the donor is trying to make sure that his "goodness" is appreciated by the injured (page 31). We wish especially to stress the fact that excessive emotionality has also the danger of making the donor imperceptive to the shifts in feelings

and changes in needs of the sufferer. It is important to note that in the opinion of the injured a deep positive feeling on the part of the sympathizer can be conveyed to them without any emotional display. They object to shallow sympathy, but shallow sympathy is not, of course, equivalent to sympathy that is manifested simply and without elaboration.

Active help requires that the donor be alert in watching for an occasion when he can strengthen the forces in the recipient in the direction of leaving the distress area without provoking resistance from the recipient. One injured subject identifies this as encouragement rather than sympathy, but the idea is essentially the same:

You can always take encouragement. More than sympathy, it is the cheerful look, not a sorrowful look—a feeling of raring to go that kind of infects you—not the idea that the world has gone wrong.

Yet sudden or too strong or persistent urgings in the direction of leaving the area reflects on the genuineness of the donor's appreciation of the cause of distress. At the first sign that he has proceeded beyond the ability of the recipient to follow him, the donor must be ready to abandon any benevolent attempts. Because the emotions of the donor are not identical with those of the recipient, because he is not so depressed, he is already a step ahead in the struggle to overcome the distress. It is this discrepancy in feeling which gives the donor the possibility of shifting the recipient in positive directions. But the emotional change required of the recipient cannot be too great. Only small steps can be taken, the size of the allowable step being not infrequently smaller than the donor wishes would be possible.

The meaning of size of step may be grasped more fully if we consider the parallel case in the intellectual realm. A teacher may explain too quickly or may omit necessary intermediate points. The student is then unable to follow because the size of the steps taken by the teacher has been too great. In the emotional realm, we may take the case of a noninjured person who, wishing to overcome the brooding of his injured friend, suggests a joyful interlude. Though the injured friend *also* wishes to overcome his brooding, merrymaking requires too great an emotional change for him. It is in-

interesting that when someone is deeply distressed a sympathetic person may suggest a cup of tea. This may represent not only concern for needs which the sufferer himself might neglect; it is also a shift from preoccupation with loss to an activity which is neutral enough not to seem incongruous. It will also not be seen as too great an emotional step if the donor gradually aligns himself with and strengthens those positive aspects which the recipient might express, for example that he has the fortitude or stamina required, or the hope of an eventually successful outcome.

SPONTANEOUS AND ETHICALLY DICTATED SYMPATHY—SINCERITY

In the absence of spontaneous sympathetic feeling, there may still be strong social pressure to play the appropriate role. Thus, besides sympathy based on genuine primacy of need of another person there is simulated sympathy—sympathy for the purpose of adhering to the ethical ideal that one *ought* to be a good person, which sometimes implies self-aggrandizement. Most people will be able to recall being at one time or another donors of both kinds of sympathy—that which is “ought-inspired” and that which is prompted by genuine concern. In some instances the former will be difficult to admit to oneself.

It is important that the dynamics of inter-relationship between the donor and recipient is different in the two cases. If the sympathy is ought-inspired, the donor will do as much for the recipient as is required by the donor's need to be “good.” We cannot help but suspect that he will be guided much more by what *he* considers good for the other than by the needs and wishes of the person he is sympathizing with. The recipient distinguishes between spontaneous and ought-inspired feelings of sympathy in the donor and speaks of them as “sincere” or “insincere.” This does not mean that he always correctly detects them. But when the underlying feelings are seen as spontaneous and genuine they will be evaluated as positive, even though the recipient may not for other reasons welcome the overt expression of sympathy (e.g., because of lack of knowledge or sensitivity in the donor or because of some conflict in himself; see page 32). Positive

evaluations of the genuine feelings are expressed in these terms:

I don't mind [if old friends say they are sorry]. Being a friend I felt that his word was sincere, coming from the heart.

Sincerity means a lot.

Yes [there is a good kind of sympathy and a bad kind]. You can always tell the person who does actually have a feeling for you and is sincere.

Ought-inspired sympathy can be evaluated as proper when seen as a formal expression of politeness. The donor thereby conveys only a recognition of the seriousness of the event and his intention not to intrude further into the privacy of the recipient. A limited interaction of this sort is accepted, but it must be brief and does not bear repetition. The injured say:

I think it is all right [for someone to say he is sorry on first meeting]. I think I would say the same thing. If he would let it go with saying he was sorry and not rave on about it.

I don't mind anybody saying that. It's just like a person saying, “I'm sorry you are sick.” Not if he just said it once. It's the same if you have lost a wife or relative or something; people offer their condolences. That is the same thing. It is all right if you don't overdo it. That is just common politeness.

While this type of sympathy is less valuable to the recipient than is genuine sympathy, it bears no great dangers. Perhaps the only additional caution required is that overt expression of this sort of feeling should emphasize the event and not the man. To say, “I'm sorry it happened,” conveys what is needed. “I'm sorry for you,” may connote devaluation:

A person can say he is sorry it happened, but I don't want him to say he's sorry for me. . . . It's in the time element. Sorry it happened refers to the past and it doesn't mean he keeps right on feeling sorry . . . and pity and being sorry *for* a person suggests looking down.

Though interactions of this kind are accepted, they are by no means considered necessary by the injured. But the injured know also that their acquaintances may feel embarrassed if they make no comment on first meeting the man after the injury. Hence, in addition to the evaluation of “proper,” the same behavior may be regarded as *neutral or unimportant*:

They don't really need to say it, but it's all right. If they say [casually], "It was hard luck," it's all right. I'd just as soon they wouldn't say it. If it's a friend of yours, you know anyway.

The evaluations become negative when the basis for the expression of sympathy is felt entirely to be a matter of obligation:

Some people who are not so close to you feel they *should* give sympathy and say they're sorry you lost your leg.

This sentimental stuff. It seems to be partly an act. Old people seem to think they are obligated.

The simulated sympathy which is feigned for self-aggrandizement or to satisfy some other need of the donor is rejected:

Well, there's the crocodile type [of sympathizer]. . . . Cries, you know, like the crocodile. Then . . . the he-man type. He comes up and claps you on the back. All the time patting himself on the back.

Ought-inspired sympathy, when mistaken by the recipient for genuine feelings, provokes positive feelings toward the donor in return. When the recipient does reciprocate and later finds no real concern for his needs, he feels cheated or fooled—first because he was under false pretenses drawn into serving as a means of satisfaction of the needs of the other; second because he was ready to accept emotionally this person whom he now rejects as unworthy; and third because, believing himself secure with this person, he permitted himself to expose his private and sensitive feelings. Insincerity in such a case is therefore threatening; it is rejected and avoided.

DESIRE TO BE NONINJURED

Sympathy may be unwelcome not only because of some failing of the donor but because of the recipient's own attitude toward his injury. To welcome sympathy means that the injured man must admit that the injury has made a difference to him, even if it is only in particular and confined ways. He must not only see himself in the sympathetic situation as an injured person but must also be willing to have the sympathizer see him as such. This is not easy to do if the man has negative emotional feelings toward being considered an injured man. The resistance against being regarded as an injured person may be seen in

the man's resentment of sympathy when he says:

Servicemen don't want their family to feel sorry for them. . . . Some people feel sorry but not around Utah. They see a lot of it. They treat you just as if you were another man.

The persistent demand by the injured to be treated like anyone else may be indicative of healthy attitudes when it reflects their resistance to being devaluated. But when it is a sign that the injured person doesn't want to share injury-connected matters because he is ashamed of them, that he wishes above all else to be considered a noninjured person, then he must of necessity remain troubled. When he reaches the point where he can face the fact of his injury, then he becomes able to receive the comfort which sympathy may bring.

SYMPATHY AND ADJUSTMENT

The desire of the sympathizer is to help the sufferer to reach a happier state, to help him to adjust. The recipient, too, may wish sympathy not only because of the immediate comfort that it may give him but also because he hopes that the other will help him overcome emotional difficulties. But is there anything in the nature of the sympathy relationship as such which will assure better adjustment? Does it imply that the sympathizer will be better able to recognize intellectually or emotionally what leads to adjustment? Just as the recipient himself, the donor may err as to what is adjustive. He may lead in nonadjustive directions. One can say only that the sympathy relationship provides a favorable atmosphere for influencing the recipient, whether for better or for worse.

There is, however, another point to be considered, namely, whether sympathy, as an expression of we-group feelings, does not always have some adjustive value. Sympathy, as an expression of we-group feelings, gives assurance that one is of worth to another person. We shall see that adjustment may imply the overcoming of the feeling of worthlessness of oneself and meaninglessness of the world around.

CHAPTER VII

ACCEPTANCE OF LOSS

In the preceding two chapters we spoke about the meaning which misfortune has for the noninjured and about his feelings toward the injured. We indicated that these feelings lead to difficulties (*Misfortune*, Chapter V) and to attempts on the part of the noninjured to lessen the suffering of the injured (*Sympathy*, Chapter VI). In his social relationship with the noninjured, the injured has to find a manner of living most satisfactory for him. He has also to overcome certain individual difficulties in addition to those produced by social relationships. He has to accept both personal loss and social loss.

The content of personal loss as felt by the injured may be conveyed by the following statement ascribed by us to a leg amputee:

The leg which was a part of me and like the other is now detached from me. With it I felt free to move, to jump, to run, to play. I could move it, move with it; it moved me. I will be hampered. I will not be able to climb a mountain (even though I never climbed one before). I won't be able to dance or fight as well as before. I won't be able to take a job that requires standing for hours. The prosthesis can fail. I can slip and fall. I have to take care of the stump. When I look in a mirror I won't see a whole man; I will have to get used to seeing myself this way. I can't bound out of bed in an emergency. When I move I will think, "Is it worth the inconvenience and effort of getting up?" So much that I will do would have been so much easier; in a shorter time I could have done so much more. I will always be less able than I would have been. I was a better man when I had my leg and amounted to much more than now. I will never be what I wish I were, and ought to be—had I the leg.

In suffering from social loss, the individual suffers as a member of a group. He feels that he is not accepted as equally worthy. Other values which the group can offer, such as companionship, are made inaccessible.

The content of social loss as felt by the injured may be conveyed by the following statement ascribed by us to a leg amputee:

I will be considered inferior by others. They feel that I can't contribute my fair share. I will be regarded as a burden. They won't want to associate with me. They might stand my presence but not accept me as they would a noninjured man. Girls won't want to go out with me. People will be repulsed by the sight of me.

One could consider each of these difficulties and see how each in turn could be overcome. This obviously is an endless task, for one could continue to enumerate specific sufferings involved in personal and social loss. Instead, it is more meaningful to try to see whether there are not some conditions common to diverse difficulties. Understanding of these conditions is actually a first step toward solving problems of adjustment, for only when they are clearly specified can we tell what it is that must be changed, and only then are we able to get some insight regarding the state to which it would be desirable to change and how to produce the change.

The desired state which we call "acceptance of loss" does not mean becoming reconciled to one's unfortunate situation. Instead, acceptance of loss is a process of value change. Before discussing value changes, however, we wish to describe those attempts at adjustment which seem promising to the injured, yet not only fail basically to overcome the difficulties but even create new ones.

MAINTAINING THE NONINJURED STANDARD

The way in which the injured person tries to overcome difficulties is determined by the fact that his values are those of a noninjured person. A blow which damages a part of his body does not at the same time lead to changes within his value system.¹⁸ He may continue to maintain the noninjured position as *the* standard of comparison and direct his efforts toward reaching it. He may cling to the belief that the way to overcome his difficulties is to be, in his own eyes and in the eyes of others, a noninjured person. To achieve the end of being considered noninjured, he uses all means available, both realistic and unrealistic ones.

¹⁸ The study of congenital cases, or those injured in early childhood, would be important for understanding problems of acceptance of loss. Do these people differ in their value systems from those who are injured later in life? It would also be important to study the value structure of those who experienced gain after loss, who changed from a handicapped to a nonhandicapped position (e.g., cured cardiac cases and cases of arrested tuberculosis).

Realistic Attempts to Achieve the Noninjured Standard

The realistic means used by the injured to be like the noninjured are strenuous efforts to perform certain tasks independently and to equal or surpass the success of the noninjured in certain roles. These attempts can be considered realistic because in certain limited ways they are successful. The injured can equal or surpass the noninjured performance on particular scales or in particular roles. But *if the sheer fact of being an injured person is a difference which makes a difference to the injured man, that is, if the noninjured remains the wished-for ideal, no matter how often he does as well or better than the noninjured he will still devalue himself as an imperfect noninjured person.*

In their efforts to be noninjured, the injured impose upon themselves unnecessary strain. Whereas the noninjured person often readily accepts help when it is more convenient to do so than to perform a task alone, the injured person tends to be reluctant to accept help if the help is not absolutely necessary (5). Thus an injured man says:

I wouldn't accept help except where absolutely necessary. Offers of help get me down unless I were in a real jam. [Interviewer: What do you mean by absolutely necessary?] Oh, something like an earthquake out here where I couldn't get my hands on my crutches in time.

And another says:

You'd like to be a lot more independent than you were before. If somebody opened the door before, you never paid attention to it, but they do it now and you notice it.

In order to explain why the injured, in striving to be and behave like a noninjured person, is led to impose greater hardships upon himself, we must take into account that "help is necessary" has a double connotation. It means "Without help I will not reach a desired goal," and "I am not able." The latter implies comparison of one's own ability with that of another. "You cannot do it, but I can," is, in our ability-minded society, a most unwelcome comparison. For the injured person who wishes to be noninjured, the ability-comparison aspect of help has a greater weight than for the noninjured, and he wishes to deny that he *needs* to be helped. The necessity of the goal,

therefore, has to be greater for the injured in order to overcome the resistance against being helped. This, we suspect, could be shown by a simple experiment.

A scale of the necessity of help is constructed. One end indicates "help is a pure matter of convenience" (*i.e.*, no great effort needed to perform the activity alone, but someone willing to share the effort), the other "help is absolutely necessary" (*i.e.*, an important goal completely inaccessible without the assistance of another). We can then determine the points at which help will be welcomed by injured and noninjured persons. Judging from the data we have, we would expect that the point of acceptance of help by those of the injured who wish to be as much like the noninjured as possible will not in general coincide with that chosen by the average of the noninjured subjects but will be nearer to the point of "help is absolutely necessary." Thus, when the injured person in speaking about help says, "Treat me like anyone else," he may not mean "Give me as much help as you would a noninjured person for whom a task is inconvenient." Instead, he may mean "Do not help me; a noninjured person would not require help in this situation."

Unrealistic Attempts to Achieve the Noninjured Standard

The unrealistic means toward being considered noninjured are the attempts to deny that an injury makes any difference whatsoever, either to the person himself or to anyone else. The injured man should forget and others should forget; if both would forget there would be no difficulties:

[Interviewer: How should a person go about adjusting?]

I think he should forget about it.

People should just forget what happened.

If he doesn't think of it, it won't bother him.

Two reasons seem to support the belief in this literal kind of forgetting. First of all, in the highly emotional striving for adjustment, the aim and the means are not sharply distinguished. "I wish my injury would be forgotten," and "It can be done by actual forgetting," merge together in an emotional state which leads to primitivization in thinking.

Secondly, the injured man does many things without feeling like an injured person. When he is in a bar, reading the comics, discussing political affairs, and so on, the thought that he is an injured person may not enter. In such situations he escapes the painful devaluative feelings associated with his loss. Temporary forgetting which the injured man does experience may make him believe that he can forget the injury most of the time.

Temporary forgetting may not be altogether valueless in the process of adjustment. It may provide much needed emotional relief before one can again become involved with the problems brought about by other adjustment attempts. Consideration of problems connected with the injury goes on at the emotional level with such intensity that temporary escape may be welcomed as a psychological rest from too much strain on the organism.¹⁹ But the injured person realizes in time that it is not only hard to forget what exists but that also so much happens which may "remind." Thus an injured man who said, "You can forget you are hurt if everybody ignores it," a few sentences later complained, "If you go out you can hardly go through a day without people asking you about it." And reminding is not due only to the incorrigibility of the non-injured. A person who wears a prosthesis, for example, has to put it on and take it off. The injured often has to enter situations in which other people are handicapped, and again he is reminded. Thus even if one could willfully forget, one would constantly be reminded by new occurrences. The wish and the impossibility of forgetting are brought out clearly in this statement:

More or less forget about it is the best thing, but how are you going to forget when everybody keeps reminding you of it? I guess in time to come they won't be half as curious and will accept it. . . . I don't think about it unless someone speaks about it, or if I think about something I want to do and then I think, "Hell,

I can't do that." You shouldn't worry about it, but you can't forget that one moment when you got hit. But it's about the future that you think.

The belief in the possibility of literal forgetting gives way, therefore, to the feeling that the injured and noninjured should behave toward each other *as if* the injury did not exist:

I'd just act normal, as if nothing had happened.

The happy and perfect thing is to have it ignored completely.

[Forgetting?] That's hardly possible but we can all make believe.

It is evident that such behavior does not really mean that the man will be considered noninjured. On the contrary, it is implicit in acting "as if" that he actually is not noninjured.

As in the case of temporary forgetting, which has some positive aspects, so also "as-if" behavior has its assets, though they be limited. The injury may be considered a personal matter, and "as-if" behavior serves the purpose of keeping others from intrusion into privacy. Thus, under certain circumstances, "as-if" behavior may be appropriate, especially where strangers are involved. But "as-if" behavior, again as in the case of the attempt to forget, brings about difficulties in the relationships between the injured and the noninjured. When the participants in a relationship are closely associated, persistent role-play has negative effects. First, if each feels that he can never relax his guard there will be a constant strain. But worse than that. It is characteristic of close relationships for the partners to share their feelings. If the formal surface behavior which is appropriate to stranger relationships persists, they will begin to feel like strangers to each other. Closeness, which is built upon easy communication, sharing of feelings, the warmth of sympathetic interactions, gives way to estrangement. Basic understanding between the persons cannot be reached. The injured person will continue to feel that he is not understood and cannot be understood (8). Again, as in the case of help (page 34), the injured deviates from the actual behavior of the noninjured, for the noninjured does not ordinarily impose such restraint upon himself and does not in time of

¹⁹ Activities which separate one sufficiently from emotionally intense conflicting and frustrating contents seem to give one the possibility of recuperation. To shift at will to less emotionally intense situations, *i.e.*, temporary forgetting, is a blessing and sign of psychological well-being or health. When one is under strain, he seems to need it more, but frequently the shift is more difficult.

stress deprive himself of the comfort of sympathy.

SOME VALUE CHANGES INVOLVED IN ACCEPTANCE OF LOSS

Denial that a difference exists, as we have seen, not only does not overcome difficulties; it may actually create new ones. But above all it hinders basic adjustment, for admission that a difference exists is a prerequisite for the further step of accepting the difference as non-devaluating. Most important for the process which we have called "acceptance of loss" is a process of revaluation. Although this process is too complicated to permit us at present to make more than a few statements regarding either observed changes or possible ones, we can present, as an incentive to further study, the advances we have thus far made in understanding it.

The first problem is why revaluation should be so difficult for the injured. Why, in the face of persistent difficulties, do they cling so strongly to those evaluations which hurt them? Two reasons may be mentioned. First, the injured seem to feel that, since abnormality of the body connotes psychological deviation or even mental abnormality to some people, they will only strengthen this impression should they maintain values which differ from the noninjured's viewpoints and ideals. Second, and most important, is the fact that to produce value changes on the emotional level is at least as difficult as to change the needs of the person. Though one may easily convince a person intellectually of the advantage of adhering to different values, their actual integration within the value system of the person is bound to meet resistance. This is understandable if we consider that single values are not independent from other values of the person, so that one change in the value system necessitates making changes in other values or giving them up.

Some of the value changes which we believe would do much to overcome suffering from loss may be examined in the light of certain considerations brought out in the discussion of devaluating misfortune. First, devaluation will be diminished to the extent that the values lost are felt to be nonessential for the evaluation of the person when the scope of values is

enlarged to include other personal characteristics. Second, devaluation will be overcome when the values lost are regarded as asset values rather than as comparative values. A third possibility, viewing the value lost as a possession value rather than as a personal characteristic (page 22), doubtless has adjustable significance, but this will not be further elaborated here.

Enlargement of Scope of Values

We may describe two examples in which enlargement of scope of values takes place.

The State of All-Inclusive Suffering. For the injured person to see the lost values in a larger setting of other values is of special importance in the case where he feels he has nothing more for which to live. The problem then is to bring about the emotional realization of the existence of other values. Some injured subjects have admitted that in the initial stages their suffering was so acute, the experience of loss (of both personal and social values) so overpowering, that the idea of suicide presented itself. In such a state the loss seems to pervade all areas of the person's life. Whatever he thinks about, whatever he does, he is troubled, pained, and distressed. There is no differentiation between areas of the person which are and are not injury-connected. All that matters are the values affected by the injury, and they are lost. No other values in life are important or even exist.

There are two characteristics of such a state which make the thought of suicide likely. First, the perception of only a single area which is characterized by suffering means complete devaluation of one's life. Moreover, the suffering seems to be boundless, not only in extent but also in time. If no other area is seen, then there is nothing to which one can hope to change. The only hope of escaping suffering is to leave life altogether.²⁰

²⁰ In the present state of knowledge, we are not able to state whether those who consider or commit suicide after acquisition of a physical injury have had pronounced neurotic trends which prevent them from standing the additional stress of the unfortunate position or whether an otherwise stable individual but with an extreme evaluation of the fortunate position may consider or commit it. Also, we may ask whether the extreme evaluation of body-whole and body-

Fortunately, such black depression and despair does not persist in most of the injured who experience it. There is a gap in our knowledge as to just how it is overcome, but what is necessary is the perception of something besides suffering in life. It may be that, when the decision to commit suicide is made and when only execution of the plan remains, the injured may look back at what will be given up: suffering *and* life. When fighting against living further is no longer necessary, as it is before the decision is reached, life itself may be seen as a value. At such a moment this sudden experience of something else than suffering may be sufficient to give the first hold and with it the feeling of hope and strength which we have called the "stamina experience," so distinctive and easy to recognize when encountered, although difficult to convey, that it was named long before its place in problems of value change was seen.

Those who have had the stamina experience know that life is worth living again. They feel that "they have been all the way down to the last door and come back," that no other enemy will ever be so formidable. The realization that the essential value of life is regained means that the unbearable of the situation has been overcome. It means that the person is able to attend to what life holds for him, to begin to appreciate the fullness of meaning of having what he does have. As one very severely injured man put it:

You gradually see that there is more to life than you thought possible. . . . They all think at the beginning

beautiful is not itself an expression of instability or strong neurotic trends.

There was a time, not so long ago, when little attention was paid to the problems of the good, quiet child; only the boisterous child was considered a problem. Similarly, high self-esteem and satisfaction with one's appearance or any other fortunate position is considered healthy and only lack of self-esteem is felt to be a problem. We think that extreme self-esteem on the basis of comparison with the unfortunate position of others may be an unhealthy and dangerous state of unpreparedness to meet situations of loss or misfortune. From the standpoint of mental health, little attention is paid to preparedness for psychological suffering. Attitudes toward misfortune, as is the case with any other emotional attitudes, need educational and sometimes therapeutic guidance.

that they are no good. Why there was a fellow here the other night who had a couple of fingers missing, and you would think there was nothing worse under the sun. And I said to him, "Well, son, you still have a pair of arms, a good pair of legs, a good pair of eyes. Why just think of it! I would be glad to have a good pair of anything."

Another injured man stated:

I have a sharper appreciation of things I valued before—health, happiness, comfort, friendship. I am a hedonist. I feel lucky for just being here.

And still another calls it a "conversion to life":

Before, when I would try to analyze myself, I would come against a blank wall. For seven months I don't think half the time I knew what was going on. . . . Some things have become more important that before seemed so unimportant, and consequently less important the other things that seemed so important before. . . . I never had a clear conception of what it meant to live. In other words, I have come to the conclusion that most people go through life and never accomplish anything. They just live. They eat and sleep. . . . Cows I call them. . . . They just grow and disintegrate. . . . I feel that if I don't make a contribution what's the use of having come back alive. I don't want to waste my life now. . . . [Interviewer: It's almost a religious experience.] Well, it's a complete change. . . . a conversion to life. Religion is another thing. . . . You have got to dance, to laugh, and have your fun, but also you can put your aims on a higher plane.

The injured frequently maintain that "It is up to the man himself," to overcome the depression in the acute suffering stage. In other words, perception by an outsider that something other than suffering exists is felt to be unconvincing to one who is within the area which seems all pervading. Some injured therefore state that the depressed one should be left alone. Others, however, try to overcome what they call "self-pity" in a friend by scolding and ridicule:

That's all within the man himself. I have seen them when they haven't anything to live for after the injury. [One guy] wasn't eating, feeling so sorry for himself. I called him everything but a gentleman. I called him everything I could think of. After that he started eating.

The fact that the friend is hurt and feels these insults to his manliness means that he discovers at least pride as a remaining value. As different as the overcoming of depression by oneself or with this sort of "help" may be,

they have in common the finding of a value at a time when every value is lost.

The method of hurting the injured man during depression should not be given as a recommendation to the noninjured. Such behavior on the part of the noninjured would simply intensify the feeling of being devaluated. When the injured use this method it means "He is not devaluating me for being injured but for being unmanly." At the same time, the injured friend is there as an example that one can be injured without feeling that everything has been shattered.

What the conditions are which give the values of manliness, of pride, the power to restructure the meaning of the lost values so that they no longer dominate the person's life needs further investigation. Though the lost values may retain their importance, the stamina experience brings with it the strength and hope which make the injured person feel that he is ready to live further *in spite* of difficulties. An important condition toward overcoming devaluation is thereby realized. The injured state is no longer regarded as an unadjustable one. At least in the sense of being able to make a go of it in spite of difficulties, the person feels he can adjust (page 24). But though the worst consequences of loss may be avoided through enlargement of scope of values, it does not mean that all suffering is overcome. It does mean, however, that the person has been faced with the necessity for revaluation. He has had to see the place of the lost values in his whole value system. In this way he is a step ahead, for adjustment, when the person is not in a depressed state, also entails value changes.

The Problem of Appearance. A person may be bothered by his appearance because he feels that it discounts his attractiveness to others. The injured person may believe, for example, that when someone looks at him his scar is seen and nothing else matters. We propose that devaluation due to damaged appearance will be diminished to the extent that surface appearance is felt to be nonessential for the evaluation of the person when the scope of values is enlarged so that surface appearance is included within personality appearance. Actually, the perception of the appearance

itself may then change so that it is seen in light of the personality. Thus, whatever the objective condition of the surface appearance may be, when one reacts positively to the person the appearance may be felt to be attractive.

Of appearance, a man who was undergoing plastic surgery had this to say:

Some people who you can look at their picture and say that they are extremely homely and yet the people who know them will swear that they are good-looking. I heard that people used to think that Lincoln was very handsome. A man could not grow an awful lot homelier than Lincoln. . . . There are certain things in a man's face that are an indication of his character, and if those things are what you like they make him good-looking despite the fact that his features are a little irregular.

In this case the attractiveness of a person is determined not primarily by a smooth, unblemished surface appearance but more decisively by his personality, from which scars may not detract.

Many people quite naturally judge a person's attractiveness in terms of his personality. Under certain circumstances it seems that the influence of personality recedes to the background while that of surface appearance becomes the focus of attention. In the case of the injured, primacy of surface appearance leads to devaluation, so that the integration of surface appearance within the context of personality should diminish suffering. The conditions which determine the primacy of personality or surface appearance is a problem requiring special investigation.

We present below an excerpt from an interview with a person who has a severe facial injury. During the interview, the evaluation of the appearance or attractiveness of a person is seen to change from surface appearance to personality appearance:

Subject: Undoubtedly at first it is a great shock to a person's family—their loved ones—when they see him with his features changed from what he was before. It is a great shock at first. They have to be around him for a while before they realize that fundamentally he is not changed.

Interviewer: Do you think, actually, it is a big shock? I don't think so. I am speaking from my own experience, I am asking you, what do *you* see in a person you meet—a new person—what do *you* see?

Subject: The first thing you see is his appearance.

Interviewer: Why do you say that? The first person you saw here was John Hall. When he came in, what did you see?

Subject: A fine looking young man—a gentleman.

Interviewer: Now, has gentleman anything to do with a scar?

Subject: No.

Interviewer: Now let us say there is a new doctor on the ward. He comes in. What do you see?

Subject: It is hard to say. If he has a strong personality, the first thing you see is his personality. Is he capable? How he approaches you.

Interviewer: That is it. Myself, I think is it a nice person? Do you see? It is the kind of person. What kind of a nose? Do you remember the kind of nose John Hall has? What kind of mouth he has?

Subject: Not distinctly. But if there had been something outstanding, for instance a bad scar, you would remember, wouldn't you?

Interviewer: Now, for instance, when you look at the patients in the hospital, what do you notice about them?

Subject: The boys, when you first see them, you notice first their scars.

Interviewer: The first moment?

Subject: The first moment. That is the hard part.

Interviewer: How long?

Subject: Until he says something. Then you start getting an idea about his personality, and once you start thinking of him as he really is, you don't think of his scars. You don't remember them.

Interviewer: You can see the nose of a person, but when you speak to a person you don't notice the nose. You notice the personality, because you see you looked at John Hall, and you only saw the personality.

Subject: The way I was impressed—that is the way I was impressed. That is new. I hadn't thought of that before.

In the above example, the attractiveness of a person is seen primarily in terms of the more inclusive personality appearance rather than in terms of surface appearance. If this is a lasting change, then we can expect that for this subject devaluation of the injured due to damaged surface appearance will be diminished.

Change from Comparative Values to Asset Values

Two situations involving a change from comparative to asset values may be described.

The Problem of Mourning. A person may mourn his loss because the personal satisfactions which the object of loss gave him in the past are now denied him. For example, the injured man may feel, "With the old leg I was free to move, to jump, to run, to play. I could move it, move with it; it moved me." Over-

coming of mourning does not require a lowering of the level of aspiration (being satisfied with less), nor does it require depreciating the object of loss. What seems to be necessary to overcome mourning is a change in relationship to the object of loss.

In the case of loss of a person, the one bereaved must recognize that, although further *interactions* with the person are impossible, a *relationship* nevertheless can still persist. Some of the values which they had formerly shared, and which, in his first grief, he may have seen as dependent upon the presence of the lost one, can be kept. He can do what the loved one would have done and wanted him to do. He can bring up his children to observe the traditions which his wife had begun. Then he can look back upon the past with tenderness rather than rejecting any painful reminders of it.

Some similarities may be found in the change of relationship to the lost object which is necessary in the case of the injured. An amputee, for example, has to feel that the most essential functions which the limb had formerly enabled him to perform can be carried on by the stump and the prosthesis. He has to feel that he is still an intact organism, a whole man. A change of feeling has to take place from that expressed by one subject:

What does she see when she comes in? Half a man lying on the bed. . . .

to that expressed by another:

I am a long way from worthless. I am still a good man without the leg.

Such a viewpoint implies that one turns to the satisfactions existing in the present and does not derive essential satisfactions or dissatisfactions from comparison with the noninjured state in the past. It means that a leg as a value has changed from a comparative value (without which one is inferior) to an asset value (a good thing when it is present). If such a change takes place on the emotional level, the past can be remembered without pain but with tenderness—with that tenderness which old people not infrequently feel toward the reminiscences of their youth. The two states of the person before and after the change can be described as, first, "I am nothing but an

incomplete noninjured person who has always to mourn his loss," and, second, "I am as I am, and though I don't have all the possible values which can be *imagined*, my life is full."

The Problem of Disability. The change from comparative to asset values is indicated not only when the person suffers because of personal loss as described above but also when he suffers because of loss which is socially evaluated. As an example, we shall consider the disability aspect of the injury.

To call someone disabled implies that *performance* determines the evaluation of the person. In our society, people are frequently compared with each other on the basis of their achievements. Schools, for example, are predominantly influenced by the achievement or product ideology. High grades are given not to the one who worked hardest but to the one who performed best. Under certain circumstances, of two who reached the same performance level, the one who did so with greater ease is considered the better. He is seen as potentially a better producer than the one who had to work harder. Thus, effort is not always considered as a positive value but, paradoxically, sometimes as a liability.

If one would follow the maxim which also exists in our society to the effect that, "All that is expected of you is that you do your best," it would mean that the person would not be compared with others in regard to ability; it would mean that his own state matters and thus that it does not matter whether he lost or lacks ability. Actually, one wishes to say, a person does not lack ability; he can only *have* it. In everyday life we do evaluate as equally good citizens those who pay taxes according to their financial state. The injured who applies himself with effort contributes the most that he can as a *person*. Though the unsatisfactory physical tools of his body may have limited his production, his personal contributions are at the maximum. As a *person* he is not different from the noninjured.

Effort as a basis for evaluation is observed in the injured. A bilateral amputee stated:

Sorry is for someone who does his damndest but still he is physically unable to accomplish what he does in the best way. Pity is for someone you feel like he isn't putting everything into it. Not up to standard,

up to what you judge by. Maybe I am wrong but that's the way I think of it.

This man expresses the thought that, in addition to the scale of achievement ("accomplishing what one does in the best way"), there is another scale, that of effort ("doing one's damndest," "putting everything into it"), and that devaluation ("pity") should be reserved for those who are lower on the effort scale. Only those who do not put forth sufficient effort should be judged as "not up to standard."

Why bring up the change from one comparative value (the product-achievement value) to what appears to be just another comparative value (effort) when we are discussing the change of comparative values to asset values? It is true that effort, in this case, is seen as a comparative value, but when effort becomes the yardstick by which a person judges himself, then the *values lost* are changed from comparative to asset values. Greater ability or achievement becomes a good thing when it exists, but not a loss, or a lack, or a disturbance when it is absent. Such a change is but one among others that are required for the person to perceive his existing state as valuable rather than as a crippled, noninjured state.

These differing evaluations of one's existing state have important consequences. The particular problem which we should like to discuss as an example is the effect of the two evaluations on the readiness of the person to improve wherever realistic improvements are possible and on his persistence in bettering his state.

It would seem at first glance that maintaining the noninjured state as the standard would have the advantage of leading the injured to increase his efforts, for example in dealing with the physical environment. The injured would desire the best prosthesis, try to improve in using it, and learn as many skills as he could in order to be able to perform the physical tasks which the noninjured can perform. But the desire to be able to handle the physical world does not stem only from the wish to be as much like the noninjured as possible. We even doubt that the desire to be as good as the noninjured is helpful. The injured person who emotionally desires to be noninjured will see even objective improvement over previous

performance as still falling short of the goal and hence failure. The same objective improvement can be seen as success (in comparison with recent performance) or failure (in comparison with the noninjured). The following two examples illustrate the different feelings resulting from the different evaluations of one's present state. In the first, "always wondering whether I could have done better" indicates feeling of failure, in the second, "enjoying learning over again" a feeling of success:

We'll be satisfied with less but there'll always be a little bit of doubt as to whether we could have done a little bit better without it. Maybe I'll be able again to play a good game of golf, but I'll always wonder whether I could have done better. . . . In some part of your mind you just have to check off the fact that you're missing something extremely valuable.

The more you learn to use it the less it bothers you. If it's just hanging it will. . . . The more I learned the better off I was. . . . I figured it was gone so I might as well see what to do about it. . . . I enjoy learning to do things over again. It offers a challenge to you. I think, "What's the best way?" before I start fooling around.

It seems reasonable to expect that, if a subject feels he is improving, he will hopefully continue. If he is constantly frustrated by unsuccessful attempts, forces away from the unreachable goal and disruptive emotional effects will appear (3).

Our discussion is of value for an important practical problem of the amputee. In trying out a new, technically improved prosthesis, some of the injured feel that it is an improvement and others do not. Besides the question of the physical fitness of the prosthesis for the individual, psychological conditions leading to the different reactions are important. It would be promising to study whether those injured who are dominated by the noninjured standard are more easily dissatisfied with the new prosthesis than are those who consider their postinjury state as valuable. We predict that the former group will more easily be disappointed because, in comparison with the noninjured standard, the results obtained with the prosthesis can be seen only as a failure. The latter group, however, will recognize any actual improvement and consequently will be encouraged to continue using the prosthesis. Those who maintain the noninjured as their standard require psychological adjustment

before they will be able to accept an objective improvement as such rather than as a new indication of the unreachability of the noninjured state. We venture to say that only if the postinjury state is taken by the subject as a basis for comparison can he make valid judgments as to the advantages of the technically improved prosthesis.²¹

Conclusion

Acceptance of loss is seen as involving changes in the value structure of the person. We have pointed out only some of the changes which may lead to acceptance of loss. Clearly there are others. Our statements have to be taken as suggestions for further research rather than at their face value. We discussed four kinds of situations: *a*, overcoming all-inclusive suffering; *b*, overcoming mourning; *c*, overcoming devaluation produced by damage to appearance; and *d*, overcoming devaluation produced by physical disability.

The kinds of value changes that may alleviate the suffering in these situations are closely connected with those value preconstructs discussed under *Misfortune and Devaluation* (page 22). The value change involved in *a* and *c* can be seen as one in which enlargement of the scope of values takes place. In the case of all-inclusive suffering, enlargement of the scope of values is the first step toward the possibility of acceptance of loss, since the main problem here is to regain, psychologically, values other than those lost. In the case of devaluating appearance, enlargement as such is not in itself an advantage unless with the enlarged scope of values the values lost are seen as relatively nonessential. In both cases, the person will maintain the noninjured standard and regard the values lost as comparative values. Thus, the person may still devalue himself, for instance when a particular situation arises in which enlargement is made difficult.

The value change involved in *b* and *d* can be seen as one in which the values lost are re-

²¹ A similar practical problem is raised in a much more general area. If one's own state is felt to be valuable, should not comparison with oneself in performing activities be a better incentive than comparison with others and, if so, should not this guide our educational procedures?

garded as asset values rather than comparative values. In this case, the person feels that his own state is a worthy one. When, instead of selecting unreachable states as a standard, he turns to what he has and can reach, life can be seen to offer more than he can possibly avail himself of. He frees himself from devaluating comparisons with a ghost ideal of a different but actually not better person, the noninjured. Thus, acceptance of loss seems to be more fully realized through the second type of value change.

ACCEPTANCE OF PERSONAL LOSS AND REACTION TO SOCIAL LOSS

The injured person who has accepted his personal loss will feel one way about the discriminatory attitudes of the noninjured. He who has not accepted his loss feels another. The social loss of the injured person—his feelings of nonacceptance as a group member—has a basis in reality. Whether or not the person has adjusted to his loss, therefore, he will experience difficulties in his relationships with noninjured people. But the reaction in the two cases will be quite different.

Where the person devaluates himself because of his loss, he will feel that his nonacceptance by others is largely justified. He will agree with the other group members that a noninjured person is more valuable, more likeable, more worthy. He will suffer keenly that he happens to be on the short end of this relationship, but he will see it as an unavoidable and natural fact, to be supported as morally valid. He will feel that no one can change this state of affairs—that one can perhaps try to behave “as if” he were noninjured but that emotional devaluation of him must prevail.

If, however, the injured person has accepted his loss, he will not devalue himself. He will consider himself an equally worthy member of the group and thus feel that he should be fully accepted by the group and have access to the values which the group can offer. He will see that it is the maladjustment of the noninjured toward injuries which leads them to devalue and reject him, a fact which hinders him from having access to the values of the group. He will see that the locus of the

difficulties is not in the injured who adjusted to his personal loss, not in the natural, lawfulness of devaluation of the injured, but in the noninjured.

A considerable part of the suffering due to nonacceptance by others is thereby removed. Because the negative evaluations of others are seen as unwarranted, because the injured person does not blame himself, they hurt less. Instead, the person who holds them may in turn be devaluated and seen as ignorant or prejudiced. This counterdevaluation also may serve to diminish suffering from social loss.²²

Whereas the maladjusted injured person wishes to be accepted by the noninjured though he feels he ought not be accepted, the adjusted injured person will care less to associate with those whose values he does not share or respect. The adjusted injured person gains a considerable degree of emotional independence and freedom from the noninjured. This does not mean that the injured person does not and need not care about how the noninjured receive him. Even though he may not care to associate with a given person, he does wish to maintain close relationships with others. Moreover, in a world dominated by the noninjured, it is often the noninjured who determine whether the injured person can have access to important values such as jobs and group memberships of many kinds. Thus it is of vital interest to the injured that the noninjured become adjusted to injuries.

ACCEPTANCE OF LOSS BY THE NONINJURED

Acceptance of loss is of great importance not only to the injured. Persons close to the injured (that is, those who are in the position of sharers), as well as the large number of noninjured who have little to do with injured people, have much to gain from healthy attitudes toward injuries. The sharer suffers not only because the injured person suffers (sympathy) but also because he too experiences a loss (personal and social loss). A wife may feel the loss of her husband's leg just as personally, just as deeply, as the husband

²² This is a good example of how changing a one-sided relationship to a mutual one changes the meanings which the relationship originally had for the person (page 9).

himself. The sharer has, therefore, to accept the loss just as does the injured person before suffering may be overcome. It is of extraordinary practical importance for an injured man to realize that his closest sharers—his wife, mother, and so on—cannot be expected to accept the loss immediately. Just as he has to go through the struggle to accept the loss, so does the sharer.

For the nonsharer, adjusted attitudes toward injuries do much to free him from anxieties regarding bodily harm. He still will continue to regard body-whole as a value, but as an asset value and not as a comparative value. The loss, then, is regarded as an adjustable state and not as a catastrophe. Consequently, in threatening situations, he would not become careless about his safety, but the anxiety would be reduced to realistic fear.

Since acceptance of loss has adjustable significance for all persons, the question arises as to how the noninjured may be brought to face it as a problem. The need to attempt to accept the loss exists in noninjured sharers, for they also experience a loss. But what about nonsharers? In general, they do not feel the necessity of imposing upon themselves the problem of adjusting to injuries. They may feel uncomfortable in the presence of an injured person, they may devalue the injured or wish to diminish his suffering, but they do not see the suffering as *their* problem. Not only do they feel that real acceptance of this kind of loss is extremely difficult; what is more important, they do not feel that they should try to accept it. The general attitude may be described as, "Problems of visible injuries are special problems. They do not actually concern me."

At least two groups of people not in the position of sharing a loss with an injured person may consider more closely their feelings toward injuries. First, there are people who are bothered by social justice. When considering injured people, they may question their own attitudes, since negative feelings toward a suffering part of humanity are regarded as unjust and intolerable. As they puzzle, they may discover their own basic nonacceptance of injuries and struggle to see the loss as an adjustable and acceptable state. The second

group consists of those people who have a general need for self-adjustment in whatever area anxiety is felt. Just as a person who is frightened when climbing a mountain may wish to ascend again in order to overcome the fear, so may a person who feels uneasy about body welfare wish to meet the problem of non-acceptance of loss.

CHAPTER VIII

DIRECTION OF FURTHER RESEARCH

The study of adjustment of any kind, including acceptance of loss, requires the investigation of, first, the conditions c_1 and c_2 underlying the nonadjusted and adjusted states, respectively, and, second, the conditions leading to change of condition c_1 to condition c_2 , expressed as $ch(c_1 \rightarrow c_2)$. That is, two distinct tasks are involved: first, there must be determined *what* has to be changed to *what* and, second, *how* the change takes place. The study reported here deals only with the first task, that is, with the determination of conditions of nonacceptance (c_1) and acceptance (c_2) of loss.

For the determination of what has to be changed to what, manifestations of the two conditions c_1 and c_2 have to be observed. These manifestations, or events, which in our case were the statements by injured persons concerning nonacceptance and acceptance of loss, were the raw data on the basis of which the underlying conditions c_1 and c_2 were specified. Conditions c_1 and c_2 are always specified in terms of constructs and their interrelationships; the underlying conditions in our case are value statements on the conceptual level.

Once c_1 and c_2 have been determined, further research should take the direction of systematic search for and examination of the manifestations of $ch(c_1 \rightarrow c_2)$. As the result of our study, we know that conditions c_1 and c_2 involve different value structures. The conditions of value change could then be studied by designing experiments which would promote value change and permit the observation of its manifestations.

We will now suggest two examples of situa-

tions in which value change may be brought about. Both are designed to have the subject himself try to bring about the change.

First example: The injured man is asked to try for one day to accept the role he usually resists taking, namely, the injured role. The injured role does not mean one of overdependence and self-pity. Rather, it means that the person does not go out of his way to appear noninjured. He is encouraged, for example, to take advantage of offers of special consideration by others which will make things easier for him. He may also be asked to discuss a personal matter related to his injury with someone to whom he feels close; this should be a matter which in the past he has refrained from bringing up. For that day he has to abandon the noninjured role as the ideal and accept the injured role as the one to strive for. He may succeed in changing, and report these changes, or he may fail and report the difficulties. In either case, a gateway is opened for analysis of the conditions of change.

Second example: An injured man is asked to note events, situations, and interpersonal relationships occurring during the day which are and are not injury-connected (*i.e.*, whether the event included any aspect of the injury). He is asked to consider further whether the injury entered in a positive, negative, or neutral way. Finally, he is to examine, for alternative interpretations which give them a more positive character, those events which he characterized as negative. For example, the events noted may have included a lift on the way to work (injury-connected, positive), staring by someone in the elevator (injury-connected, negative), or dictating letters (not injury-connected). Crucial for the study is the instruction given to the subject to search for a change in the character of the injury-connected negative events. In the elevator example, the subject may come up with the statement that not all staring needs to be staring at an amputation; someone might stare when he is in deep thought about his own personal concerns. In searching for a substitute for the negative character of the event, the injured person thus restricts the all-inclusiveness of the devaluating injury so that other values become available. As in the preceding

hypothetical experiment, analysis of these attempts at changing values should lead us to the specifications of the general conditions of value change.

In returning to our study here reported, we want to mention a number of value constructs related in pairs to c_1 and c_2 . These are: comparative values *vs.* asset values, personal properties *vs.* possessions, and all-inclusive value loss *vs.* partial value loss. The conditions of change from one member of a pair to the other, $ch(c_1 \rightarrow c_2)$, are yet to be determined.

These changes, we believe, are only a few of the necessary changes involved in acceptance of loss. One can be sure that acceptance of loss does not imply only the value changes mentioned above, nor only value constructs.

Although much further study of c_1 and c_2 is indicated, we feel enough is already known to encourage investigations of $ch(c_1 \rightarrow c_2)$. The knowledge to come from such investigations should provide a systematic basis for understanding and aiding the psychological adjustment of the injured.

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Appendix I

Summary of Methods Other Than Interviews Used in the Study

In the beginning of our study, certain techniques other than interviews were tried out. Although the interviews proved especially suitable for our particular purpose, and we therefore discontinued the other procedures, some insights gained from the alternative approaches enriched our knowledge of the problems investigated.

GROUP DISCUSSION

In the case of 37 subjects, the interviews were followed by group discussions. Two or three subjects and two or three investigators, as well as at least one stenographer, were present. The group discussion provides an opportunity for following controversial points on which disagreements between the subjects could be expected; for observing behavior of injured men toward each other, as well as toward a noninjured group; and for ques-

tioning by the subjects of others who have had similar experiences, thereby showing something of their spontaneous interests and perplexities.

DISCUSSION OF A STORY

Whenever it is necessary to elicit emotional contents which are difficult or impossible for the subject to admit to another person (and sometimes even to himself), it is the task of the experimenter to find new methods which make "hiding" or "covering up" unnecessary for the subject. For instance, the denial by injured men that they want sympathy may in part be due to their viewing the need for sympathy as unmanly.

One technique which overcomes the resistance to speaking freely about some hidden topics is that of asking the subject to discuss a story (a technique used with seven sub-

jects). The story chosen for our purposes, a story of an injured man returning home, was entitled *One Hand Behind Him* (by Charles Mergendahl, *American Magazine*, August 1945). Near the beginning of the story this statement is made:

... We [the family] were to act as though losing an arm didn't mean a thing, and we were not to do anything special for him that we wouldn't have done if he hadn't lost an arm . . . and Irene (the fiancée) . . . promised she wouldn't show the slightest trace of sentimental sympathy.

With this statement the men usually agree. Then they read further. Step by step the literal application of the "as-if" behavior is described. The family ask none of the natural questions which the man expects them to ask; they religiously refrain from carrying either of his bags upstairs for him, with the result that he has to make two separate trips, and so on. In commenting on the concrete, homely details of this story, the men may reverse the position with which they started, and as they do so more of their underlying feelings come out clearly.

PSYCHODRAMATIC ROLE-PLAYING²³

The role-playing technique (used with 27 subjects) requires that the subject "act out" certain situations either alone or with the experimenter. One of the situations required the experimenter to play the role of an injured man in the hospital who was reluctant to "go out on pass" and to face the stares and questions of the general public. The subject was asked to talk with this individual as he himself might actually talk if he met such a person in the hospital. In practice this always became a more or less deliberate attempt by the subject to persuade his maladjusted friend to go out and face the public. This method seemed to bring out in a very concrete way how the subject might actually behave as one injured man to another. At the same time it brought out some of his own views on the difficulties faced by injured men and on how they can be overcome.

Another situation was designed to bring to

the surface some of the less articulate attitudes of the individual with regard to the behavior of his own family. The experimenter would, in this case, act as a woman who came to the subject for advice as to how she should act toward her own injured son or husband.

In a third situation, the subject enacted a scene (e.g., a conversation between a non-injured civilian and an injured serviceman) in which he played two roles alternately—asking questions and answering them himself. Illustration:

Subject: Age 33, serviceman in hospital, sergeant, former stockclerk in department store, injured 11 months before role-playing, hand injury (stenographically recorded). The subject was asked to play the role of a serviceman who is going out on pass for the first time (Bill), of another (Joe), who persuaded him to go out, and of persons whom they encountered, some of whom behave well and some badly. The following episode takes place the second time they go out together:

Joe: Well, I guess the first stop is another beer joint.

Bill: That is about it—need something to freshen up with.

Joe: Okay, this looks like a pretty good place.

Bill: Shall we stand at the bar or sit at the table?

Joe: Let's stand at the bar again. Two beers, please.

Bill: I had a pretty nice time out last night, Joe.

Joe: I figured you did. You can't pay too much attention to all these people, you know. Most of them let you alone.

Subject to the observers: A stranger walks up and starts talking.

Stranger: Well, boys, what are you drinking?

Joe: Let's make it a beer.

Stranger: Sticking with you. Okay, bartender. Set 'em up. What you boys doing around here?

Joe: They gave us a pass out of the hospital.

Stranger to Bill: That's right. Say buddy, you are bunged up pretty bad, aren't you? Think the doctor will be able to do anything with that?

Bill: I hope so. I don't know.

Stranger: Some of these burn cases are pretty serious.

Bill: You think so.

Stranger: Yours looks like a pretty bad burn. Don't think they can fix your face up there.

Bill: What do you mean, can't fix it? [with rising anger]

Stranger: If you get a decent face out of that it will be just luck.

Bill: Joe, do you hear that? I ought to take a poke at that guy.

Joe: Hold it back, Bill. Hold it back. Don't pay too much attention to him.

Bill: He's getting me. Let's get out of here.

²³ Psychodramatic role-playing is a version of the technique originally developed by J. L. Moreno and called by him "psychodrama."

Joe: Okay, let's go. There is another place down the street.

To the observers: They enter another place and Joe orders two beers. We're drinking lots of beer, feeling pretty good.

Experimenter: That is all right.

Bill: Joe, I didn't like the way that last guy talked to me.

Joe: I told you not to pay too much attention to him. You know there are some good doctors back there in the hospital.

Bill: Yes. But still it is something to think about when he tells you that way.

Joe: Forget it.

Bill: How do you expect me to forget it? It's my face, isn't it?

Joe: Yes, but after they fix it up you won't recognize it.

Bill: That is what you say.

Joe: I mean it, too.

Bill: A couple of beers, bartender. Give me a shot with it. Say, Joe, I think I'm going back and take a poke at that guy anyway.

Joe: Now, Bill, you have had a few drinks. Better cut it out. Let's go home.

Bill: I'm going back to the other place. Coming along?

Joe: No.

Bill: Okay, you stay here. I'm going back to take a poke at that guy.

Joe: Wait a minute. I'm going with you.

Subject to the observers: We go to the other place.

Joe: Let's have a couple of beers in here and go back.

Bill: I wonder if that guy is still here? If he is, he's going to get a good poke.

Joe: Okay, let's get some beer. Two beers, bartender.

Bill: Say, there's that guy at the other end of the bar. Stick around, Joe. We're going to have a little fun. [Goes up to stranger.]

Stranger: So you think you got good doctors at the hospital.

Bill: I'll say they're good. Treating me all right. Doing all they can.

Stranger: I still say they will perform a miracle if they can do anything worthwhile with your face.

Bill: I don't like your tone, buddy.

Stranger: Yes? What you going to do about it?

To the observers: Bill hits him and Joe comes over to help him out.

Joe: Bill, I told you to lay off that guy. Look at that! He scratched your face. Now it's going to take much longer to heal.

Bill: I don't care about my face.

Joe: Is that the way to feel about it?

Bill: The doctor won't be able to do anything with it anyway. I don't know what they got me in the hospital for. Let's have another beer.

Joe: No, Bill. We had enough tonight.

Bill: Oh, come on—one more.

Joe: Let's go. I'm going back to the hospital.

Bill: Okay, we'll go back to the hospital. Did they kind of scratch my face bad?

Joe: It isn't too bad. A little patch will fix it up.

Bill: Think it will hurt the operation any?

Joe: It all depends. Get it cleaned up good before you turn in tonight.

Bill: Okay.

Subject to observers: So they turn in for the night.

* * *

Interviewer: Could you say one more thing before we go on? What was going on in the mind of Bill at this time? Could you say a little more about what he was thinking about—when he spoke to this man and when he spoke to you, and so on. It is not an easy thing to do. But start when he started to speak to this man in the bar and the other was going on in this way. What went through Bill's mind?

Subject: It is kind of hard. I never had an experience like that.

Interviewer: Why did he do that?

Subject: He was peeved at the man telling him about the bad burn on his face. The doctors had him cheered up. It finally worked on him so bad he had to take a swing at the guy to get it out of his system. Probably after he took a swing at the guy he realized he was wrong. Doctors can do wonders now.

Interviewer: Why did the other man do it? What was the case? Why did he speak in this way?

Subject: That is something else that is hard to say—tried to irritate him. Probably had a few drinks too many—didn't care what he said. Tried to start an argument in some way.

Interviewer: Why did he hit the man?

Subject: Closest man around—thought he was weak or something.

Interviewer: Did you have a chance to observe something like this?

Subject: No. I didn't.

Interviewer: Did you hear something of this sort?

Subject: I heard it—it wasn't very clear how it happened. He went to a place, had a few drinks, somebody said they couldn't do much for the scar. He brooded about it, finally hit the guy, and got it out of his system. Then he thought he was wrong.

Interviewer: Why did he think he was wrong?

Subject: He realized the doctors could do something.

Appendix II

Record of an Interview with a Noninjured Subject

We suggest that you read this record twice. First, read it as you naturally would. Second, if you are noninjured, put yourself in the position of an injured person and note which

remarks of the subject would make you feel uncomfortable. It might also be interesting for you to try to distinguish between those meanings which are intentionally or overtly con-

veyed by the subject and those which appear unintentionally or covertly (because the speed of emotional processes is greater than the speed of intellectual control of them, page 29, footnote).

Subject: Age 50, noninjured housewife, upper middle class, not intimately acquainted with injured persons (stenographically recorded):

Interviewer: It was nice of you to come.

Subject: Well, it was pleasant to be asked.

Interviewer: I have a series of questions here to ask you.

Subject: Yes. Regarding the attitude of civilians to soldiers?

Interviewer: Yes, and also the attitudes of the soldiers themselves, but we are as much interested in the problem of the public as of the returning veterans.

Subject: Yes, it is a mutual problem.

Interviewer: What do you understand by "handicap"?

Subject: Nothing specific. Just not being able to see, hear, or without arms or legs.

Interviewer: We are especially interested in cases without arms and legs, or plastic surgery.

Subject: I would like to ask you about plastics and limbs missing. How apparent is it?

Interviewer: It is apparent by limping primarily. Of course it depends upon how it happened—and how large the injury is. If it is below the elbow, the arm is easily moved and is not so noticeable.

Subject: I have never seen plastic cases. How bad are they?

Interviewer: Some of them there is not much to it. On the face some wrinkles and lines have to be regained before the appearance approaches normal.

Subject: Is there discoloration?

Interviewer: Not necessarily, and it improves as it goes on. We do not take in deaf or blind because of the change in perception. It is the social problems that are most important in the present study. How many persons with such handicaps have you known?

Subject: None. Oh, one. My maid was attacked by a dog. She lost her left arm. She is 70–75. Very cheerful.

Interviewer: Does she have the whole arm off?

Subject: Up to here [indicates to elbow]. I have only seen her twice. She was in the hospital a year.

Interviewer: Did you ever feel in a position like her?

Subject: I was in an automobile wreck. My ribs were broken. But I knew I was going to be all right.

Interviewer: Are you especially interested in these people with handicaps?

Subject: No. I have not thought about them.

Interviewer: But you have read articles and so forth on the subject of the returning veteran?

Subject: Yes. I always read the articles.

Interviewer: What have you learned from these?

Subject: Oh, cheerfulness, etc.

Interviewer: Have you noticed what was said? Regarding how one should treat these persons?

Subject: To treat them as normally as possible.

Interviewer: You spoke about a person who is rather well adjusted. What would be a good measure? How do you say she is well adjusted?

Subject: Yes. I think she is very cheerful for a woman of her age, and the terrible accident that it was, being attacked by a dog and being torn to pieces.

Interviewer: And in what way do you say she is well adjusted?

Subject: Well, she tries to do everything—what she did before—and tries to accept the situation and tries to forget about the handicap. Tries to live above it.

Interviewer: What do you mean, "above it"?

Subject: Ignores it.

Interviewer: You didn't see her in company with other handicapped persons.

Subject: No, but she was with another maid who was not handicapped, and she seemed even more efficient. But that was her personality.

Interviewer: How do you feel in seeing her? Can you describe it?

Subject: No. There is no feeling at all. No, I just accept it, and she seems to be just the same as she ever was. The only other disabled person I ever saw was once one evening we were having dinner in a restaurant, and I happened to glance over across the aisle, and all of a sudden I saw there was a woman sitting near us who was eating with her feet. My husband was alive then, and it did him up for almost a week.

Interviewer: And how did you feel about it?

Subject: I didn't feel anything about it. Except that I was terribly interested. You see, she had slipped off her shoes and seemed to be managing very well.

Interviewer: I see.

Subject: Of course she was born without arms and so she had learned to get along very well.

Interviewer: And she was eating. Was the plate on the floor?

Subject: The plate was on the table. She held her glass with the soles of her feet. It was amazing. And to my husband, who is more sensitive than I am, it was horrible.

Interviewer: But you were just feeling it was all right?

Subject: Yes.

Interviewer: Were there soldiers with her?

Subject: No, she was surrounded by her friends. They were evidently just out for the evening—going to a picture show and all.

Interviewer: And did the people in the restaurant know about it?

Subject: Yes, those that could see her. But they were all very well behaved. Of course it was a place where mostly faculty went, you know.

Interviewer: How would you feel sitting around somebody with an artificial arm?

Subject: It would not affect me at all.

Interviewer: In a club that you belong to?

Subject: In a club? Why, yes. That would be all right.

Interviewer: How about in a gymnasium?

Subject: Well, yes. It would depend on how many. I don't mind at all an armless man or a legless man diving. I have seen a man with one leg dive and he managed perfectly. I don't see why it would bother

me at all. No, I don't see how it could. By the way, this girl who has no arms was a college graduate.

Interviewer: What if there were a girl with a missing leg, and she were a model for hats?

Subject: That would not have anything to do with it.

Interviewer: Suppose a girl marries a man whom she loves and he has a missing leg. What would you think?

Subject: Well, is he all right? In every other way? Intelligent? Did she marry him before or after? Well, if he had an artificial limb . . .

Interviewer: Just take for example a case of a girl marrying a man who has a missing leg. Yes, that is the only thing in question. He is intelligent.

Subject: That would be all right.

Interviewer: All right if he has an artificial limb. How about if it was very noticeable and he had no artificial leg?

Subject: Well, I don't think that would be bad either. He would have no leg? [Not sure about difference but sticks to point of view.]

Interviewer: Suppose you have a man coming back from overseas to a girl who loves him. He has lost his leg since she first knew him.

Subject: Well, I wouldn't like it myself, but if that had happened to my husband it would make no difference to me. I would want to take care of him. But of course I would feel sympathy and tremendous regret that it had happened. Then again it depends upon the attitude of the man. If the man is in love with her. There would have to be a great degree of forbearance. He would have to be financially independent. I think that a little money plays a tremendous part in this thing. If they could be free of worry. Let me tell you about another woman I saw one time—Do you have time?—who had no arms. We were down at the beach, and there she was with her family and all, and she was dressing the children. She did it very skillfully and the children didn't seem to have any feeling about it. There were several children at the seashore. And this woman had no arms. This was within a year or two of the time that I saw the other woman in the restaurant. It might have been the same woman.

Interviewer: What would you think of this girl that was marrying the man we talked about?

Subject: Well, you know, love is not love if there is alteration. But then again you've got to have the financial position fairly secure. Because if the financial position is fairly secure, they can accept the disability. Because if the financial position is insecure they would blame it on the disability. And that isn't good, you see.

Interviewer: Have you seen any disabled persons on the street?

Subject: Well, usually we go through in the car, you know. I don't see many people on the street. That is, to pass them, you know.

Interviewer: If you should pass such a person on the street what would you do? How would you react?

Subject: If the man was disabled and was approaching me and getting along all right I would just pass him by. But if he had difficulty I would try to . . . Well, under what circumstances?

Interviewer: What would you suggest as different circumstances?

Subject: Well, does he belong to a family I know, or had I just met him casually, at someone else's house, or that he came to see me with somebody.

Interviewer: Let us start with a stranger.

Subject: Well, I don't see how I could do anything but just to pass him by. If everybody stopped and talked with a disabled man he would have a terrible time.

Interviewer: What if a man were without a leg?

Subject: Well, would he have an artificial leg?

Interviewer: Well, let us say, no.

Subject: Well, I can't see any reason for not treating him like I would treat anybody else.

Interviewer: And if he came to see you at your house with somebody you know?

Subject: My personal feeling would be a little shocked, but I would try not to show it and I would try to treat him perfectly natural. And I would ask him where he would like to sit.

Interviewer: Now we come to a series of questions on what one *should* do. You said "be natural." What else?

Subject: Well, just try to make them as comfortable as possible. I look at it this way. I just don't notice things like that. It is none of my business.

Interviewer: Now, if this person were a member of your own family, would that make any difference?

Subject: I would have at first great emotion, such as sorrow, and possibly resentment I would have to overcome, and you would have undoubtedly great sympathy with the person and they would know it and you would know it. It would be a most emotionally trying situation. And I would try to do everything to overcome this and try to make him comfortable.

Interviewer: In what respect would you show sorrow? What way resentment?

Subject: Well, that it had to happen to him. The war and all that. That maybe that others escaped scot free. It is sorrow or resentment.

Interviewer: How would you show sympathy?

Subject: Well, you would not have to say anything about it. Because it would be understood. And I think in a lesser degree it would be understood with anybody. They must know it. If you have the right kind of sympathy it would not offend him.

Interviewer: You say, the right kind of sympathy? What is the right kind?

Subject: Well, you just accept the fact and go about and try to make him as comfortable as possible. There again the money comes in. If a man has a way of financial security, that is very important. You could travel and get his mind off of it.

Interviewer: And the wrong kind?

Subject: The wrong kind is to talk about it. It is wrong to say, "I am so sorry for you."

Interviewer: So you think much should be done to help straighten out the financial situation. Do you think that one should think about it? Should there be some special precaution made?

Subject: You mean precaution not to accidentally mention other handicaps?

Interviewer: Well, yes. Is it more embarrassing perhaps not to mention it?

Subject: If it is a general topic of conversation. Then I think that if you accidentally mention it, it would be because you are so unconscious of his . . . I think that I would not try to cover it up.

Interviewer: Would you tell a child in advance of a situation likely to occur? If he were to meet a handicapped person?

Subject: That I wish I knew. Because I had a very embarrassing experience. A general in the army came to see us. And he has an affliction with his nose. So that it had grown big and red. He had come to see my grandchildren. And my little grandson, who was about six years old at the time, all of a sudden said, "What's the matter with your nose? You look like an old witch!" There was a dead silence. His wife laughed nervously. He didn't take it very well. He could have laughed and said, "I am an old witch, and I'm going to eat you up." I very nervously changed the subject and we got through it. Another time I had a friend whose chin would tremble—she was rather old, you know, that trembling condition. And my little granddaughter said, "What makes your chin go up and down like that?" And she just said, "Well, you know, I have something that makes my chin go like that." And she just took it and looked at it a minute, and then it passed over and was not thought of again. Now, that lady had made a good adjustment and knew what to expect of children.

Interviewer: You haven't made up your mind in this regard, whether to warn a child or not.

Subject: No, I don't know what to do. I really would like to know.

Interviewer: We haven't much material to make a decision yet. But personally, at this point I think I would not warn the children. If you tell them you will make them uncomfortable. Secondly, the child has a natural attitude toward it anyway.

Subject: That's my reaction. Now, the second situation went off perfectly comfortably. She told me afterwards that when this thing came on her she knew that children would be interested and she made up her mind to just treat it in this manner.

Interviewer: Do you think with an eight-year-old one should behave the same way?

Subject: I think that an eight-year-old may have some feeling of himself of reticence. And we never had that with my daughter when she was a little girl. She is like her father—never could stand disfigurements, etc.

Interviewer: In special situations, should one behave differently?

Subject: There are so many ways with an eight-year-old boy. One could say that he would meet someone whom he knows from the war—that it was a terrible misfortune and it was great only that he was fighting for his country. And an eight-year-old boy could understand that. Just tell him to try to treat him as though it had not happened.

Interviewer: And how about if it would not be a veteran—just an accident?

Subject: You could explain an accident. You could impress upon him to avoid accidents, too.

Interviewer: Do you think that a handicap changes a man's personality? Again this is a strange question.

Subject: I am just wondering. I know in the case of my own accident the minute I came to the first thing I did was to try to move my legs and my arms and my back. Then I began to be reassured that I would not be paralyzed.

Interviewer: But do you think it changes a person in his position?

Subject: Well, that depends entirely on the person. And on his spirit, and depends on whether he has to earn money or has been deprived of his source of earning money. It depends on the soul of the person.

Interviewer: So, indirectly it would in some way?

Subject: It must because it would cause him great mental anguish. And I think any great emotion is either going to enlarge a person's understanding and attitude or it will thwart it, but that depends upon the person. Well now, I wonder, I don't know if it would completely change a person. I don't know.

Interviewer: Do you think that people regard handicapped persons as equals?

Subject: It depends upon what they are doing. I don't think that a handicapped person could be regarded on a par with normals except for the mental. He is definitely not equal on the physical for—that is, I mean, obviously they are not equal physically. But what difference does it make?

Interviewer: So actually it's a question—it's not a matter of equal or not equal. Do you think a handicap is a terrible misfortune?

Subject: Well, I think that it is a misfortune but not a terrible misfortune. It is not fatal or final.

Interviewer: Do most people think of it in the same way?

Subject: Well, I should not think that the people I know would think that is a terrible misfortune. What do we mean by "terrible"?

Interviewer: Well, we just put the word "terrible" in because it has been brought up in the discussion. Do you think a woman should help a handicapped man?

Subject: Well, I think anybody should be helped if he needs help.

Interviewer: Can you give me an example?

Subject: Well, if a man were going through a door and having difficulty, I would just step ahead of him and open the door.

Interviewer: Would it make any difference if the man were a stranger?

Subject: Well, I don't know. I have a different reaction to that. I think that a man might accept help from a woman where he might resent it from a man. He has always been helped by his mother and so forth like that.

Interviewer: But if the man were a stranger, would that be different?

Subject: Well, I don't think it would make any difference. If I saw a man in those circumstances.

Interviewer: A servant?

Subject: Oh, yes. Because what would they do if somebody would not help them?

Interviewer: What do you think about sympathy? Or pity? Do you think this is something one should have.

Subject: Well, I like sympathy better because that is something that you share with. And pity is from up down, you see. I don't think pity is good for the man or yourself either. It depends how they express themselves and so forth, but I hate pity.

Interviewer: What would you say to a young friend who had just had an injury, and he has a missing ear, arm, fingers, etc.?

Subject: Well, do you mean what would I say to him about his difficulty, or what?

Interviewer: Well, would you say anything about it, or not?

Subject: Well, if he knew that I knew he was in that condition I would not say anything about it. I would just wait until he perhaps said, "What do you think of the mess I'm in?" and then, you see, we would talk about it. I would not bring the subject up at all.

Interviewer: What about if it were a close relative?

Subject: Well, if it were a close relative he would probably want to talk about it with me.

Interviewer: Would you start it or let the person start it?

Subject: Well, I'd hate to start it. There is something going to happen. It will come up naturally you know. If he would say, "Well, Mary, get me that," or something, you see, I would not take the attitude of "you poor thing" or so forth.

Interviewer: How would you refer to a handicapped person about a handicap?

Subject: Well, what are the other choices?

Interviewer: Do you think of any others?

Subject: You mean would I say, "So-and-so is handicapped," for instance? Handicap. Well, I would like to look it up in the dictionary and compare it with the synonyms. I like "handicapped" much better than "disabled."

Interviewer: How about the other person has "a leg missing" or "a similar handicap"?

Subject: I like "similar handicap" or "in the same boat"; it gives a feeling of unity.

Interviewer: You don't think it is a good thing to start to talk about the injury? Is it always true?

Subject: No. I wouldn't bring it up.

Interviewer: If it is a close relative who never talks about it?

Subject: Well, if everything else seemed normal and all right, I would just let it go. A dismemberment like that is like a death. I had a lot of experience the way people treated me. I had one woman who was perfectly awful. She would call me up on the telephone every day and ask me was I all right and she was so sorry and what could she do. Until she made me emotionally upset she would not quit. I got to hate her. You don't want to mention the fact of death any more than the loss of a limb.

Interviewer: Do you think you would hire a one-armed man for a chauffeur or a gardener? If you had two applicants, one whole and the other this one?

Subject: That is an awfully hard question. What I

would have to know is if this one-armed man could do the work as well. Give as good service. And the same kind of character. And would they both have children to support?

Interviewer: Let us say they are both in the same circumstances except for the loss of the arm.

Subject: Well, my conscience would make me take the one-armed man. But there I don't know if it is for the best or not. But is it pity there? No, I think it is justice. But I would have to have assurance that he would be a safe driver, etc. If he could prove it I would not mind the handicap, and I think that he should have his chance.

Interviewer: If he could prove it. What about a maid, a butler?

Subject: Well, what would she have to be missing to serve the table?

Interviewer: Say she had an arm missing.

Subject: I would not mind that at all.

Interviewer: What about your guests? Do you think they would mind?

Subject: As far as my friends were concerned they would soon get used to it. If she was a nice person, they would soon become fond of her. I would be glad to have a maid with one arm right now [laughs].

Interviewer: Would you mention the handicap in the interview?

Subject: In interviewing the person? Well I would rather do it through references. I would rather do it through someone who had employed her before. She would probably say, "You have probably talked with so-and-so."

Interviewer: Would you talk to a veteran about how he got his wound?

Subject: Well now you know if you were on the subject of his handicap that might come up, and he might be very eager to tell you all about it. Of course that depends so much on the man. There are some who would love to tell you about it and others would not at all.

Interviewer: And what would you say?

Subject: You might say something about it and then I would say, "Would you feel like telling me something about it?" and if he would say, "I don't want to talk about it," then I would just forget it.

Interviewer: Do you think it is good to have clubs, camps, etc., for the handicapped?

Subject: Well, we have that.

Interviewer: Yes, but do you think it is good?

Subject: I don't know how the veterans would react. I would never force it upon the person. I don't like organizations myself at all. How has the present veterans' organization functioned? It is all right, isn't it?

Interviewer: I mean just the disabled veterans.

Subject: You don't mean only handicapped persons? Oh, just disabled veterans. I would rather see them merged into the whole veterans' program. They could always find enough to meet together if they wanted to, you know.

Interviewer: Do you think a handicapped person should marry another handicapped?

Subject: As I said before, yes, as long as they would

not become charges on the community. If a handicapped person had a job and could get along well. I don't know about two handicapped persons. It would depend on the nature of the handicap and how severe it was.

Interviewer: Suppose a man is so sensitive about his appearance that he becomes unsociable. What would you do?

Subject: Well I would do everything that psychology and everything else could do to bring him out of it. There again if there were lots of money I would take him around and travel and have everything made easy and comfortable.

Interviewer: You mention travel. Is there a special reason for this?

Subject: Well it was in a way by chance, but it flashed in my mind that he would be among people and would not have to have personal contact with them and it might bring him back. And then he might meet somebody that he could make personal contact with. But you have got to have money to do that. No responsibilities.

Interviewer: What do you consider the worst handicap?

Subject: You mean blind or what?

Interviewer: Loss of leg, arm, both legs, etc.

Subject: I don't know. It seems to me that to lose both legs would be worse than to be totally blind because if you have hearing you can at least get around. But I think that the loss of two legs is a terrible thing.

Interviewer: What factors do you think most significant in the adjustment of a handicapped person?

Subject: If he can't get around. That would be devastating to his personality. Well, I think everything comes from inside a person. He has to remember what he was before he had the handicap and try to build up on that. He would have to find out what his actual interests are.

Interviewer: How would you help him to do this?

Subject: By creating a healthful atmosphere. Give him a feeling of security in his surroundings. A feeling that he never would be submitted to any terrible shock or assault. A feeling of confidence. [Discussion follows about combat fatigue problems not pertinent to our study.]

Interviewer: Now I would like to get down to a more fundamental level of feeling. Have you ever seen a stump?

Subject: A stump of an arm? Encased in leather or bare?

Interviewer: Well, just under a short sleeve, for example.

Subject: No, but I can visualize it.

Interviewer: What would you feel about it?

Subject: I would not have any reaction.

Interviewer: Have you seen a man with a hook instead of a hand?

Subject: Yes, I have seen that. Well, I have only seen it in passing. But I don't get any reaction.

Interviewer: Have you ever seen a handicap that was "hard to look at"?

Subject: The only one I can remember is when I was

in college there was a very fine student. One side of his face was bright red. The only reaction I can remember was just curiosity. He married. He was a handsome man. He was also well off financially.

Interviewer: When you saw only the side on which was the birthmark was he a handsome man?

Subject: Yes, he had very good features, physique, etc.

Interviewer: Can you remember when you saw for the first time a handicap, when you were a child?

Subject: Let me see. Mmmm. No, I don't recall any as a child. I will tell you what I did see and to which I had a terrible reaction. A little boy with a huge mark on his face which looked more like a large mole because it was dark and raised up from the face. On the surface he seemed a little bit queer. I didn't like it. I was sorry for him. I just saw him when I went to look at a piano. He impressed me more like a little animal than a little boy. He was going at the time to a plastic surgeon to have it removed. But it was something horrible to look at.

Interviewer: But can you remember the first time you saw a handicapped person?

Subject: Well, I lived at ——— then, very much of a country place. I can't recall any handicapped people as a child at all. Not even as much as my four-year-old grandchild, and I never saw anybody with trembling either. That was after I was married that I saw this condition with the head trembling all the time.

Interviewer: Do you think you would avoid people if you were handicapped?

Subject: If I had a handicap? I would not mind a handicap, but I would mind a terrible facial disfigurement. I think I would feel more inclined to seclude myself if I were blind. Because you see I would feel so helpless. One can meet people through the eyes.

Interviewer: Do you think the seclusion would be because you were handicapped?

Subject: I don't think so. I think you could get used to one of those handicaps if you had your physical contact with the world. It is awfully hard to put yourself in that position. If I felt well, then I would want to see people. Do you know what I think? I think the whole person is more liable to be embarrassed than the person who is disabled.

Interviewer: Do you feel personal appearance is important to you?

Subject: Well I like cleanliness and oh yes I think personal appearance in a broad way.

Interviewer: Do well-proportioned features matter very much?

Subject: Well I think that a good, normal physique and a bright intelligent face is a good asset. I think there is something in first impressions. But I think that they are often quite wrong. Have you time for me to tell you something? I was in a Spanish class at ——— University. There was a boy in the class who always affected many peculiar mannerisms. He was extremely fresh and so forth. One day, he had his feet up on the desk in front of him and all of a sudden he just pulled up his shirt and scratched his chest. Now what was the matter with that boy?

Interviewer: That is more a question of manners isn't it?

Subject: Yes. It reminds me of the father that was telling his son how to behave at college. "Be careful of your manners. And be careful of your morals. But be especially careful of your manners." I think that is fine. Because if he were careful of his manners it would more or less take care of his morals. Of

course, he would have to be clean and neat to have good manners.

Interviewer: Now do you have any questions?

Subject: It has been awfully interesting. I have learned a lot from you. You are undertaking a very important job.

Appendix III

Records of Interviews with Injured Subjects

We selected the interviews with the injured subjects so that they would give a picture of the diversity of feelings which exist in the injured man. We were able in our report to analyze only a few of the difficulties and problems existing for the injured. Not all of the following subjects will have all of the difficulties we studied but all will have additional ones. The three records are presented, according to our impression, in the descending order of severity of difficulties.

RECORD No. 1

Subject: Age 25, serviceman in hospital, private first class, married, formerly high-school student, motorcycle mechanic and tractor driver, injured 14 months before interview, leg amputation below the knee, arm injury (recorded by interviewer):

Interviewer: How do people act?

Subject: Their attitude is good. Only one thing, I have still not been out in public much [has been on furlough]. I feel self-conscious and out of place. They mean well but they are just curious. The only question is where you lost your leg. It's only natural, I guess. They seem to want to talk about it.

Interviewer: Would you rather they didn't?

Subject: If they bring up the subject you can't tell them to shut up. You've just got to grin and bear it. They do try to encourage you, and they give you much more consideration in housing, real estate, etc. [Here he tells a little story about a blind soldier who had always liked a particular plot of land and came back to try and buy it. A school principal bid it up to way beyond its value, and some business man helped the soldier get the spot he wanted. He built a motel on it and will be self-supporting.] Many have already forgotten about the war. Before it was "Hurray for Joe," but now he is forgotten. You find curiosity in kids who don't know any better. I had a Catholic lady tell me I was a hired murderer. I told her I kind of got the worst of it. I wired for an extension of my furlough, and just as I was going to get the telegram an MP picked me up and wouldn't

hear my story and locked me up. Then I got a ticket for parking overtime while I was locked up.

Interviewer: They also stare?

Subject: Oh yes. You can walk in a crowd, and everyone's eyes are fixed on your leg. You finally get used to those eyes burning into you. It's kind of hard to accustom yourself to that. I used to be proud when I walked down the street, and now I want to slip down the street.

[The interviewer discusses the possibility of a film to satisfy natural curiosity.]

Subject: That is an excellent idea, I think. Sitting in a car the other day while I was waiting for my wife I counted a dozen or more soldiers and civilians on crutches. They were mixed in with other people and everybody's eyes were following them. They are just wondering. It's only human nature.

[The interviewer makes a remark that the non-injured need information.]

Subject: Sure. I am just as curious. Even here in the hospital I want to know how the other guy stands.

Interviewer: Is the objection to talking about your injury the same as that of talking about overseas experiences?

Subject: Both equally. You sometimes think it's none of their business. Sometimes I get so mad I could kick buildings. They are so curious they even miss part of a movie to see you. They make war pictures that aren't real at all. They think that is what the soldier really did. They are trying to show the public what war was really like, but there is too much fiction in it.

Interviewer: The lady who said you were a hired murderer had no conception that it was something you had to do.

Subject: I always wear a silver star ribbon in the hospital. She had been staring and came over and asked where I lost the leg. I said I didn't lose it. I know where I left it. I was wearing eight ribbons, and she wanted to know what each was for, going into details of each battle star, and when I came to the silver star: "When I see that I just think of the man as a hired murderer." I read that magazine *Courage*, and it says you can't let it get you down. My mother lives in Missouri. I can't ever go back there to school. I feel like an outcast. You are an outcast. They can't spend time with you. Time moves too fast, and you move too slow. You sit on the sidelines. You don't have the courage and nerve

to fall in with the same people again. My two kids right away adjusted themselves, and my wife too. She really wanted to, but others don't want anything to do with you. You know you have said it yourself, if you are going to picnics and swimming, "We don't want her along; she's a down beat."

[The interviewer remarks that a person is more than arms and legs. The only outcast is one who isn't a good egg.]

Subject: It's silly, but embarrassing. The things you once could do but can't now. You have to sit back and watch all the time. You feel like a heel lots of times when kids are playing on the street with sleds. Other fathers can play with their kids.

Interviewer: And when you get your prosthesis?

Subject: You are a little more able to be . . . it's the little things that hurt. I had four years of boxing in the army. The thing that always got me through school was sports, and it's pretty hard to get yourself to the stage where you feel you are an 80-year-old man getting around on crutches. I guess in time I will adjust and not miss it so much. You don't want to ask people to do anything for you. When the roads are icy, you can't get a paper or your clothes from the cleaner. You can swim if you go away back in a creek, not in public. I left home only once in the 45 days of my furlough, cause you feel like you don't have a part on that street. After you get a prosthesis and throw away the crutches you will get more courage. I heard this remark right in the hospital. A woman said, "Where's all the freaks at?" It's just like a freak circus maybe, but there's no use expressing that opinion in public.

Interviewer: Do you think it is?

Subject: No. I'm proud to be home and alive, and that is all I am proud of. That film would brighten things up for a lot of ignorant persons. I feel like this: Why can't they let us alone? If they meet us on the street—go right on by, don't say anything to us, and don't look at us. Of course, if they want to it's their privilege, but I am ashamed of my body. Did you see that picture *Tomorrow Is Forever*? A guy steps out of a person's life and people's way, and so they forget him. He couldn't give his wife what the other fellow could because he was handicapped. He died and still didn't tell it. His wife was very happy because her new husband could give her anything.

Interviewer: I think that is a bad picture. A woman wants her husband back. There is no difference as long as he can speak, and even then they can find some way of communicating so she will know how he feels. It is the way he thinks that is important. As long as that isn't changed—and even that may be temporary, until he's assured of how you feel.

Subject: That is it. You are so uncertain. . . . You lose self-confidence. You are not sure what you can do. I just finished high school before I went in the army. I don't know about working.

[A discussion follows about counselling and vocational and testing services in the hospital. The subject agreed that clearing up just what he could and couldn't do would be helpful, but to the suggestion of taking training he said "That's the catch. I am only getting

\$33 a month now, and the overhead is greater than that with a wife and two children." He was very fearful about their security.]

Interviewer: How about helping?

Subject: The average GI wants to weed his own row and get along by himself. The person who is being sympathetic makes him feel bad.

Interviewer: Is there a good kind as well?

Subject: They should be courteous and that is as far as it should go, and that is not sympathy.

Interviewer: But maybe it's understanding, and that is good.

Subject: Yes.

Interviewer: Do you appreciate help when it is needed?

Subject: It's appreciated, sure, but you haven't the nerve to ask anyone to help you. Men just don't do that. I carry a 42-lb. suitcase on crutches. I figure I got myself into this trouble and I will get out.

[There was some discussion about reciprocal help. The subject said that he wouldn't be satisfied until he could pay it back. The discussion continued about the possibility of perhaps not giving it back to the same person who helped you but in some other way later helping someone else. Though he wasn't entirely convinced, he felt a little bit better about asking for help when it was needed.]

Subject: . . . I had an offer to write a book. I used to write poetry and some was published. But I don't want to write about the war. I would like to write about the world as a whole, each chapter on a different subject. That is what I would like to do eventually, but not about the war. I don't want others to bear that burden of knowing how awful it is. [There was a discussion on the possible usefulness of their knowing more, so that it would be less likely to happen again.]

Interviewer: Do you think that noninjured people are uncomfortable when they are with you?

Subject: Very often.

Interviewer: Is it up to the guy to help put them at ease?

Subject: No. It's more or less their attitude and talking that will help put you at ease. When they ask what the war was like, your mind is not in your head. It runs out to your foot. You are embarrassed, but if they talk about anything else it is okay.

Interviewer: Is it good for them to tell an injured man about all the things that another injured man can do?

Subject: Of course not. Everybody you talk to: "I saw Joe Blow, saw him running and playing baseball." Some get along well on artificial legs, but it's the determination of the person himself. If he wants to he can, but 95 percent of the time he is just trying to make you feel better. It's good for the individual to see what the other guy can do, and then he figures: "If he can, I can too."

Interviewer: Do you think a person who is not injured should kid the man about the injury?

Subject: If it is someone outside I wouldn't take it so well. How would you like it if I met you on the street and called you "Hag"? I don't want anyone to call me "Crip" or "Short Leg" or "Shorty" cause I'm not.

Interviewer: Do you like to hear it said that the injured man is courageous?

Subject: No, of course not. Strike that question off your list. Anyone who stood up and looked in a gun barrel and didn't run the other way, he's nuts. But I can say I was never afraid in battle, only after it was over. It just happens so fast you don't have time. I was afraid but didn't realize it.

Interviewer: What do you think comes into a person's mind when he sees a fellow with an amputation?

Subject: The first thing is to sympathize. They may not say anything, but they still do it and it puts them in a state of wondering when and where and how.

Interviewer: Would many people feel respect for him?

Subject: Sure. I never ran into anyone who showed disrespect.

Interviewer: The opposite is never true. Would anybody look down on him?

Subject: No, I wouldn't say that.

Interviewer: Do other people react any differently than you expected at first?

Subject: Yes, very much. It's just like walking into a room you never saw before. Although they know you personally, they walk up just like saying, "Where did you come from and what happened to you?" I have seen them go in a revolving door twice to get a look at you. You want to get away where they can't see you.

Interviewer: What percent act very well and what percent really badly?

Subject: The greater percent act very nice, about 90 percent.

Interviewer: How would you check whether a person has the right feeling toward injured people? Do you do anything like that?

Subject: No, I wouldn't say there is a check. You can't tell by talking because when they are talking they are always in your favor. But there's no telling what they think.

Interviewer: [Not recorded.]

Subject: You're always conscious of that empty pants leg though. It's more or less in the attitude of the wounded man. If he thinks he's boring to them, that's the way he's going to be. The hardest part is just that you don't know what the attitude of the person is—what they think—and you are so conscious and feel conspicuous and get down in the dumps. You know how you'd feel if they would gawk at you.

Interviewer: Should we find out their attitude?

Subject: They wouldn't say anything to you. If a person can just overcome the embarrassing thought, he'd get along better. You are always in an embarrassing situation. If you are catching a streetcar you feel you are in the way. You think they would like to give you a kick in the pants, when actually they're not thinking of you. It's not what they're thinking. It's what you think they're thinking. [The interviewer says something about expectations being worse than reality.]

Subject: I know what I expect. They are always gawking, but if they would just let me alone and not stand

and whisper. You know they are referring to you. Just forget about the wounded man, as far as his condition is concerned. Remember what he was before, mentally speaking.

Interviewer: Did you ever know anybody who was injured before you were hurt?

Subject: I had a cousin who had a leg off in 1932. He was a brakeman.

Interviewer: How did you feel about your cousin?

Subject: I never gave it a thought, and after he got the prosthesis [pause]. . . . And I knew how he acted, and his actions were like the rest of us. Was backward ever after. It seemed like he couldn't get back in the same groove as before. Not in the family, because they adjust themselves to the family.

Interviewer: Are there some mistakes that even families can make because they haven't the information?

Subject: Here's something that bothers me. Time goes on fast. We change in the way we talk. I have been eight years away from civilian life. I have to adjust to civilian life. I can't apply anything I have learned in the army, which was only to train men and to fight. I don't say I am handicapped. Of course I can't do some things, but how am I to get a job? There are 150,000 registered in employment agencies in Denver. How are we to live? The ads say, "Must be in good physical condition and free to travel." I can't be a bricklayer and carry a hod up a ladder or walk down a beam. If someone hires 15 men they want 15 men to work, not 14 to wait on one. How am I going to keep my family, going to keep up with the rest of the world? I want my wife to dress well and not have anyone say I can't support her in nice style. . . . [He wants to go into the restaurant business and has a location already selected.]

Interviewer: Should a fellow try not to think about his injury, or think about it whenever there is reason to?

Subject: A person has to accept what he's got. More or less forget about it is the best thing. But how are you going to forget when everybody keeps reminding you of it? I guess in time to come they won't be half as curious and will accept it. They couldn't think they could fight a war without someone getting hurt. I don't think about it unless someone speaks about it, or if I think about something I want to do, and then I think, "Hell, I can't do that." You shouldn't worry about it, but you can't forget that one moment when you got hit. But it's about the future that you think. . . . I won't be a burden on anyone. If I can't make it, I'll just leave—just go away. . . .

Interviewer: [Not recorded.]

Subject: That is what my wife said—she didn't marry a leg. But it comes in handy. The government's giving the GI a good break.

Interviewer: Do the men feel that their injuries will make a difference in getting married?

Subject: I was talking to a fellow the other night. He said he wanted to get married, but he didn't do it because sooner or later there would be a discrepancy between them, and that would be the cause of it, so he didn't do it. I would feel just like him. It's different if they do marry after because they knew

it before, but afterward? What does she see when she comes in? Half a man lying on the bed. I was back three months before I let them know. It's crazy, I know, but you don't want anyone to see you till you're back to normal again. What would you think if you came in and saw your husband like this?

Interviewer: [Not recorded.]

Subject: But he's still not the man you married.

Interviewer: [Not recorded.]

Subject: But how would you like to introduce a girl friend to a wreck and say it's your husband? You'd want to be proud of him.

Interviewer: I would be proud of him, and if she couldn't understand that, she isn't anyone I would care about.

Subject: There are people like that. A woman had a 19-year-old son here. They told her he was going to die and he would be happier at home. She wouldn't take him home. It was cancer and she said it would hurt her social standing if people knew it wasn't the result of combat, so she wanted him to die in a military hospital—her own son—because of her social standing.

Interviewer: Well, I hope she keeps it because she sure hasn't anything else. That is the kind of person I feel sorry for.

Subject: I like to talk to you cause you think the way I would like to. I guess I am just stubborn. I fought just because I love my country and my people. I don't want to be a sponge. Many men are going to be selling those pencils, but if they are it won't be on account of the handicap. It will be their attitude. The government feels responsibility. Of course they can't put them all into business. They are not all capable but . . . [says something about their being taken care of]. The bilaterals are overbearing. They expect everything and curse the nurses out. I don't sympathize with them, but the blind I do. If you got out alive it was a miracle and you are lucky. I don't expect anything but a living, and I am going to make that myself.

Interviewer: How was it in the beginning?

Subject: You are conscious of the thing all the time and the public is too—more so than you are—until they are accustomed to it, and then, like us, they don't even see it. After the public sees it, it won't matter so much any more. Like you were saying about the moving pictures. [Interviewer states something about the appearance of plastic-surgery cases.]

Subject: I feel that way myself. After you are around them a while, you don't notice it. You think different, and you see different.

Interviewer: What would you do if you saw a fellow patient was feeling sorry for himself.

Subject: A guy over there was gripey and grouchy; couldn't get along with anyone. He wanted to be alone. We would toss water on him and steal his leg and hide it, and finally he was just one of the boys. At first he wouldn't fight back; he acted like he was whipped. The patients get them out of it. If they were put in private rooms they would go nuts.

Interviewer: What kind of a person will let his injury get him down?

Subject: I am afraid to say, but the guys I have noticed are the quiet type. If they would talk with someone, they wouldn't feel that way. I don't feel sorry for myself or any crippled person who tries to do for himself. It is easy to let it get you down if you think only of the worst.

Interviewer: Does it help to know that another person was injured worse than you?

Subject: Yes, I should say so. Then you forget about your own.

Interviewer: Is it because he is in a worse condition, or even though he is in a worse condition he can still take it.

Subject: If he can take it when it's worse, then I can take it like this.

Interviewer: Which is more important—the looks or the things you can't do?

Subject: The things you can't do. I am not worried about what I look like, because I am not interested in anyone but my family, and if that bothers them they never told me. The only time looks bother me is because I won certificates for being the best dressed and the best built man, and now my weight is down to 148 lb. from 185. But if I could do things I wouldn't bother how it looks.

Interviewer: Are you satisfied with your stump?

Subject: I am not satisfied with it. They have been fooling with it 15 months and I have had only one operation.

Interviewer: Eventually . . .

Subject: Yes, but time is flying. They could have straightened my arm out, but they say there is plenty of time. From May to November, I was at another hospital, and they didn't do anything. The surgeons are slack. [Discussion takes place about the amount of work the surgeons have to do.]

Interviewer: Is an injury easier to take for a woman or a man?

Subject: The injury is worse for a woman. A man thinks of a woman as something he is proud of and wants everyone to see. It wouldn't make any difference if my wife got her leg cut off. She couldn't help what happens to her. I don't know if I could marry one though. I never saw a lady with a prosthesis. I never saw one, and if I could I would gawk just as much as anyone.

Interviewer: Would it be possible for you to marry an injured woman?

Subject: It is possible but not probable. I would give it lots of consideration and thought. After you are married and love them it's different.

Interviewer: Are there some words you object to? How about the word "handicapped"?

Subject: You've got to face facts. It is not objectionable. The only objectionable word is "crippled."

Interviewer: How about the word "stump"?

Subject: I never use it outside. I felt so self-conscious all the time at home. My wife never saw my leg. She is working in the X-Ray Department in a hospital at home, and I fell and landed right on the end of my stump. My wife was standing at the head of the steps. The doctor was going to dress it. I was about to pass out, but first I told him not to dress

it till she was gone. I don't ever want her to see it. Even dogs notice it. They stand and look.

Interviewer: It is not any different when you are first married. You feel embarrassed to get undressed. It's the same thing. It would only be the first time, and then it would be okay.

Subject: I would just be embarrassed. I will eventually, I guess [let her see it].

Interviewer: How do you feel about it?

Subject: I don't think it looks very nice. It still isn't a leg. If I can just get over that embarrassment. One thing on that side it makes my wife and I the same length. [He had shown her picture and told what a little person she is.] You've got to accept it the way it comes.

Interviewer: Have you talked to her about it?

Subject: Yes, and she gets mad. I wait until she is doing something else, and then I will get up. It doesn't bother her a bit; she's in X-ray and sees them every day.

Interviewer: Do you think that after an injury a man gets more interested in new things that didn't interest him before—that he looks on life differently or that things that were important before don't seem important now while new things do?

Subject: He has to adapt himself to new things, that is why. He has to get interested in new things, and many new ones are opening up all the time—radio, telephone, etc. I used to make money boxing, so I have to adapt myself.

Interviewer: Any further suggestions?

[The subject shows the interviewer the magazine *Courage*, which is subtitled *Official Magazine of the Fraternity of the Wooden Legs, Inc.*]

RECORD NO. 2

Subject: Age 23; serviceman in hospital; staff sergeant; married; former carpenter and farm helper; injured 14 months before the interview; face, shoulder, arm, and leg injury; left eye gone, scars about eye (stenographically recorded):

Interviewer: I suppose you know fairly well what we are interested in doing by now. We are trying to investigate the relationships of the returning injured servicemen and the kinds of problems there are and what kinds of solutions should be worked out—how people behave and how they should behave. In other words, the problem that we want to investigate is that of the social and psychological adjustment between the injured man and the noninjured civilian.

Subject: In other words you want to know how the serviceman feels about his wounds and his reactions against it all. You have to give me an idea of what points you want to discuss.

Interviewer: Yes, but I wanted to get your general feelings about the problem first. I will ask a few questions then and I want to get your full expression on them. In the first place, how do people treat an injured serviceman?

Subject: That varies in states. I would say out of all the states I have been in that Utah—Ogden, Utah—is the best place yet. I asked a person this morning. He said they couldn't do enough for you. . . . This fellow's lost his leg. People would be watching on the street—you know how curious they are. We walked down the street, and civilians would be standing around. They open the door for him and help him inside. He looks at them kind of funny. He goes to the counter and goes to buy something. They will move obstacles out of his way. But that's not helping. It got so bad that they put a piece in the paper not to help the soldier. People help them like that. It really slows them down. Crossing the road a man would help you. In all such little things like that. . . . That's what they're doing there.

Interviewer: That's not good.

Subject: No, not for the fellow. Because he will never learn if he don't help himself. He don't want to be helped. He is going to be left alone some day. Fellows with their arms off. . . . They can open their own doors. But of course if you know he can't do it, it's all right to do it. Helping a blind fellow across the street is perfectly all right. Down in the hospital, boys will help them up the walks. But they tell them, "Leave them alone." They will bump into doors. They have got to learn some day. You know yourself if you were blind and somebody always helped you you would never learn to walk alone.

Interviewer: But how about when you are just walking down the street. Let's say a man with plastic-surgery work is walking down the street. What kind of reaction do strangers on the street give to that?

Subject: It all depends on how serious it is. But everyone is curious. It's just human nature. And some people make remarks about it. If we are just standing talking and a civilian is there he will ask you. He will ask you just how does that grow? What does that flap do? Sometimes you don't feel like telling.

Interviewer: Why do you suppose it bothers you?

Subject: They are afraid that if it don't work out right, you know your operations are pretty technical stuff. If it don't work out right the public will see him later on, and they might get the idea that plastic surgery is supposed to cure you of everything. Pretty soon it's spread all over that plastic surgery is failing. It puts a damper on the individual himself. I feel like if people looked at me that way and would say, "Well, I don't know if that's going to work," it might put a damper on your spirit. You don't show it, but boy you sure feel it.

Interviewer: Would you rather forget about being injured?

Subject: Well, yes. Every soldier would that I have talked to. There are some we call the "USO Commandos." They will talk and tell you the whole war. They know everything. The fellows that have been to the front lines—he wants to forget about it. As far as the war is concerned he wants to forget about it. The quicker he forgets the better he is off. People are awfully inquisitive. Sometimes a person will ask if you are allowed to do this and that. I figure if a man has been over there he is entitled to his privacy.

Interviewer: How should strangers act? Should they just avoid the thing entirely?

Subject: No, I wouldn't say avoid it and I wouldn't say ask inquisitive questions. It doesn't concern you. I know a fellow lost both his arms. We went into a place to have a drink. Another fellow set the glass back down and the fellow asked for a straw. The other fellow turned around to him and said, "Can't you drink out of the glass?" The fellow grabbed him with his hook and cut him up a bit. An instance like that puts a damper on him. Of course when the fellow found out he made a bad mistake he felt sorry. You will be standing on the street and you will say, "Look how odd that fellow walks." Maybe you don't think he hears you, but he does.

Interviewer: You feel that there is really an element of pity in there that isn't good?

Subject: I don't like pity. Don't get the idea that we want to be forgotten. Still they don't want to be pitied.

Interviewer: How do they want to be treated?

Subject: Just like before the war. Not on a higher level than they were before.

Interviewer: Most of them don't want to be heroes?

Subject: No heroes! That's one thing they don't want. They shut you up in a hurry.

Interviewer: You say that you want to forget about being injured. What is it that you want to forget? Do you want to forget about the war or that you were hurt, or what is it?

Subject: No. You take not only me but the other guys. I had an arm injury myself. When we went home they wanted to go to work. They got it in their minds: "Well, I am injured. So I won't be able to go back to mailing work or like that." Actually they could do it if they would just forget about the injury. If they forget about the injury they will forget about the war. They will never forget about the war, but it won't bother them. You are only doing yourself harm. If a man forgets that he has an injury, he can do a lot of things. There were some things I couldn't do when I had my arm taped to my chest. But it was only that I would reopen the injury that I had. Outside of that I could do a lot of things if I just didn't worry about it.

Interviewer: It limited you in a physical sense.

Subject: Yes. But actually after it's healed it's all right.

Interviewer: I know a fellow who lost his leg. He had been an athlete. But he determined to do everything he had done before. Played tennis, didn't stop till he won the city tournament, danced, etc. Do you think that is good, or what is your feeling?

Subject: You have got to give up something to gain something.

Interviewer: What did he gain by this?

Subject: He gave up his handicap. That he was disabled. . . . And look what he gained. It was his own mind that did it. It wasn't the loss of his leg that would limit him, because he can actually do lots of things that one wouldn't dream he could do. I notice fellows out on the field playing football with wooden legs. Those fellows just forget about it. They are all right.

Interviewer: That's the way you think it should be done.

Subject: Yes. That they are trying to do. Make them forget about the injury. Try to make them more independent. People come in and say, "I don't know whether you will make it or not." Some fellows think they don't give you enough attention. That's just in their minds.

Interviewer: You say that people look and ask questions. How is it with you in the hospital? Do you ask questions of each other, etc.?

Subject: Yes we do. We feel like we are closer related. It is sometimes good to talk about it with someone that understands.

Interviewer: Most of them like to talk about it?

Subject: Yes. Especially about operations. Like the fellow that is going to have an operation. . . . They will ask him, and he tells them what they are going to do. It kind of helps out.

Interviewer: Do they say much about how they feel about it?

Subject: No, they don't say much about how they feel—just about what it's going to be like. How it will look. . . . They don't like it if it don't look just right.

Interviewer: Looks are quite important?

Subject: Yes. Here is an incident. For 31 months a fellow has been in the hospital. He barely went outside of the gate. He looks like Frankenstein. If his face was fixed so he could look like he should he would go out. They are more concerned about the face. That is something you can't hide. You get a wound on your face you will always carry it. But the rest of them you can hide.

Interviewer: And is this terrifically important—having your face look good?

Subject: Not too important. But it's best to have your face look good.

Interviewer: Why?

Subject: Well, in going out in public. . . . He will shy away from the public and entertainment. He will be mostly alone.

Interviewer: Because people reject him, or why?

Subject: Because most people will look at him and ask questions. He won't feel like answering them. He is trying to forget it. This fellow out here, he feels the same. He feels like nobody wants him. He asked me several times, "Do you think I will ever get married? Do you think anybody will want me?" His own folks came, and he wouldn't even go out to see them.

Interviewer: Are you pretty friendly with him?

Subject: Yes.

Interviewer: Does it bother you?

Subject: No, it don't bother me. It don't bother him to talk to me.

Interviewer: Actually if he were as horrible as he thinks you wouldn't take him for a friend if the looks are so important.

Subject: No. I like to talk to him—try to encourage him.

Interviewer: Have you ever tried to get him out?

Subject: Yes.

Interviewer: Did he have fun?

Subject: We rode around town and took in the sights.

Went out to the mountains. He didn't want to go to no public place.

Interviewer: Actually how a person looks—when it comes right down to a matter of choosing friends or getting married—you don't pick out the best-looking people.

Subject: No, but you can't make them understand that. They think that, everyone not looking just so, the girl won't even have much to do with you. Take him for instance. He feels like, well, he is handicapped. His fingers are burned badly too. He feels like a girl won't have nothing to do with him. I don't think anybody in the hospital has got more friends than he has. But he feels like civilians are not like that.

Interviewer: But still he has a lot of friends in the hospital.

Subject: Yes. But if you look at him just right there. . . . Start looking at him. You will kind of shy away from him.

Interviewer: Will he eventually be fixed up?

Subject: No, I doubt it. They have put eyelashes and eyebrows on him. Now they are putting a nose on him. You can't forget that.

Interviewer: He won't look like the same person?

Subject: No.

Interviewer: The fellows on the ward get used to it so it doesn't bother you?

Subject: Yes. We joke and play and get to know each other pretty well. Pretty quick you are all ganged up together. They will cheer and whistle at each other as they go along.

Interviewer: Do you think that there is a difference, from your experience, in how women and men feel about appearance?

Subject: I think there is. The women . . . The man figures he don't care after a while. He will kind of forget about it. But a woman—they are always prettying up you know.

Interviewer: Do they care about how men look?

Subject: Yes, I think so.

Interviewer: Do your wife care about the fact that you were scarred up a little bit?

Subject: She wants me to get fixed up the best I can. That means a lot to her, and it means a lot to me.

Interviewer: Did you meet her before or after the injury?

Subject: I met her after I was home on furlough. I wasn't good looking, I can tell you that. I had a big scar on my face down here. It's gone now. I didn't know then whether she was stepping out with me because she wanted to or because she thought she ought to. I asked her why she was going out with me—because if she turned me down she thought she would hurt me? She said "No."

Interviewer: You didn't marry her for her looks?

Subject: No. I married her for love.

Interviewer: Would it have made any difference if her face had been scarred?

Subject: No. They would look at her and stare a little while at first. But being as I know how it feels I wouldn't hesitate a bit.

Interviewer: In the small towns it's not at all unusual to see a man with a scar. It's not an unusual thing.

Subject: No. People just kind of forget about it. Don't say much about it. They don't forget the guy entirely. They quit talking about it.

Interviewer: When you were first injured on your face, were you sensitive about going out?

Subject: I certainly was.

Interviewer: How did you get over that?

Subject: I was at Bushnell. One day I was walking down the hall. The colonel stopped me and asked me how I was getting along. He says, "Have you been home?" I said, "No." He said, "Why not?" I said, "I don't want to go until I get fixed up." He said "Why do you feel that way?" I said, "Look at me." He talked to me just like a father would. I guess that's the reason I kind of got over it.

Interviewer: You went home a little while after that?

Subject: About three weeks. Made up my mind I would go home.

Interviewer: After you got out was it bad?

Subject: It was for about a week. I stayed away from public places. Stayed away from all the gang—people I know. Kind of took it easy.

Interviewer: All your old friends?

Subject: Yes, I didn't want to see them. When I met one it would be all right.

Interviewer: One at a time?

Subject: Yes, that's the way I would feel.

Interviewer: Why?

Subject: You can explain it to one. Meet them all at once you feel you are on exhibit.

Interviewer: How did your family treat you?

Subject: Very good. My dad knew what it was. He was in the last war. He kept my brothers and mother and sister from asking me.

Interviewer: They wanted to ask?

Subject: Yes, they really wanted to ask me.

Interviewer: But you didn't want them to?

Subject: No, I didn't want them to. I wanted to work it off myself. I was pretty highstrung. I used to have nightmares—sit up in bed and fight all night. They never had to ask me anything after that. I would tell them all in my dreams. I guess that's why they stopped after a while. Dad kind of protected me that way. I was really shy. If I would see somebody coming toward me, I would try to get away from it. Felt a lot better alone the first couple of months than around a bunch of people. That's the way I am, and I think lots of the guys are the same way.

Interviewer: How should a family act when a fellow comes home? Should they avoid it entirely?

Subject: No, I didn't want to be avoided. Most mothers and the whole family want to help you. Open the door. . . . Or take me, for instance, I wanted to drive the car. They didn't think I should drive because my eye was injured. They were scared that I would wreck. It got pretty monotonous. I couldn't do anything. As far as questions were concerned, my little brother would ask questions. I overlooked that. But when the brother younger than I but older—he was old enough to know better—I would kind of shy away from him. They think that you are mad at them, but it's not actually that at all. You just want to get away and forget and kind of take it easy.

Gradually come into it as you go along. . . . Five years in service everything you do you are on your own. You have a bunch of equipment. You are told to look for your own self. You go home and you are still looking out for yourself and forget there are others in the house with you. Sooner or later you kind of get over it. I can go home now and forget all about it. It would take a week to get used to it again. You can get right back into the old groove.

Interviewer: This is a funny question but I will ask you anyway. Are there any advantages to being injured?

Subject: None whatsoever. Everything I can find is a disadvantage.

Interviewer: You seem to have a pretty broad understanding of some of these people—know how they feel and all that. Would you have had that deep sense of sympathy before?

Subject: Yes, I think I would have before. I was with them a long time. Boys I was with before, they was older, they kind of give you a broad view of things. When you go overseas you find out the disadvantages of a wound. In one way or another it's going to affect you. Maybe it won't now, but it will 10 or 15 years later. You go home with somebody on furlough, and you will be going to a dance or something—he will slip on the floor. Myself, I was playing basketball and fell much harder than I would have before. Broke my arm.

Interviewer: How about changes in your attitude? Changes in your goals—what you want to do with life—has that been changed?

Subject: That all depends on the wound. An eye lost—that puts a damper on lots of things. Like I wanted to be a construction engineer. But you have to go to school to do that. I can read a newspaper, and by the time I have finished my eyes are too tired to do anything else. It's too hard on my eyes.

Interviewer: How about interest in other people? Have you had any changes in attitude on that since you have been injured?

Subject: Well, yes. It seems like I know the people more. The reactions in a different way. Just what the outcome is. You know if a person has a funny reaction he will overcome it. Seems like I picked that up pretty easy. And colors—I pick up colors quicker with the one eye. That's one thing I have picked up.

Interviewer: What injury would you consider to be the worst? The most severe?

Subject: To have all the time or just until it is healed?

Interviewer: Permanently.

Subject: Shell shock—brain. You know what a shell-shocked man is.

Interviewer: Have you seen a lot of them?

Subject: Not here. In the East.

Interviewer: Why do you think that is a permanent condition? It all depends on how bad it is.

Subject: They lose weight. The look in the eyes. I don't think they get over it. They are always nervous. Can't seem to quiet down. I got a cousin that way.

Interviewer: What would be the next?

Subject: Well, I think blind—totally blind. That would be about the next thing. In fact it would be hard to

judge between the two. In fact I think I would put blind before nervousness. You could see. A nervous man—he can see and get around by himself. Blind man has to go to school and be taught everything. Here a nervous man can take it on himself and get over a lot of it. It's just in his mind.

Interviewer: What would be the next worse thing?

Subject: The arm—or a stomach wound. Pretty bad.

Interviewer: What about this boy friend of yours with the disfigured face?

Subject: No, I would not say that is next. It is just his mind. He is all right.

Interviewer: Do you think he is a shell-shocked case?

Subject: No. He is nervous. I wouldn't say he is any worse than anyone else. He will have to stay away from cold weather. But his fingers are crooked. That's his only disadvantage.

Interviewer: You don't think that there is any greater tendency for injured men to be nervous than for anybody else?

Subject: Oh yes. I will say they are always looking out for things. They are more self-conscious. They pick up everything that comes along. They are always guarding that eye, or leg, or whatever it is.

Interviewer: I think that about covers the questions.

Thanks for coming. We appreciate your contribution.

Subject: I am glad if I can help any.

RECORD No. 3

Subject: Age 21, serviceman in hospital, private, single, formerly college student, injured one year before interview, amputation of right arm below elbow, facial scars, eye injury (recorded by interviewer):

Interviewer explained purpose of the interview. Content not recorded.

Interviewer: How do people act?

Subject: They act all right to me.

Interviewer: How about their asking questions?

Subject: I would rather have them ask questions than stand there and look. Some people are self-conscious. I am not. A man with a hook is a curiosity, and until they know how it looks they will look and ask. I would sure be curious if I saw one of those things.

Interviewer: Even for strangers it is all right?

Subject: I have had perfect strangers ask; it doesn't bother me.

Interviewer: How about help?

Subject: People treat me just as well as always when they find out I can use this just like a hand. I have seen some guys take offers of help. I can't see it. Sometimes they offer me a little help, but they also would if I had two hands.

Interviewer: Do you think that noninjured people are uncomfortable when they are with you?

Subject: Definitely. They get some idea. . . .

Interviewer: Do you try to put them at ease?

Subject: Yes. When they find out it doesn't bother me too much, it generally straightens them out.

Interviewer: Do you think it wise for the uninjured to make light of the injury?

Subject: It never affected me one way or the other. The guy that is doing it may have a leg off himself. Sometimes it helps.

Interviewer: They kid a lot around here. Is it okay outside?

Subject: It doesn't bother me. Some guys are a little bit backward, but most do it in a joking way. People joke about big feet; it's the same thing with me.

Interviewer: What do you think comes into a person's mind when he sees a fellow with an amputation, besides curiosity?

Subject: A couple of old women say, "You poor boy, did you lose it in the war?" I tell them, "Hell no, I was born with it." Some of the boys enjoy being pitied, believe it or not. It doesn't bother me if I go in a bar and someone buys me a drink; I like that.

Interviewer: Some enjoy being pitied?

Subject: A minority. And they won't admit it. They do though.

Interviewer: How do you tell?

Subject: Just the way they talk. I took a little psychology at junior college.

Interviewer: What kind of person wants to be pitied?

Subject: They never had anybody feel sorry for them before. Some of the hardest characters—since they are in the hospital they have got it. The ones who don't give a damn get along better. They walk better than any one in the hospital. The ones who pity themselves walk with a limp. When he gets out in civilian life it's going to be different. He's just going to be another guy who is crippled up.

Interviewer: Do they worry about the way it will be after?

Subject: You wonder what it's going to be like after four years in the army. A little bit of furlough makes them think.

Interviewer: Do they think maybe people will be prejudiced?

Subject: Not prejudiced, but we have gotten used to this life. We have got to watch our step. There are a lot of things you can do in the army and not in civilian life.

Interviewer: Do many people feel respect?

Subject: You would be surprised how few. They think they respect you but actually they pity you. But some really appreciate you.

Interviewer: Do other people react any differently than you expected at first?

Subject: Just normal to me. Just the way I expected, which is saying a whole lot. It didn't take me long to get adjusted. I just sat down and figured out what would be the consequences.

Interviewer: Some say you should just forget about it.

Subject: You can't do that. There are 16,000 amputees in the war and three times as many civilians.

Interviewer: What are some of the things you tried to figure out?

Subject: What people would think about this hook. Until the novelty wore off I knew they would stare like at a freak show, but if you talk about it it will wear off.

Interviewer: If they have been informed then it's okay?

Subject: I don't have any vanity to speak of anyway.

Someone's bound to notice, but as soon as they take a good look they will quit.

Interviewer: [Remarks that films about problems concerning the injured might help to overcome curiosity.]

Subject: It would help a lot of misconceptions. They think the hook is connected to the muscles. If it were shown in the movies—I know how that works—and that is all there would be to it. It's the best way you could find.

Interviewer: What percent of the people act very well, really badly, and in between.

Subject: A good 90 percent, or more, act pretty damn decent. You expect them to stare a little but . . . You may run across three in a row. A third of them I have been in contact with asked, and then the novelty wore off. Then it's just another thing, as normal as the next man. A lot are self-conscious. The more you learn to use it the less it bothers you. If it's just hanging it will. I don't think it's too much of a disadvantage in hiring for a job if you prove you can use it. Some of the best people in the United States have got 'em off. I really miss it [the hook] when I haven't got it on. I can do pretty nearly anything. There is a good program in the hospital, and the more you use them the less you notice it and the less others notice it. Some try to hide it. They don't know what to do with it. More guys should condition themselves instead of warning the public. There was an article in the *American Weekly* which came out recently. It was pretty good; it showed how they worked.

Interviewer: Did you ever know anybody who was injured before you were hurt?

Subject: I knew one who had an arm off in the last war. He had no artificial arm—just a stump. I used to think it was a horrible thing, but I found out he could do as much with one arm; and with this thing there is nothing you can't do. But it's natural, if you don't know you think it's a terrible handicap.

Interviewer: Which is worse, an arm or a leg?

Subject: It is all according to the individual. To me having a leg off would be kind of rough if it were above the knee. If below, it's not so bad. An arm handicaps you a little more. Those five fingers help more than five toes, but above the knee is rough.

Interviewer: Is sympathy different from pity?

Subject: It's close to discriminate, but there is a difference in my estimation. The nurses sympathize, but I will be damned if they pity you. Pity is when you think he really needs help and think of him as inferior to yourself. Sympathy? All right. Pity is looking down on them.

Interviewer: Quite a number of things may be important for other people who are injured to know about—the stages one goes through. It would help them to know they are not the only ones who have those feelings in the beginning. How was it at the beginning? What are the stages one has to go through and the things you have to get used to?

Subject: In the beginning I didn't know what to think about the whole deal. The hand was gone—most of my face and side. I walked back to the aid station. I thought I didn't know what's cooking. I asked a doctor about the prosthesis. He was honest and told

me just how it was. Others told me about its being connected to tendons. Then I thought if other guys can get along I can. It was rough when I couldn't feed myself and was helpless. [Other hand also was injured.] I learned to tie my shoes and write, and the more I learned the better off I was. But if you have self-sympathy you won't get along. If you figure out how you can do it it helps take your mind off. Recondition yourself. I felt low at the beginning. I thought of the shock to my folks. I knew there was some things I couldn't do. So what? I was determined I could. They told me I couldn't swing on the rings, but I did it. Having no feeling is one advantage. You can stick it in a fire, and chemistry acids wouldn't bother you. If someone is in an accident, the best thing to do is to send someone who has one and show him how to use it. I was told but I couldn't visualize it. If you send someone, the guy may resent it at first, but in the long run it helps out. I figured it was gone so I might as well see what to do about it. Nobody else could figure it out for me.

Interviewer: What would you do if you saw a fellow patient was feeling sorry for himself?

Subject: They razz them in the hospital and it works. There was one fellow with a leg off at the hip taking it kind of rough. We call him a cripple and everything else. Once he sees a guy walk on it it's okay, but there are no others in this hospital like him with the leg off at the hip. If you can see another one like yourself it's okay. You carry an opener always with you. Someone showed me how to open bottles with the hook.

Interviewer: What is more important—the looks or the things you can't do?

Subject: The looks are kind of rough too, but I can see it on myself and it doesn't bother me. On somebody else it does. I enjoy learning to do things over again. It offers a challenge to you. I think, "What's the best way?" before I start fooling around, but I have heard all of them say it's the looks that bother them more than anything else.

Interviewer: Is an injury easier to take for a woman or a man?

Subject: It's worse for a woman. Most people will accept it on a man.

Interviewer: Would you object to marrying an injured woman?

Subject: After I have had one off, for me it wouldn't make much difference. I was never prejudiced much that way. I wouldn't go out of my way to look for

one, but you have something to talk about anyway. She could wear long-sleeved dresses and the hand [shows his cosmetic hand and how it works].

Interviewer: Do the men feel that their injuries will make a difference in getting married?

Subject: No, to tell the truth amputees seem to get around a lot better. It doesn't seem to make much difference to women around here. From what I see around here, more men seem to get married. The first thing that enters their mind is how the women will feel about it. And when they find out they don't mind it; then they get hooked. They are just experimenting, and before they know it they are married.

Interviewer: [Not recorded.]

Subject: Some get it in their minds that the women pity them, but it's only themselves that is doing it.

Interviewer: Do you have any plans for a job?

Subject: I am going back to school. Before I intended to be an engineer and now a lawyer. I have a bad eye too, and I can't do drafting. I can draw with one hand, but my eyes wouldn't hold out. I can see movement and color with this eye, but the nerve is out. The whole side of this face is a plastic job.

Interviewer: Is there a broadening of interests?

Subject: There is a change more than broadening. You start thinking of what you can do instead of what you have been doing.

Interviewer: Do you have any further suggestions, for families for instance?

Subject: I haven't seen families make many mistakes. They were leary of letting kids around me when I first got home. My family took it pretty well. They know how to deal with his case because they know the guy. Just use common sense. I would rather talk about it than not. If you spend three or four years away and nobody speaks about it . . . I can't see. . . . They were pretty important years, and he may want to get it off his chest. They are trying to help him more than they should. Mine found out what I could do and then they said, "The hell with you." When I get lazy my sister says, "You're no more crippled than I am."

Interviewer: Some fellows say they get mad at the stump and try to hurt it. What do you think the reason might be?

Subject: I don't get sore at the stump too much. It's on me to stay. There's no sense getting sore about it. It's gone and that is it. [Closing of interview not recorded.]

Technical Notes from the Artificial Limb Program

This section of ARTIFICIAL LIMBS is intended as an outlet for new developments in limb prosthetics which, though not deserving of a long feature article, nevertheless ought to be brought to the attention of the readers of this journal. Notes may vary in length from a single paragraph to several pages of manuscript, as appropriate. Illustrations also are acceptable.

Above-Elbow Training Arm

Following the development of the new below-elbow training arm (ARTIFICIAL LIMBS, Spring 1956, p. 36), personnel at the Army Prosthetics Research Laboratory undertook the design of a corresponding arm that can be used by a normal person in demonstrating the operation of the above-elbow prosthesis. The new above-elbow training arm (see cut) can be constructed easily and economically by anyone familiar with plastic laminating techniques.¹

The forearm section, consisting of wrist disconnect, laminated forearm shell, and mechanical elbow, may be any of several commercially available above-elbow setups, and the terminal device may be either hand or hook. The upper arm shell, which attaches to the elbow turntable and corresponds to the above-elbow socket, is built of laminated stockinet and is so designed as to encase a half section of the normal upper arm and yet to allow easy insertion and withdrawal. The shoulder harness is of the conventional above-elbow figure-eight design (ARTIFICIAL LIMBS, September 1955, p. 40), with the exception that the front suspensor strap is attached to the arm shell by means of an inverted Y-strap. As in the standard above-elbow harness, an

elastic insert provides for the necessary motion with respect to the elbow-lock control strap. And finally, an elastic holding strap is provided just below the bulge of the biceps.

Except for the special positioning of the reaction points as required to clear the forearm of the demonstrator, the cable system, with split housing and leather lift loop on the forearm shell, is identical with that used in the standard above-elbow case. The Bowden cable in the elbow-lock control enters the upper arm section on the anterior side.

To construct the arm shell, the arm of the subject is flexed 90 deg. at the elbow and covered with stockinet from below the elbow up to the shoulder. Then a primary wrap, or negative cast, is made by lapping plaster-of-Paris bandage up and down the arm but leaving the front uncovered to permit easy removal of the wrap after it has hardened. Care is taken to form the cast firmly about the flexed elbow in order to make a comfortable seat.

When the primary wrap has hardened, it is carefully removed, laid on its side, and filled with plaster, which is allowed to harden. The wrap is then removed from the set plaster, and the latter, which now constitutes the positive model, is covered with a parting agent. The elbow turntable is positioned in proper relation to the model, and a double-wall socket (ARTIFICIAL LIMBS, September 1955, p. 18) is laminated according to standard procedure. When the lamination has been cured, the plaster is broken out, and the anterior portion of the socket is cut away as shown in the illustration.

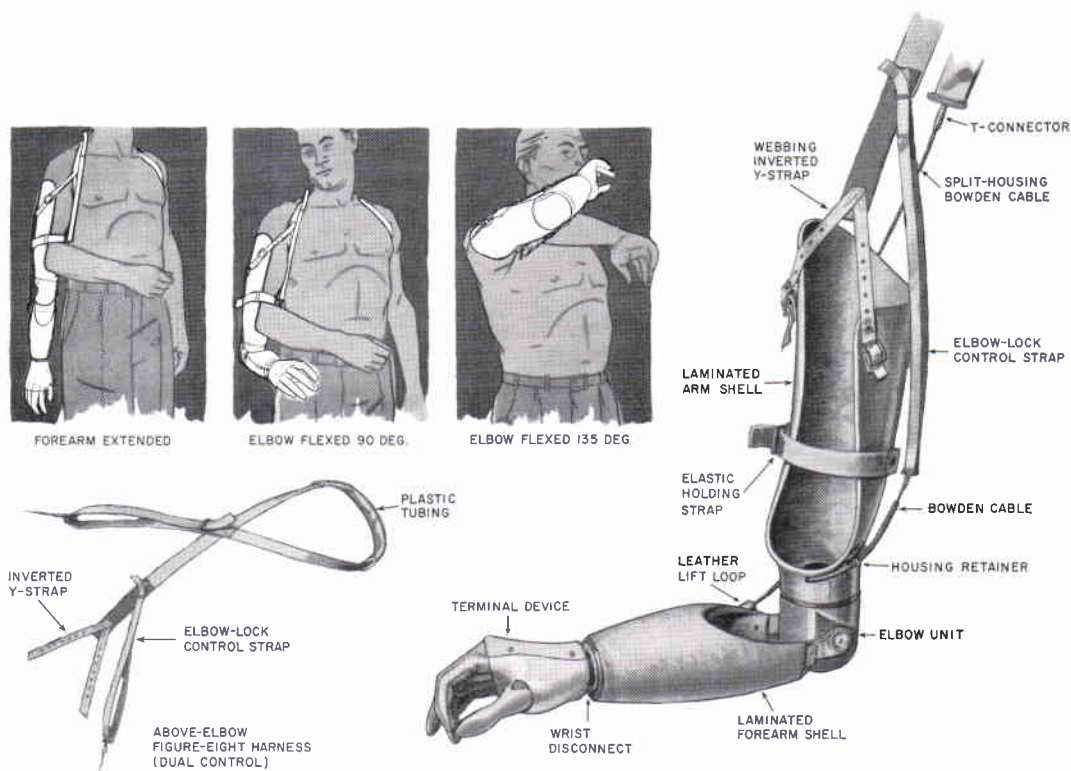
All adjusting straps should be made long enough to accommodate persons of various sizes, but of course it may be necessary in certain cases to modify the size of the arm when it is intended for persons of exceptionally small or exceptionally large build.

The drawing accompanying this note is the work of George Rybczynski, free-lance artist of Washington, D. C.

Addendum

Through an oversight in reporting the APRIL below-elbow training arm (ARTIFICIAL LIMBS, Spring 1956, p. 36), no mention was made of the fact that it is sometimes necessary and desirable to reinforce the "Royalite" sheet

¹University of California (Los Angeles), Department of Engineering, *Manual of upper extremity prosthetics*, R. Deane Aylesworth, ed., 1952. Section 6.5, *Arm socket fabrication*.



ABOVE-ELBOW TRAINING ARM, APRL DESIGN—A useful device that can be constructed easily and economically. The model shown is for a right arm. Substitution of a left arm shell and a left harness system provides the corresponding left training arm.

at the right-angle bend which forms the tab for support of the F-M disconnect. A simple and convenient way of doing so is to rough up the inside surface of the plastic in and around the bend and to apply at this point a mass of raw cotton batting saturated with "Ortho-Bond A" (Vernon-Benshoff Co., Pittsburgh). Air cure of this material suffices to make the "Royalite" much less susceptible to bending torques about the L-shaped turn.

Nontoxic Plastisol Formulation

A nontoxic plastisol formulation, consisting wholly of ingredients approved either by the Department of Agriculture or by the Food and Drug Administration, has recently been developed at the Army Prosthetics Research Laboratory for use in the fabrication of flexible prostheses that can be placed in the mouth

without danger of harmful reaction. It is especially useful in the construction of, say, a child's passive hand. By suitable variation in the ratios of the ingredients, the flexibility of the resulting films can be varied, so that it may be possible to produce other types of prostheses, such as for parts of the face or hands.

The formulation given in the accompanying table has been found to be useful for making a child's passive hand.

The components are finely dispersed on a conventional 3-roll ink mill using tightly spaced rolls, and the dispersion is then placed under vacuum to remove air bubbles. To use this plastisol, it is poured into an appropriate nickel mold, and the mold is heated to 100°C for such a period as is necessary to gel the desired film thickness. Thereupon excess

Component	Proportion	Supplier
	<i>(parts by weight)</i>	
Geon 121	120	B. F. Goodrich Chem. Co., Rose Bldg., Cleveland
Di-(2-ethylhexyl) phthalate (DOP)	60	Ohio Apex Div., Food Machinery & Chem. Corp., Nitro, W. Va.
Paraplex G-60	10	Rohm & Haas, Washington Sq., Philadelphia
Stayrite 90	3.6	Witco Chemical Co., 295 Madison Ave., N.Y.C.
Iron Oxide Pigments	As needed to produce desired shade	

material is drained from the mold, and the gelled film is heated further at 180°C in a circulating-air oven for 15 minutes to effect cure.

Films thus prepared, which are later to be filled with a suitable filler such as vinyl foam rubber, have good heat and light stability and a "dry" feel.

Abstracts of Current Literature

This section of ARTIFICIAL LIMBS is intended to summarize the current literature of limb prosthetics, especially the less accessible reports literature arising from the several research groups participating in the Artificial Limb Program. Authors are invited to submit, for review, copies of any such material, including papers published in scientific journals.

The Canadian Type Hip Disarticulation Prosthesis, J. Foort and C. W. Radcliffe, Series 11, Issue 28, Prosthetic Devices Research Project, Institute of Engineering Research, University of California (Berkeley), [Report to the] Prosthetics Research Board, National Research Council, March 1956. 40 pp., illus. Free.

Early in 1954 (ARTIFICIAL LIMBS, September 1954, p. 30), C. A. McLaurin, then of the Department of Veterans Affairs, Toronto, Canada, reported the development of a new and improved type of prosthesis for the hip-disarticulation amputee. Instead of using the older and generally unsatisfactory tilting table or the saucer socket, both requiring a manual lock at the hip joint, it incorporated a one-piece socket-waistband combination of laminated plastic giving three reaction points, a full-width hip joint giving improved lateral stability, and a unique arrangement of joint locations such as to give improved security against buckling of the knee without the necessity for a lock at the hip. Use of alignment stability instead of the customary lock at the hip joint gives more natural backward inclination of the prosthesis at heel contact, eliminates raising of the pelvis on the amputated side during the swing phase, avoids awkward pelvic rotation at push-off, and dispenses with use of the hands in sitting down.

Because this so-called "Canadian" design seemed to offer so many advantages over the conventional prosthesis for hip disarticulation,

the Prosthetic Devices Research Project at the University of California (Berkeley) undertook an analysis of its characteristics in actual use by pilot wearers and, in the course of study, worked out improved methods for fitting and aligning the device. McLaurin's original principles remain unchanged.

This report presents well-illustrated and detailed instructions in the latest techniques for making and fitting the Canadian hip-disarticulation prosthesis (ARTIFICIAL LIMBS, Spring 1956, p. 43). It consists of seven sections, as follows: I. *Introduction*; II. *Fitting the Socket Waistband*; III. *Laminating the Socket Waistband*; IV. *Preparation of Components*; V. *Assembling and Aligning the Prosthesis*; VI. *Duplicating, Finishing, and Adjusting the Prosthesis*; VII. *Time and Material Study Data*. Fifty-four hours was the total construction time in the one case clocked.

Fiberglas Laminate Reinforcement of Wooden Prostheses, J. Foort, Series 11, Issue 27, Prosthetic Devices Research Project, Institute of Engineering Research, University of California (Berkeley), [Report to the] Advisory Committee on Artificial Limbs, National Research Council, February 1956. 14 pp., illus. Free.

Wooden leg prostheses (sockets, knee blocks, shanks, and feet) have been reinforced with Fiberglas plastic laminate routinely at the University of California (Berkeley) over a period of two years. The results are said to have been generally satisfactory.

As compared to the conventional method of reinforcement involving rawhide, the use of Fiberglas plastic laminate, it is claimed, offers certain advantages. Materials are less expensive, fabrication time is reduced, resistance to moisture is excellent (less than 1-percent water absorption), and cosmetic finish (at least for males) is inherent because the necessary pigments are incorporated into the laminating plastic composition. In addition, the surface thus produced is easily cleaned with water or solvent and may be restored to its original luster with a light coat of lacquer. Although in the units tested (a total of 99 components) a small percentage of failures occurred, the difficulties were found to be due to neglect of certain variables mostly amenable to control.

This report sets forth, by word and drawing, detailed instructions for the application of

Fiberglas laminate reinforcement to wooden above-knee sockets and knee blocks. It includes a list of the materials needed, together with the names and addresses of suppliers. Anyone familiar with the manipulation of plastics should be able to follow the procedure. Presumably the method is applicable to below-knee prostheses also.

A Technique for Building a One-Piece Laminated BE Arm (Double-Wall Single-Laminated), Robert E. Plumb, Technical Report No. 5629, Army Prosthetics Research Laboratory, Walter Reed Army Medical Center, Washington, D. C., 21 May 1956. 4 pp., illus. Free.

A method has been developed for building

a plastic-laminate below-elbow arm—the socket and the forearm shell—in one piece, thus eliminating one operation, effecting a saving of two and a half hours of construction time per prosthesis, and producing a below-elbow arm which cannot pull apart. It is applicable to all below-elbow types except, of course, where a split socket is required to obtain full elbow flexion of 135 deg. This report details the stepwise procedure for unit construction of the so-called “double-wall socket” (ARTIFICIAL LIMBS, September 1955, p. 18). Although the technique described is that for a below-elbow prosthesis, it is equally applicable to the above-elbow case when the appropriate substitution of components is made.

Digest of Major Activities of the Artificial Limb Program

This section of ARTIFICIAL LIMBS is intended to present a summary of principal news events of interest in the Artificial Limb Program during the several months preceding issue. Stories of activities in the various laboratories and associated agencies, reports of meetings, photographs, and items about individuals all are acceptable.

PRB Meetings

The Henry Ford Hospital was host to the Prosthetics Research Board at its third meeting in Detroit, July 20. Present to represent the National Academy of Sciences—National Research Council were Dr. Thomas Bradley and Mr. Louis Jordan, of the Divisions of Medical Sciences and of Engineering and Industrial Research, respectively.

Among the important conclusions reached was that, in view of the increased responsibilities attendant to an expanding program, the membership of PRB, then limited to nine persons, should be increased to fifteen. Chairman Strong was authorized to appoint a nominating committee of three members to consult with the President of the Academy-Research Council with a view toward the selection of six new members, preferably individuals whose interests cover the rather broad scientific and professional disciplines encompassed in the field of limb prosthetics.

Edmond M. Wagner, consulting engineer, of San Marino, California, who has been associated with the Artificial Limb Program since its inception, was unanimously elected to serve, at least until June 30, 1957, as Chairman of the Committee on Prosthetics Research and Development, a group heretofore chaired *pro tempore* by the Chairman of PRB. Relieved of his duties in connection with CPRD, the Chairman of PRB was elected to serve as Chairman *pro tempore* of the newly

activated Committee on Prosthetics Education and Information.

After the meeting, Dr. C. Leslie Mitchell, Surgeon-in-Charge, Division of Orthopaedic Surgery at Henry Ford Hospital, arranged for the members of PRB to view a motion picture showing the results of vocational rehabilitation of several upper- and lower-extremity amputees under the auspices of the Henry Ford Hospital Amputee Clinic, which was originally established as a result of the prosthetics training courses offered at UCLA in 1953 and '54. Dr. Mitchell then conducted the group on a tour of the facilities of the Orthopaedic Division located in the new Clinic Building.

The next meeting of the Board is scheduled to be held in Washington, D. C., on Friday, March 29, 1957.

Committee on Prosthetics Research and Development

The Committee on Prosthetics Research and Development, a unit advisory to the Prosthetics Research Board and formerly known as the Panel on Prosthetics Research and Development, met June 12 through 16 at the University of California, Berkeley. Among other decisions reached during the deliberations was that a pilot production run of the Henschke-Mauch hydraulic swing-control knee unit for above-knee amputees should be made. The Henschke-Mauch unit, designed so that it may be installed in most of the existing types of artificial legs, provides variable hydraulic resistance to rotation about the knee axis. The committee felt also that the usefulness of the so-called Canadian-type hip-disarticulation prosthesis (page 66; see also ARTIFICIAL LIMBS, Spring 1956, p. 43) had been demonstrated to the point where it should be made available for general use.

The infant's passive hand, a joint development of APRL, UCLA, and the Michigan Crippled Children Commission, was considered by the committee to be ready for general use as soon as slightly revised models can be made and checked. This is the terminal device that has proven useful in fitting children as young as 10 months of age.

The status of all items under development was reviewed and, where appropriate, recommendations were made to the agencies participating in the Artificial Limb Program.

The next meeting of the Committee on Prosthetics Research and Development will be held in Los Angeles November 28 through December 1.

Prosthetics Education at UCLA

The first West Coast school in the new series entitled *Clinical Prosthetics: Above-Knee Amputations* was presented during the two-week period of May 28 through June 8 in the facilities of the Prosthetics Education Project in the big new University of California Medical Center at Los Angeles. In attendance were seven prosthetists, 13 therapists, and 20 physicians.

The classrooms, teaching laboratory, and the offices of PEP are now located in the Medical Center; and other classrooms, clinical facilities, and auditoriums throughout the building also are made available during the presentation of the prosthetics courses. The participating faculty included Miles H. Anderson, Ed.D., Educational Director, Prosthetics Education Project, UCLA Medical Center, Los Angeles; Virginia M. Badger, R.P.T.,

Physical Therapist in Charge of Rehabilitation, Orthopaedic Hospital, Los Angeles; Robert W. Bailey, M.D., Assistant Professor of Surgery (Orthopedics) and Chief of Orthopedics, University of California School of Medicine, Los Angeles; Charles O. Bechtol, M.D., Chief of Orthopaedic Surgery, Yale University Medical School; John J. Bray, C.P.&O., Lanham Orthopedic Service, Los Angeles; Nancy Cake, R.P.T., Physical Therapy Supervisor, Wadsworth VA Hospital, Los Angeles; Donald F. Colwell, C.P., Modern Prosthetic Appliances, Santa Monica; Cameron B. Hall, M.D., Clinical Instructor in Surgery (Orthopedics), University of California School of Medicine, Los Angeles; Charles A. Hennessy, C.P.&O., Peerless Artificial Limb Co., Los Angeles; Robert Mazet, Jr., M.D., Clinical Professor of Surgery (Orthopedics), University of California Medical School, and Chief of the Orthopedic Service, Wadsworth VA Hospital, Los Angeles; Alvin L. Muilenburg, C.P. & O., Muilenburg Artificial Limb Co., Houston, Texas; H. Lorraine Ogg, R.P.T., Senior Physical Therapist, UCLA Medical Center,



PROSTHETICS EDUCATION AT UCLA—First of a new series. Pictured are the students and instructors in the first West Coast school in *Clinical Prosthetics: Above-Knee Amputations* held May 28 through June 8 in the new facilities of the Prosthetics Education Project at the University of California Medical Center, Los Angeles.



Los Angeles; Charles W. Radcliffe, M.S., Assistant Professor of Engineering Design, Lower-Extremity Amputee Research Project, University of California, College of Engineering, Berkeley; and Donald F. Slocum, M.D., Branch Consultant in Orthopedic Surgery, Veterans Administration, Eugene, Oregon.

The seven prosthetists were Bill Hammen and Edward L. Jachowski, Phoenix, Ariz.; Charles D. Neal, Los Angeles; William Peralta, Van Nuys, Calif.; Carl T. Sumida, Honolulu; John J. Vollmer, Los Angeles; and Guillermo Martinez, Guatemala.

Therapists in attendance were Ruth Ann Aust, Honolulu; Margerie Allen, Phoenix, Ariz.; George O. Belders, Whipple, Ariz.; Carolyn Bowen, Seattle; Gerda Busck, Los Angeles; Jeannine Dennis, Los Angeles; Elwin L. Edberg, Hondo, Calif.; Mildred Galvin, San Fernando, Calif.; Austine Grigsby, Los Angeles; Rudolph Jahn, Long Beach, Calif.; William Koos, Los Angeles; Irvin F. Travis, Sepulveda, Calif.; and Laurance W. Weeks, Tucson, Ariz.

Finally, the 20 physicians and surgeons included Dr. Warren A. Colton, Phoenix, Ariz.; Dr. William A. Craig, Los Angeles;

PROSTHETICS EDUCATION AT UCLA—First of a new series. Top, Virginia M. Badger, Physical Therapist in Charge of Rehabilitation at Orthopaedic Hospital, Los Angeles, and Lorraine Ogg, Senior Physical Therapist at the UCLA Medical Center, instruct a class of therapists during the first West Coast school in *Clinical Prosthetics: Above-Knee Amputations* held May 28 through June 8 in the new facilities of the Prosthetics Education Project at UCLA. Middle, students engage in laboratory practice in shaping of the above-knee socket. Bottom, physicians study gait analysis of a bilateral above-knee subject.

Dr. Richard H. Hall, Long Beach, Calif.; Dr. Melvin M. Halpern, Tucson, Ariz.; Dr. Charles G. Hutter, Los Angeles; Dr. Ivar J. Larsen, Honolulu; Dr. Lewis A. Leavitt, Houston; Dr. Joseph E. Maschmeyer, Los Angeles; Dr. Neil P. McCloy, San Francisco; Dr. Marvin T. Meyers, Los Angeles; Dr. John B. Miles, Jr., Phoenix, Ariz.; Dr. Frederick W. S. Modern, Long Beach, Calif.; Dr. Garth Mooney, Seattle; Dr. Fred B. Moor, Los Angeles; Dr. Vernon L. Nickel, Hondo, Calif.; Dr. Robert L. Romano, Seattle; Dr. Robert L. Smith, Los Angeles; Dr. Robert G. Thompson, Chicago; Dr. Walter L. Wood, Los Angeles; and Dr. Russell E. Youngberg, Los Angeles.

The second West Coast school is to be presented September 3 through 14. As of August 21, enrollment totalled 14 prosthetists, 13 therapists, and 11 physicians. This session is for students from the San Francisco, Portland, and Seattle areas. Subsequent courses will be presented as follows: October 29 through November 9 for the Salt Lake City, Denver, and Oklahoma City areas; January 7 through 18, 1957, for the New Orleans, Dallas, and San Antonio areas; and February 25 through March 8 and March 18 through 29, for areas as yet unassigned.

Prosthetics Education at NYU

Another successful step in the Prosthetics Education Program at New York University (ARTIFICIAL LIMBS, Spring 1956, p. 39) was achieved with the completion of the first course in *Prosthetic Rehabilitation of the Upper-Extremity Amputee* on June 29. Sponsored jointly by the College of Engineering and the Post-Graduate Medical School, these courses are under the direction of Sidney Fishman and Norman Berger, both long with the Prosthetic Devices Study.

The first course in upper extremities got under way on Monday, June 4, with the registration of 14 prosthetists from 10 different states. They were John E. Dillard, Nashville; Max Field, New York City; Marion F. Kessler, Boston; Thomas L. Maples, New Orleans; Martin D. Massey, Baltimore; George M. Parsley, Charleston, W. Va.; Thomas Pirrello, Long Island, New York; William R. Rogers, Chelmsford, Mass.; Alvin E. Rupley, Ft. Worth; Chester T. Shelton, Brentwood, Md.; Joseph Smerko, Chicago; Marvin L. Sturtz,

St. Clair Shores, Mich.; Allen C. Talley, Jr., Raleigh, N. C.; and Fred E. Thompson, Charleston, W. Va. At the end of the first week they had each completed two below-elbow prostheses—one with flexible hinges and another with rigid hinges (ARTIFICIAL LIMBS, September 1955, p. 28). At the end of the second week they had finished one above-elbow prosthesis and one for the very short below-elbow case.

The beginning of the third week of the course was marked by the arrival of 20 therapists. Representing 10 states and Washington, D. C., they were Gloria R. Addressi, Bronx, N. Y.; Margaret M. Bishop, Philadelphia; Edward Block, Baltimore; Theodore F. Childs, St. Albans, N. Y.; Barbara G. Feallock, Chicago; Josephine Gardner, Malden, W. Va.; Rhoda S. Goldstein, Lakewood, N. J.; Grace C. Horton, Durham, N. C.; Mary E. McDonnell, Louisville; Leland D. Miller, Peoria, Ill.; Elizabeth Moeller, Croton-On-Hudson, N. Y.; Francis P. Mulhern, West Orange, N. J.; Mary G. Ryan, Dorchester, Mass.; Mary W. Slaughter, New York City; Marcus E. Spivey, Jr., Kingsport, Tenn.; Lilianne E. Steckel, New York City; Virginia T. Van Bree, Chicago; Benjamin F. Wade, Springfield Gardens, N. Y.; Elizabeth J. Wood, Washington, D. C.; and Anne B. Wurtz, Saranac Lake, N. Y.

Monday, June 25, saw the beginning of the fourth and last week of the school and the arrival of 26 physicians and surgeons. Those registered for this part of the course were Dr. Rufus H. Alldredge, New Orleans; Dr. Joseph J. Amster, Orange, N. J.; Dr. Eleanor M. Bendler, Philadelphia; Dr. Isador Blum, Elizabeth, N. J.; Dr. Sigmund Chessid, Brooklyn, N. Y.; Dr. Bernard Chromow, Teaneck, N. J.; Dr. George D. Dorian, Short Beach, Conn.; Dr. Otto Fliegel, New York City; Dr. Arthur J. Heather, Wilmington, Del.; Dr. Earl F. Hoerner, Livingston, N. J.; Dr. Milton Holtzman, Rockville Centre, N. Y.; Dr. Leon Kruger, Springfield, Mass.; Dr. Harold H. Kuhn, Charleston, W. Va.; Dr. James F. Kurtz, LaGrange, Ill.; Dr. Newton C. McCollough, Orlando, Fla.; Dr. Emilie L. Maxwell, Haverford, Pa.; Dr. Richard J. Miller, Tampa, Fla.; Dr. Albert J. Novotny, Chicago; Dr. Colman J. O'Neill, LaGrange Park, Ill.; Dr. Frank J. Schaffer,

SCHEDULE OF SCHOOLS AT NEW YORK UNIVERSITY

Above-Knee Prosthetics—Series A September 24–October 5, 1956

Preference will be given to applicants from Delaware, Maryland, Southern New Jersey, Pennsylvania, Virginia, North Carolina, and South Carolina.

Course 741A—Physicians	October 1–October 5
Course 742A—Therapists	September 27–October 5
Course 743A—Prosthetists	September 24–October 5

Above-Knee Prosthetics—Series B October 29–November 9, 1956

Preference will be given to applicants from Florida, Georgia, Alabama, Mississippi, Tennessee, and Arkansas.

Course 741B—Physicians	November 5–November 9
Course 742B—Therapists	November 1–November 9
Course 743B—Prosthetists	October 29–November 9

Above-Knee Prosthetics—Series C December 3–December 14, 1956

Preference will be given to applicants from Iowa, Missouri, Minnesota, and Wisconsin.

Course 741C—Physicians	December 10–December 14
Course 742C—Therapists	December 6–December 14
Course 743C—Prosthetists	December 3–December 14

Upper-Extremity Prosthetics—Series A January 28–March 1, 1957

No geographical priorities.

Course 744A—Physicians	February 25–March 1
Course 745A—Therapists	February 18–March 1
Course 746A—Prosthetists	January 28–March 1

Above-Knee Prosthetics—Series D March 25–April 5, 1957

Preference will be given to applicants from Kentucky, Southern Ohio, Indiana, and Illinois.

Course 741D—Physicians	April 1–April 5
Course 742D—Therapists	March 28–April 5
Course 743D—Prosthetists	March 25–April 5

Above-Knee Prosthetics—Series E April 29–May 10, 1957

Preference will be given to applicants from Michigan, Northern Ohio, and West Virginia.

Course 741E—Physicians	May 6–May 10
Course 742E—Therapists	May 2–May 10
Course 743E—Prosthetists	April 29–May 10

Above-Knee Prosthetics—Series F June 3–June 14, 1957

No geographical priorities.

Course 741F—Physicians	June 10–June 14
Course 742F—Therapists	June 6–June 14
Course 743F—Prosthetists	June 3–June 14

Memphis; Dr. Harlan A. Stiles, Huntington, W. Va.; Dr. Bernard Stoll, Bronx, N. Y.; Dr. Emery K. Stoner, Philadelphia; Dr. Robert T. Strang, Kingsport, Tenn.; Dr. James H. Taylor, Clinton, Iowa; and Dr. Seymour Zaller, New York City.

While the doctors and therapists were busy with lecture-demonstration and laboratory

sessions covering such topics as amputation surgery, postoperative care, biomechanics, components, fabrication principles and procedures, checkout, training, prescription principles and practice, and clinic-team operations, the prosthetists continued with their lecture-demonstration sessions and shop practice. In addition to the prostheses previously fabri-

cated, the prosthetists made a second above-elbow prosthesis and a shoulder-disarticulation prosthesis, bringing to six the total number of arms made by each prosthetist.

On Thursday evening, June 28, the students and faculty members and their wives and friends attended the class dinner at the Brass Rail Restaurant on Fifth Avenue. Among the guests present were Col. Gerald R. Tyler, Executive Director of the Prosthetics Research Board; Dr. Alonzo Yerby, Medical Consultant to the Office of Vocational Rehabilitation; Glenn E. Jackson, Executive Director of the Orthopedic Appliance and Limb Manufacturers Association; Dr. Miles H. Anderson, Educational Director of the Prosthetics Education Program at UCLA; and Dr. Eugene F. Murphy, Chief of the Research and Development Division of the VA's Prosthetic and Sensory Aids Service.

The last day of the course was devoted chiefly to practical experience in clinic operations. Prosthetists, therapists, and doctors were divided into 14 clinic teams, and a faculty observer was assigned to each team. Working together, the team members wrote prescriptions and performed complete checkouts on a variety of amputees.

Six series of courses in *Prosthetic Rehabilitation of the Unilateral Above-Knee Amputee* will be offered at New York University during the academic year 1956-57. Because of the great interest expressed in these courses, it has been necessary to set up a system of regional priorities for the first five of these sections. In addition to the lower-extremity courses, one more course will be offered in *Prosthetic Rehabilitation of the Upper-Extremity Amputee*. Announcements of these courses will be sent to physicians and surgeons, therapists, and prosthetists well in advance of the starting date for the sections for each geographical area.

By virtue of cooperative arrangements made with the Prosthetics Research Board, the agency responsible for the coordination of this program, students from the western areas of the country will receive priority consideration for admission at the Prosthetics Courses being offered at the University of California at Los Angeles (p. 69).

The accompanying schedule gives the dates and geographical priorities that have been established for the NYU schools.

Applications for any course must be received at the Post-Graduate Medical School, 550 First Avenue, New York 16, New York, at least three weeks before the course convenes.

Training Courses for Prosthetic Representatives

In accordance with its program of affording technical training to all Prosthetic Representatives serving disabled veterans throughout the country, the Prosthetic and Sensory Aids Service of the Veterans Administration conducted two more courses, one in May for those in the San Francisco Medical Area and another in June for those in the Atlanta and Columbus Areas. Each of two weeks' duration, the courses were patterned after the pilot course held in New York January 9 through 20 (ARTIFICIAL LIMBS, Spring 1956, p. 44).

In the course held May 14 through 25, use was made of the new prosthetics educational facilities at the UCLA Medical Center. The cooperation of the University officials and the willing services of lecturers from UCLA, from the commercial limb and brace industry, and from local VA installations combined to ensure a highly successful course. Harry D. MacBird, Area Chief for the Prosthetic and Sensory Aids Service in the San Francisco Medical Area, served as Course Coordinator with the assistance of William M. Bernstock, Prosthetics Education Specialist with the New York Office of PSAS. Herbert M. Rosoff, formerly a Prosthetic Representative, and currently with EPIHAB, a Los Angeles rehabilitation agency specializing in service to epileptics, attended as a guest student.

The course for Prosthetic Representatives from the Atlanta and Columbus Medical Areas was held in New York City June 18 through 29 in the VA's New York Regional Office. Most of the instructional personnel were obtained through the cooperation of the Veterans Administration Prosthetics Center (ARTIFICIAL LIMBS, Spring 1956, p. 46), the Prosthetic Devices Study of New York University, and the New York Regional Office of the VA. Mr. Bernstock's responsibilities as Course Coordinator were terminated abruptly after the first day by an appendectomy. The collaborative efforts of Steven L. Purka, of the Research and Development Division of PSAS, Anthony Staros, Chief of VAPC, Albert S.



TECHNICAL TRAINING COURSE FOR PROSTHETIC REPRESENTATIVES—Second in the series. Pictured are those attending the course held at UCLA May 14 through 25. Front row, left to right: Orville M. Norton, Salt Lake City; Donald L. George, Phoenix, Ariz.; Joseph K. Blecha, Albuquerque, N. M.; Shigeru Goto, Honolulu, T. H.; Raymond E. Burch, Boise, Idaho; Clarence June, Los Angeles; Philip R. Bray, San Francisco; Harry D. MacBird, San Francisco; Leonard W. Jay, Portland, Ore.; William H. Talley, Washington, D. C.; and Edward Ruzika, Los Angeles. Back row, left to right: William M. Bernstock, New York City; Henry R. Landis, Reno, Nev.; Herbert F. Rosoff, Los Angeles; Bruce B. McCay, Denver; Arthur H. Dietz, Seattle; and Peter J. Thauwald, Cheyenne, Wyo.

Zuidema, Area Chief for PSAS in the Columbus Area Medical Office, and Nelson McFarland, Area Chief, PSAS, in the Atlanta Area Medical Office, were responsible for the continued smooth administration of the course.

Similar technical training courses, to be held in New York City, are scheduled as follows: for the St. Louis, St. Paul, and Trenton Medical Areas, September 24 through October 5; for the Boston Area, October 22 through November 2. Thus, by the end of calendar year 1956 all Prosthetic Representatives will have received this basic course. It is hoped ultimately to involve these key VA prosthetics personnel in more advanced courses so that they may better carry out their responsibilities as technical advisors to the professional medical staff regarding prosthetic appliances.

World Confederation for Physical Therapy

Amputee rehabilitation was the theme of a panel discussion presented June 19 during the Second Congress of the World Confederation

for Physical Therapy. Dr. Henry H. Kessler, Medical Director of the Kessler Institute for Rehabilitation, introduced the philosophy of amputee rehabilitation, citing examples from his long experience in civilian practice, in service at Mare Island Naval Hospital during World War II, and in many lecture trips to foreign countries. Dr. Eugene F. Murphy, of the Veterans Administration, reported on the cooperative research and related education and publication efforts since World War II.

Dr. Eugene E. Record, chief of the VA Orthopedic and Prosthetic Appliance Clinic Team in Boston, then served as chairman of a

demonstration clinic team to evaluate the difficulties experienced by an above-knee amputee, a role filled by Mr. Albert Zuidema, and to consider possible prescription of a suction socket. Other members of the team were Earl Lewis, physical therapist with the NYU Prosthetic Devices Study, Henry Gardner, prosthetist from the VA Prosthetics Center, and Dr. Murphy playing the role of prosthetic representative and administrative assistant to the team. Mr. Lewis, assisted by Mr. Gardner, then discussed the importance of checkout of prostheses for both upper and lower extremity. Brennan C. Wood and Herbert Kramer, both of the Prosthetic Devices Study, served as amputee demonstrators.

OALMA National Assembly

San Francisco will become the orthopedic-prosthetic center of interest when the 1956 National Assembly of the Limb and Brace Profession convenes there October 21 through 24. Sponsored by the Orthopedic Appliance

and Limb Manufacturers Association, the sessions will be held at Assembly headquarters in the Sheraton-Palace Hotel. Herbert J. Hart, certified prosthetist and orthotist with C. H. Hittenberger, Inc., of Oakland, Calif., who has been named Program Chairman, has extended to all in the Artificial Limb Program a cordial invitation to attend the meetings. Lloyd W. Brown, of the Dorrance-Hosmer Companies, San Jose, will serve as Chairman of the Committee on Scientific and Technical Exhibits.

Seminars and instructional courses will occupy the first two days of the Assembly. Among the classes to be offered will be *Harnessing for the Upper-Extremity Appliance*, to

be taught by Woodrow T. Yamaka, certified prosthetist with the Alpha Orthopedic Appliance Company, of Los Angeles, with Jerry Leavy, Vice-President of the D. W. Dorrance Company, serving as demonstrator; *Hand Splints*, to be given by Dr. Sterling Bunnell, of San Francisco; *Anatomy for the Limb and Brace Technician*, to be presented by Dr. Charles G. Hutter, of Los Angeles; and *Appliances Used in Deformities and Functional Disorders of the Foot*, to be discussed by Dr. Paul W. Meyer, of the Dickson-Dively Clinic, and Ted R. Reynolds, certified orthotist, both of Kansas City.

Open Assembly sessions will include *Cosmetic Appliances*, by C. O. Anderson, of Prosthetic Services of San Francisco; Carl Nielson, of the Army Prosthetics Research Laboratory, Washington, D. C.; and Milton Tenenbaum, of Tenenbaum Prosthetics, New York City; *The Lower-Extremity Ampulee—A*



TECHNICAL TRAINING COURSE FOR PROSTHETIC REPRESENTATIVES—Third in the series. Pictured are those attending the course held at VARO-New York June 18 through 29. Seated, left to right: Otis Denny, Detroit; Albert S. Zuidema, Columbus, Ohio; Eugene F. Murphy, New York City; William H. Talley, Washington, D. C.; Nelson McFarland, Atlanta; and Jeremiah Last, New York City. Standing, left to right: Blaine H. Whorton, Columbia, S. C.; Julius Feig, New York City; Roger Y. DeCharles, Indianapolis; James D. Johnson, Louisville; John C. McCarthy, Buffalo; Karl B. Pfirrmann, Cincinnati; Roy A. Wing, Cleveland; Sidney Mayo, Jackson, Miss.; James A. Donovan, Atlanta; John D. Pruitt, Nashville; James T. Key, Montgomery, Ala.; Steven L. Purka, New York City; Griffith C. Blair, Winston-Salem, N. C.; and Robert S. Smith, Pass-A-Grille, Fla.

Clinical Picture as Revealed by Studies at the University of California, by Dr. Verne T. Inman and associates, of San Francisco; *Functional Arm Bracing*, by Dr. Edwin R. Schottstaedt, of San Francisco, and George B. Robinson, certified prosthetist with Robin-Aids Manufacturing Company, of Vallejo, Calif.; *Service to the Veteran*, an interview discussion by Dr. Robert E. Stewart, Director of the VA's Prosthetic and Sensory Aids Service, and Joseph J. Pitrone, Supervising Purchasing Agent with the VA's Service Contracts Section, both of Washington, D. C.; *Cerebral Palsy Bracing*, by C. D. Denison, of the Denison Orthopedic Appliance Corporation, Baltimore; *Fitting the Child From One to Ten*, the lower extremity presented by Dr. Charles H. Frantz, the upper by Dr. George T. Aitken, both of the Michigan Crippled Children Commission; and *Finding Your Financial Facts*, a

presentation of a proposed cost-accounting service for prosthetic and orthopedic establishments, by Joseph Gitlin, of the Minneapolis Artificial Limb Company, Minneapolis, John Hendrickson, of the Winkley Artificial Limb Company, Minneapolis, and M. P. Cestaro, of the J. E. Hanger Company, Washington, D. C. Finally, there will be a discussion of the prospectus and preliminary chapter of the proposed *OALMA Brace Dictionary*, to be led by Matthew G. Laurence, certified prosthetist and orthotist of Laurence's Orthopedic Appliance Company, Oakland, and Edward W. Snygg, certified orthotist and prosthetist with the R. E. Huck Company, San Francisco.

As a preliminary to the Assembly proper, candidates for certification will gather in San Francisco the evening of October 19 for the written examination required of all applicants. Saturday, October 20, will be devoted to the practical examination. All parts of the examination will be conducted in the Assembly hotel.

The American Board for Certification will hold its annual meeting in conjunction with the OALMA Assembly. Dr. Robert Mazet, Jr., President of ABC, will preside at the certification sessions scheduled for the afternoon of October 22.

ABC Exhibit Program

The American Board for Certification of the Prosthetic and Orthopedic Appliance Industry, Inc. (ARTIFICIAL LIMBS, January 1955, p. 66; May 1955, p. 98; September 1955, p. 67), is expanding its program of presenting exhibits at medical conventions and other meetings in related fields. By mid-summer, ABC had been assigned space in the scientific sections at the American Congress of Physical Medicine in Atlantic City September 9 through 14; at the annual conference of the National Rehabilitation Association in Denver October 15 through 17; and at the annual meeting of the Western Orthopedic Association in Phoenix, Ariz., October 30 through November 3.

When the National Society for Crippled Children and Adults, Inc., holds its annual meeting at the Hotel Statler in Washington, October 28 through 31, one afternoon will be devoted to *A Pageant on Prosthetics*. This

session, sponsored jointly by ABC and the National Society, will be arranged by Glenn E. Jackson, Executive Director of the American Board for Certification. Preliminary plans call for a display contrasting the appliances of today with those of 50 years ago. Jerry Leavy, bilateral arm amputee and Vice-President of the D. W. Dorrance Company, of San Jose, Calif., has accepted an invitation to take part.

The ABC exhibit program, now in its third year, has the twofold purpose of acquainting professional groups with latest developments in orthotics and limb prosthetics and with the growing influence of the certification movement toward more highly trained orthotists and prosthetists. In addition, it serves the function of encouraging the best possible cooperation between the medical and the limb and brace professions, a feature of which the desirability has been widely demonstrated by the success of the orthopedic and prosthetic appliance clinic teams throughout the Veterans Administration and, more recently, in private practice.

Publications for the Handicapped

The Orthopedic Appliance and Limb Manufacturers Association is preparing two new publications intended for reading by the amputee and others with orthopedic impairments. The first, entitled *Advice to the Amputee* (ARTIFICIAL LIMBS, Spring 1956, p. 50) is a new revision of the article by Dr. Preston J. Burnham, of Salt Lake City, which appeared in the *Orthopedic and Prosthetic Appliance Journal* for September 1955. The revised edition will include a bibliography of recommended reading and a section entitled *How to Care for Your Prosthesis—A Checklist*.

The other publication now in process of preparation is entitled *Your Brace is Your Friend*. The origin of this paper dates from a meeting of Region VIII of OALMA in Dallas in 1955. At that time, J. J. Brown, Rehabilitation Director for the State of Texas, suggested that the members develop a booklet which would encourage handicapped persons to take better care of their prosthesis or brace.

When these two items are in print, probably late this year, copies may be obtained from OALMA, 411 Associations Building, 1145 Nineteenth Street, N. W., Washington 6, D. C. Single copies will be 10 cents each.

National Health Survey Act

On July 3 the 84th Congress of the United States approved Senate Bill 3076, thus creating Public Law 652, to be known as the "National Health Survey Act" and intended "To provide for a continuing survey and special studies of sickness and disability in the United States, and for periodic reports of the results thereof, and for other purposes." As justification for such a law, the Congress observed that the latest information on the number and nature of persons suffering from various disabling diseases and other handicapping conditions is now seriously out of date and that periodic inventories providing reasonably current information on these matters are urgently needed for appraisal of the true state of health of the population, for the planning of programs designed to improve the general health, for research in the field of chronic diseases, and for determination of the number of persons of working age so disabled as to be deprived of gainful employment.

It has been widely recognized by public health officers and others concerned that existing data on the incidence, prevalence, and distribution of orthopedic impairments, including amputations, are no longer meaningful. The most recent poll of any consequence soliciting that kind of information was the National Health Survey conducted in the winter of 1935-36 by the U. S. Public Health Service. Public Law 652 amends the Public Health Service Act (42 U.S.C. ch. 6A) in such

a way as to authorize the Surgeon General (of USPHS) "(1) to make, by sampling or other appropriate means, surveys and special studies of the population of the United States to determine the extent of illness and disability and related information such as: (A) the number, age, sex, ability to work or engage in other activities, and occupation or activities of persons afflicted with chronic or other disease or injury or handicapping condition; (B) the type of disease or injury or handicapping condition of each person so afflicted; (C) the length of time that each such person has been prevented from carrying on his occupation or activities; (D) the amounts and types of services received for or because of such conditions; and (E) the economic and other impacts of such conditions; and (2) in connection therewith, to develop and test new or improved methods for obtaining current data on illness and disability and related information."

Pursuant to these goals, the Surgeon General (of USPHS) is further authorized to avail himself of the services of any agency—Federal, State, or private—and to publish the results for the benefit of all. Financial support is to be provided by the annual appropriation of such sums as the Congress shall determine.

As of mid-August, staffing was already under way, plans were being worked out for close cooperation with the Bureau of the Census, and March 1, 1957, was established as a tentative target date for initiation of the first, and preliminary, national household survey.



NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

The National Academy of Sciences—National Research Council is a private, nonprofit organization of scientists, dedicated to the furtherance of science and to its use for the general welfare.

The Academy itself was established in 1863 under a Congressional charter signed by President Lincoln. Empowered to provide for all activities appropriate to academies of science, it was also required by its charter to act as an adviser to the Federal Government in scientific matters. This provision accounts for the close ties that have always existed between the Academy and the Government, although the Academy is not a governmental agency.

The National Research Council was established by the Academy in 1916, at the request of President Wilson, to enable scientists generally to associate their efforts with those of the limited membership of the Academy in service to the nation, to society, and to science at home and abroad. Members of the National Research Council receive their appointments from the President of the Academy. They include representatives nominated by the major scientific and technical societies, representatives of the Federal Government, and a number of members-at-large. In addition, several thousand scientists and engineers take part in the activities of the Research Council through membership on its various boards and committees.

Receiving funds from both public and private sources, by contribution, grant, or contract, the Academy and its Research Council thus work to stimulate research and its applications, to survey the broad possibilities of science, to promote effective utilization of the scientific and technical resources of the country, to serve the Government, and to further the general interests of science.

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