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Language, Behaviour and Dynamic Psychiatry11

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INTRODUCTION

Man has always been inordinately proud of his ability to communicate by words and signs, and has often liked to think that this differentiated him from the rest of all creation. Philosophers, who designate themselves man's professional apologists and protagonists, have therefore been traditionally pre-occupied with extensive ruminations—as various as they have been voluminous—about the significance of language as an exclusively human function. On the other hand, observant biologists, from hunters and herders to professors of comparative zoology, have inevitably noted many types of intra- and inter-species communication among animals of nearly every order, and have consequently not been so certain as to man's monopoly of the essentials of language. Also less given to semantic abstractions and dialectics have been man's physicians, who have enjoyed a more direct opportunity to observe the psycho-biologic correlates of 'language in action' (1) in their friends and patients, and who have necessarily employed action in language as an indispensable tool of their profession. Nevertheless, even psychiatrists and psycho-analysts, like other artisans with a practical and often urgent job in hand, have been prone to be less interested in the dynamics of their too familiar communicative tools than in the ever new clinical problems to which they must be applied. As a result, only recently have dynamic psychiatrists begun to pool their special knowledge and research-skills with biologists, anthropologists and linguists in a comprehensive study of language-a study necessitated by the intimate participation of communication in all forms of 'normal' and 'abnormal' behaviour. It may therefore be important to re-examine some of the former concepts of semejology and semantics in the light of the newer knowledge of behaviour dynamics, and perhaps in this manner approach an integration of linguistics with certain fundamental principles of psycho-biology.

LANGUAGE ANALYSIS

Let us begin with a critical review of the 'elements' of communication, as traditionally classified under the following terms:

1. Signals. — Signals were generally defined as sensory stimuli which actuate relatively simple ('reflex') responses in a sensitized organism. Under the influences of association-psychology, signals were until recently differentiated into 'unconditioned' as opposed to 'conditioned' or 'learned'. For example, it was stated that the 'unconditioned' sight or smell of food 'caused' salivation in an untrained dog, whereas an animal accustomed to receiving the food after the clang of a bell would eventually also salivate at this sound as a 'conditioned' signal (2). Peculiarly neglected in these early generalizations were the intrinsic factors of motivation and meaning; in fact, such considerations were deemed unnecessary in an 'objective' system of mechanistic reflexology (3). Nevertheless, it was soon noted that a satiated, ailing or frightened animal showed marked aversion rather than anticipatory salivation at the sight, smell, or preliminary signal of food, and that the same bell sounded under other circumstances produced quite different effects, such as barking and struggling when the animal was closely confined or otherwise prevented from reaching its goal (4). Even from a purely experimental standpoint, therefore, signals had to be assigned the more dynamic and contingent values to be discussed later in this presentation. 2. Signs. —Signs were usually distinguished from signals in that their learning process was considered to be more complex and involved, so that their semeiotic significance was not as simply or as directly related to the patterns of behaviour evoked (5). For example, the 'sign' Fire! Exit Quickly! suddenly flashed on the screen of a motion picture theatre would actuate in most of the audience almost the same behavioural responses that would be induced by the sight of flame or the smell of smoke; yet the printed letters Fire need never have been experienced in direct association with the latter. Nevertheless, the relativity of such distinctions will also be considered in a later connection.

3.*Symbols.* —These were customarily distinguished from signs as being yet more generalized and abstract in nature, and thereby even more remote from the basic experiences to which they refer. Perhaps the best illustrations of the genesis

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of symbols come not from their formal philologic derivation, but from the exploration and correlation of their meaning with the behaviour patterns of patients under formal psycho-analysis. As a clinical example in my own experience, a patient of mine had a generalized fear of sky-scrapers, mountains, aeroplanes and all high places; because of the nature of his business, this fear was expressed most frequently in a specific avoidance of elevators. The patient consciously dated his severe acrophobia to a vivid experience during adolescence in which he came close to being seriously injured in an elevator accident. Despite the seeming rationality of this explanation, further analysis revealed that the patient's symbolic phobias reached much deeper motivational levels and were based on these devious but specific associations: elevator; elevator to heights; attainment of prominence and success; early competitiveness and rivalry with father; fear of retribution from a powerful authority; and, finally, phobic reactions in adult life to any object or concept that might symbolize, however indirectly, a situation that the patient had considered extremely dangerous as a child. Or to take another clinical example: a schizophrenic girl who invariably fought as though in panic if any attempt were made to remove a piece of dirty white cloth she habitually wore in her hair, explained one day, while under amytal hypnosis, that this cloth represented a nun's cap and thereby symbolized 'renunciation of mortal sin' and a life of retreat and depersonalized atonement.

If it be thought that these analyses of neurotic or psychotic symbolizations are too artificial or pathologic to be of general semantic significance, it need but be remembered that 'normal' individuals react with even more complex behaviour patterns to more abstruse symbols every waking (or dreaming) moment. Thus, the sign of the quarter-moon evokes as rich an assembly of religious, ethical and personal reactions in the devout Mohammedan as does the adoration of the crucifix in the reverent Catholic or the sight of the Torah in the orthodox Jew. In each case, of course, the mere sensory stimulations of crescent, cross or scroll would have little intrinsic significance were it not for their resonance with the personal experiences, current motivations and wishful aspirations of each member of the respective religious groups. Symbols, then, however complex and remote, are in essence abstractions and generalizations of experience, and as such remain equisitely personal even when similar experiences and similar symbolizations are shared in a common culture. (See below, p. 7.)

4.*Words as Symbols.* —As has just been seen, any configuration and permutation of sensory 'stimuli' may constitute a symbol: e.g., a 'cross' of any material, the picture of a cross, the gestural 'sign of the cross', the feel of the cross to a blinded person, and the word *cross*, all give rise to almost equivalent conceptual resonances. Words, then, like all other symbols, also have 'meanings' only with reference to their specific connotations for each individual, and even these meanings may vary widely not only with the context of the paragraph or oration, but also with the current circumstances and emotional state of the writer, speaker, reader or hearer. Nevertheless, however variable their denotations, words, being economical of effort and easily transportable in space and time, have become the most widely used (as well as the most widely misunderstood) forms of communication.2 But to function as such, words must be combined and formed into language, the structure of which may now be briefly considered.

5.Language as Communication. —In order to give expression to the essentially dynamic and operational processes of thought—a dynamism inherent in even the most leisurely of descriptive passages—language requires various types of 'substantive' and 'operational' symbols. A minimal list of these could easily be assembled *a priori* as follows: a.words that metaphorically point, such as the article 'the',

b.those that 'denote' objects, such as 'man' or 'fortune',

c.those that modify these objects, e.g.: 'indolent' or 'large',

d.those that express relationships: 'his' or 'inherited',

e.those that connote translation in time or space: 'run' or 'through',

f.those that modify such movements: 'quickly' or 'thoroughly',

g.those that 'belong' to various other classes which can be abstracted from the richness of human thought in numbers apparently limited only by the taxonomic ardour of the categorist.

In the actual expression of an 'idea' the verbal examples cited might then be operationally juxtaposed thus: 'The indolent man ran through his large fortune quickly and thoroughly.'

As may be seen, however, even in this simple sentence we already have a further complexity of formulation recognizable as a 'figure of speech'; obviously, a man can be said to 'run' (in the sense

²Parenthetically, it may be noted that the rapid evolution of human thought in the last three centuries has far outdistanced the development of verbal symbol-systems with which to express it, with the result that old words have been confusingly used for new and more complex meanings, or else verbal language has been abandoned as too limited a medium in favour of a symbolic logic capable of expressing subtler and more transcendant relationships (6). Much effort is now being expended by philosophers, logicians and semeiologists towards the laudable goal of creating a more adequate and meaningful 'language of science', and so making possible among scientists 'precise' communication and 'concerted' thinking and research (7). Unfortunately, we must consider the disturbing contention that, until all scientists are born identical twins and subjected to exactly the same experiences, this goal can be only asymptotically approached.

³On the other hand, it is also within this penumbra of meanings and their intermodal equivalences and penetrations that the art and poetry of language lie. Artistry in any medium of discourse often clears away man-made obstructions and obfuscations to reveal the essential wholeness of being.

⁴It is, of course, undeniable that such purely rationalistic therapy is quite acceptable to many patients, since it pierces few of their defences and creates little anxiety. Effective results by this method in the minor neuroses, however, are in the main attributable to the prestige of the therapist or his 'system', the neurotic dependence of the patient, the intuitively therapeutic manipulation of the transference relationship and other influences not always consciously appreciated by either the patient or the therapist.

of rapid ambulation) 'through' (in the sense of pierce) 'a fortune' (an abstract monetary concept) only if these words be given a very great latitude of signification. And it is precisely within such spreads of symbolic meaning that deviations of the indissoluble triplex of motivation-symbolization-behaviour can arise and be translated into conduct sufficiently 'abnormal' to require psychiatric attention.3 For instance, the man referred to in our example might spend a small inheritance foolishly on the basis of a wishful phantasy that it was an inexhaustible 'fortune'; moreover, should he continue to be unrealistically extravagant, his spree could well terminate in a mental hospital. Or, conversely, if the man's wife were the author of our sentence, and she meant by it that her husband was 'squandering' actually inconsiderable sums to her inconsolable grief and agitation, then she herself might be committed to an institution as a ruminative melancholiac. In fact, some literal-minded psycho-logicians would consider that the abnormal behaviour in both instances arose from a relatively simple source: a misinterpretation on the part of either the man or his wife of the 'true referent' of the word 'fortune'—a mistake to be directly corrected by rational explanations of the 'reality', 'extensibility' and 'time-bindedness' of the particular 'fortune' under consideration.4 Unfortunately, as every psychiatrist soon learns, such an exercise in logical 'semantics' (8) would be as useless as pointing out to the acrophobic patient previously cited that his fear of elevators is unnecessary 'because elevators are really not dangerous'. Similarly, in the case of the irresponsible man or his melancholic wife, the futility of a purely intellectualistic and verbal approach would arise from the circumstance that their linguistic 'fallacies' are not the cause, but simply the symbolic expression, of much deeper unconscious conflicts. Thus, the man may be recklessly squandering a legacy (of whatever size) in self-punitive expiation of guilt towards his dead father, or the melancholic woman may be so insecure and pre-emptive in her attitudes toward her husband that the slightest expenditures on his part engender feelings of personal loss of neurotic or psychotic intensity. The advantage each takes of the opposite extremes of meaning of the term 'fortune' is therefore no simple 'misuse' of language, but rather a coherent part of a total behaviour-pattern rooted in previously established attitudes and derived experiential syllogisms. In this sense, it may well be contended that to the man the word 'fortune' means 'something I must get rid of', whereas to the woman it represents 'the possessions of my husband, all of which must be used for my exclusive benefit'. Once again, to quote Lewis Carroll: "When I use a word" ... Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to meanneither more nor less."5

It is such analytic insight into the personalized significance of all symbols, verbal or otherwise, that necessitates a more comprehensive review of the terms and distinctions hitherto employed in the study of language in order to establish their dynamic relationships to normal and abnormal behaviour.

LANGUAGE AND BEHAVIOURAL ADAPTATIONS

Perhaps the first question that arises in this connection is whether the distinctions between signal, sign, symbol and communicative usage are differences in kind or merely in the complexity of denotation and connotation. Certainly, the factor of motivational reference is present in each case; thus, as was seen in our simple Pavlovian example, the dog will salivate neither at the sight of food nor in response to a conditional signal, should he happen not to be hungry. To the dog, then, the signal does not really 'mean' food *qua* food, but represents an experientially appreciated opportunity to satisfy a physiologic need; when the need is not present, the signals induce little behaviouristic response.

Nor should too much stress be laid on the differences between a unimodal bell or light 'signal' and the use of a spoken or even written 'sign'. Every dog or cat owner knows that his pet will 'understand' and respond to any gesture, call or combination of words customarily used as a signal for feeding, and most experimental animals from chicks up can readily be trained to react similarly to signs printed in configurations of 'words' as well as to those discriminated by colour or shape. Thus, Cole (10), (11) easily taught raccoons to climb their cage for food at the differential presentation of a card printed with an appropriate invitation; moreover, if the animals, after responding to the proper sign, did not receive the anticipated reward, they tore up the card with a channelized fury comparable to a maiden's attack on the previously cherished letters of a faithless lover.

^{5&}quot;"The question is", said Alice, "whether you can make words mean so many different things." "The question is, " said Humpty Dumpty, "which is to be master—that's all." Alice was too much puzzled to say anything.' (9)

Equivalence of Symbols. —The relativity of signals, signs and symbols in meaning function can also be demonstrated by showing that they may be substituted for each other or even altered radically, and yet evoke similar behavioural responses *if the motivational referents of the total situation are held relatively constant.* To illustrate this, Finch and Culler (12) trained dogs to flex their forelegs off an electric grid at the sound of a bell, and then were able to substitute various other conditional signals in succession (a light, a stream of water to the nose, and an air blast) by the simple device of shocking the dogs on the chest if they did not flex their forelegs in the desired way.

An even more significant experiment with human subjects was performed by Hudgins (13) on the basis of preliminary observations by Cason (14). Hudgins began by sounding a bell while he flashed a light into his subjects' eyes, and was able in this manner to establish involuntary contraction of the pupils in response to the bell sound alone. He next required his subjects to ring the bell at the command 'Contract!', and thus produced pupillary reactions in response to the muscular activity associated with this word. Next, in successive stages of stimulus-transfer from overt action to spontaneous 'idea', the subjects themselves spoke, whispered, and then merely thought 'contract', with the result that an astonishing effect finally appeared: not only could each subject cause his pupils to contract by thinking of a specific word—a form of sympathetic control ordinarily considered to be 'beyond the reach of the will'—but ten of fourteen subjects were quite unaware of the bodily expression of their thinking. Hudgins, then, had created in a group of people a highly individualized configuration of cognate and visceral reactions to the idea-symbol 'contract'—a response which could be traced through their special experiences to an apparently remote but actually basic physiologic source: in this instance, simply the protection of the retina from excessive light. The significance of such experiments for psycho-somatic and linguistic research hardly needs further elaboration.

Change in Behaviour Responses. —On the other hand, an adequate change in the motivational referents of a configuration of stimuli can produce a complete reversal of the animal's responses in the new psycho-biologic field of motivation-symbol-behaviour. In this sense, it is again apparent that any 'stimulus', 'sign' or 'symbol' has meaning only as a part of a continuous series of total perceptions each of which has been modified by all preceding experiences and adaptations in the life of the organisms. For instance, a cat or dog can readily be trained to open a food-box in response to a bell or light stimulus; such an animal will, of course, show no aversions to the signals at any time, and will avidly welcome them when hungry. If, however, the animal is shocked or frightened unexpectedly a few times at the moment of 'conditioned' food-taking, it will thereafter react to the food signals with severe manifestations of anxiety, and may show a phobic generalization of these responses to other elements of the conflictful situation: the cage, the experimenter and even the food itself (15). As was shown elsewhere (16), if the motivational conflict is made sufficiently strong and persistent the animal will also develop peculiar ritualistic compulsions, loss of dominance in groups (17), food-inhibitions to the point of cachexia, and other somatic and motor disturbances comparable to the corresponding 'symptoms' of severe human neuroses. 'Meaning' under such circumstances can likewise be extended to olfactory and gustatory cues: for example, a neurotic animal which experiences transient but repeated mitigations of its neurotic symptoms when given alcohol will thereafter choose food or fluids smelling and tasting of this drug, and so become an alcohol 'addict' until its neurosis is permanently relieved by other means. Moreover, a 'verbal' response-pattern may easily be added to such experiments: i.e. during the control period the cat can be trained to react to the word 'food' with manifestations of anticipatory relish and 'normal' food-seeking behaviour, whereas, after the motivational conflict, the 'same' animal will react to the 'same' verbal signal with crouching, hiding, or even an aggressive attack on the experimenter who had tactlessly uttered it.6 Here, then, we have a cat 'taking umbrage' at a word to which it had become emotionally hypersensitized. All in all, were the shibboleth of 'anthropomorphism' to be used in an attempt to cloud the comparative significance of these and other experimental observations (18), it would obviously reflect more on the philosophic prejudices of the critic than on the heuristic validity of the data.

Space does not permit the citation of further experimental evidence, but the same principle applicable to human behaviour once more emerges. In effect, symbols are significant to the individual only in essentially solipsistic terms, and their meaning and effects are therefore contingent on the expansion and cumulative modification of his own life experiences.

SIGNIFICANCE OF LINGUISTICS IN PSYCHO-ANALYSIS

The Language of the Patient. —The applications of the basic semantic principle just stated are manifold, but are perhaps especially relevant to the theory and practice of psycho-analysis. From an operational standpoint, psycho-analysis is a

⁶ Compare the phobic reactions of an aeroplane pilot who, after severe and protracted motivational conflicts, develops a 'combat neurosis' and thereafter shows anxiety and an exacerbation of somatic symptoms at any 'stimulus' symbolic of flying or battle, however devoted to these pursuits he had previously been.

process in which, through the use of free association, 'dream interpretation' and other techniques, the analysand's current behaviour, unconscious motivations and cognate symbolizations are retrospectively traced through earlier patterns of concept formation and evaluation to the basically formative experiences and reactions of childhood. So revealed, the dynamisms of the patient's behaviour, including his linguistics, are more amenable to consciously directed personal and social readjustments. This process may be epitomized with special reference to a patient's symbolic system by the citation of the following case.

An intelligent thirty-two-year-old woman, who had previously been treated in various medical clinics for a chronic illness vaguely diagnosed as an 'endocrine dyscrasia' or 'anorexia nervosa', was referred to me because of persistent vomiting and severe cachexia. The language in which the patient outlined her complaints was in itself of immediate significance: she stated that for the preceding five years all references to sex had become literally 'distasteful' and 'disgusting', and that her 'inability to stomach' men caused her actually to vomit in their presence. So inclusive was this spread of cognitive and reactive symbolism that, even if she merely heard the telephone ring she became nauseated over the remote possibility that some man was calling her for a date; moreover, reading or hearing the word 'date' or even seeing the fruit of that name produced abdominal discomforts. Early in her analysis the patient, rather too readily, traced these striking psycho-somatic reactions to extreme guilt over perverse kissing and temptations to fellatio with a suitor chosen for her by her mother five years previously; significantly, actual intercourse had not caused such great concern. These analytic materials were accompanied by little emotional discharge, but subsequently, with mounting anxiety, the patient began to recall similar experiences with her older brother during childhood and equated them with even earlier oral-erotic wishes directed towards her father. These were finally associated with a peculiarly harrowing but revealing infantile phantasy which she reconstructed as follows: after weaning, but before being ejected from the parental bed, she had, in substitution for her mother's breast, sought and swallowed her father's penis. This imaginary manoeuvre had also served various ancillary purposes: it removed her father as a competitor, while at the same time the incorporation of his penis made her 'masculine' like her favoured elder brother and so more likely to regain her mother's exclusive attentions. Unfortunately, however, if she were to avoid retribution by her castrated father and deprived mother, a selfcompulsory pattern of 'undoing' and expiation was called for: she must reject symbolically and vomit somatically all other 'oral' satisfactions not given her freely by her mother. Such psycho-somatic phantasies—'bizarre' only to those not analytically acquainted with the intense and literal emotional ambience of childhood—had, in fact, certain experiential referents in the patient's early life. One important circumstance was that the patient's mother, a domineering, highly emotional woman, had in reality rejected her infant daughter because of her own insecurities and jealousies in the family inter-relationships. In this situation the patient had at first made an abortive attempt to seek security in a weak father, but, when this failed, she regressed to a helpless maternal dependence coloured by anxiety-ridden renunciations of all emancipatory longings. Accordingly, she was particularly sensitive to oral and other erotic temptations mediated by her father, her brother, or later male surrogates, towards whom she continued to behave with anxiety, ambivalence and symbolic psycho-somatic rejections. Small wonder, then, that the patient had suffered persistent 'stomach trouble' throughout childhood, that her gastro-intestinal dysfunctions had increased during menarche and again during an anxiety-ridden courtship, and that even at the time of her analysis she was still living in a childlike dependence on her mother and reacting to every opportunity for emancipation with an exacerbation of her specific psycho-somatic defences. From the standpoint of our present interests, moreover, it need hardly be added that all words, symbols and gestures referable to mother, food, marriage, sexuality or related concepts evoked exquisitely individual and unique connotations and affects which profoundly influenced not only the patient's use of language but nearly every other aspect of her behaviour. No patient can ever be 'completely' analysed (19), nor does one analysis 'prove' a general linguistic theorem, but it may justifiably be stated that the type of symbol-derivation just illustrated is fundamental to a dynamic psychology of human behaviour. Evidence from psycho-analytic sources therefore again supports the thesis that symbols do not have a transcendant neo-Platonic existence per se, but are meaningful only in terms of individual experiences and interpretations—a view implicit and often explicit in the basic writings of Freud (20). However, even these symbol meanings are continually being both expressed in, and modified by, the individual's current motivations, attitudes and environmental adaptations—a corollary that cannot be neglected in evaluating the verbal

communications of the patient in relation to his total behaviour. Space again permits only three brief references to the applications of this corollary to analytic methodology, interpretations and therapy. *Totality in Psycho-Analytic Method.* —Freud was by many accounts a shy man, and apparently preferred having

his patients look the other way

during their treatment. This may have preordained the standard couch-and-chair tandem in our analytic offices—an arrangement that has indeed relieved the tensions of many a patient (and analyst) and so contributed to the respective 'freedom' of analytic associations and interpretations. Nevertheless, most analysts these days have broken away from tradition sufficiently to take the patient off the resting position, when necessary, look him unabashedly in the eye, and obtain coherent and realistic data as to his everyday behaviour from him, or from his friends and family as occasion requires. Such heterodox departures are part of our growing acceptance of the fact that the patient's verbalizations, however unrestricted, are only a partial expression—and not always the best index—of his total behaviour patterns, and that often a coherent account of his current occupational, sexual, social and other adaptations furnishes cogent material for transference interpretations, for 'reality testing' and for the analytic process as a whole. However, once the patient, spiritually or actually, is back on the couch and 'free associating' again, some analysts relapse into somewhat myopic habits of treating the patient's word-sequences with so constricted a field of reference that a great deal of their total dynamic significance may be lost. This is particularly true of the traditional techniques of 'dream' analysis, some of which require specific mention in this connection.

'Dream' Analysis. — To point up the issue, let me venture the dialectic proposition that no dream as such has ever been analysed—or ever will be analysed—until we develop a technique of reproducing the dream sequence itself on a television screen while the patient is asleep. All we can do at present is to note carefully the patient's verbal and other behaviour patterns while he is talking 'about' his hypothetical 'dream' during some later analytic hour, remembering all the while that his hypnagogic imagery has inevitably been repressed and distorted in recollection, that it is described in words and symbols coloured by his experiences not only before but since the 'dream', and that in the very process of verbalization his 'descriptions' and 'associations' are further dependent on his unconscious motivations in telling the dream at all, his transference situation, his current 'ego defences', his physiologic status and the many other complex and interpenetrating factors of the fleeting moment. There is, then, no 'language of the dream', just as there is no 'language of the psychiatric history' or of 'the pentothal interview'; there is only the language of the patient under a fluctuating configuration of inter-related contingencies. If this makes analytic observation more complex, so also does it make our technique less rigid, our theory less doctrinaire, our insights more revealing and, above all, our therapy more realistic and effective.

The Language of Interpretation. —For reasons parallel to those just outlined, the analyst and psychiatrist must couch his interpretations in symbols, syllogisms and analogies carefully designed to resonate with the patient's deeper psycho-biologic motivations and adaptations, else no material change in the patient's behaviour other than his verbal patterns will result. All psychiatrists have had experience with neurotic patients who have eagerly adapted to their own uses some physician's careless statement that they had 'only nervous trouble' and have so indirectly been helped to regress into a life of dependency or invalidism on the plea that their 'nerves were all shot'—a rationalization now, according to them, supported by authoritative opinion. On guite the same plane, we now realize, was the patient who, in the exploratory days of psycho-analysis, was given 'interpretations' not clearly meaningful at the time even to the analyst, and who ever afterwards talked glibly and even smugly of his 'id', his 'super-ego' and his 'complexes', but who showed no other significant changes in insight, attitude or behaviour. We have since learned that if analytic catharsis and interpretation are to be truly effective they must reach beyond the verbal level to basic motivations, pressing conflicts and real-life re-adjustments, else the psycho-analytic process attains little vitality and remains—as was formerly alleged against it—merely an idle exercise in the superficies of phantasy.7

Therapeutic Techniques. —This statement is relevant to all psychotherapy, analytic as well as of the so-called 'brief' variety. As indicated, symbol-interpretations alone can lead only to grudging verbal acknowledgments by the patient that his infantile anxieties, inhibitions and other neurotic defences do not, after all, seem justified by current reality as described in the language of other adults. Such verbal comparisons, however, obviously constitute only a preliminary to the more active re-orientations of the patient, and must of necessity be condensed in the rapid clinical treatment of patients whose symbol-systems are not so deviant as to make communication too difficult. In these cases our task is to resolve the patient's motivational vicissitudes and conflicts as rapidly as possible and then, as his neurotic anxiety diminishes, induce him to undertake new experiences which may lead to more lastingly satisfactory personal and social adjustments. In fact, the essential core of psychotherapy may be stated aphoristically so: render the patient's neurotic defences-active as well as verbal-gradually less

⁷The nosologic aspects of language analysis have been more fully dealt with by Dr. Eva Balken and the author in a series of controlled clinical studies published several years ago. Briefly, it was shown that not only does a patient's imagery indicate the nature of his endopsychic conflicts and their phantasied solutions (21), but that the distinctive combinations of substantive, kinetic or descriptive symbols he uses in his verbal expressions have differential diagnostic significance (22). 8In psychotics, of course, more drastic measures may be necessary, including convulsive shock therapy, both to cloud the patient's anxiety-ridden imagery through temporary or permanent neural diaschisis, and to 'shock' him out of his psychotic regressions and phantasies with the symbolic threat of death three times a week until he responds. However, this initial vis-a-tergo therapy must be followed by a resolution of emotional problems in so far as possible and a careful manipulative guidance-not exclusively verbal-to reality adaptations by every means at the command of the psychiatrist, social worker and community. 6

necessary and satisfying to him, and at the same time make more 'normal' adaptative patterns increasingly desirable and available. Our main lever for initiating this double re-orientation is often the working-through of the transference relationship, but other available therapeutic resources, such as somatic therapy and familial, economic and other influences may be skillfully employed, and certainly need never be slighted simply to maintain a narrowly monistic approach. As clinical psychiatrists, we have all, when indicated, advised the withdrawal of family overprotection or the removal of secondary gains, and countered the discomfiting but kinetic effects of these procedures by other recommendations as to an improved home environment, suitable work and facilities for more satisfactory sexual, social and recreational outlets for our patients.8 Morevoer, we have learned to admit that such time-honoured measures constitute more than 'merely superficial' manipulations, since they may reach and effectively mitigate unconscious maladaptations even without the necessity of compulsively verbalized explorations of the underlying conflicts—although these, of course, must be recognized by the analytically trained psychiatrist. In such instances 'insight', too, on the part of the patient may be non-verbal, but expressed no less effectively in his stable re-adaptations to his new modes of living and his permanent rejection of the old. Nor should we be remiss in utilizing this repertoire of non-verbal therapy in the intermediate and terminal stages even of a formal psycho-analysis. For instance, in her second analytic year my 'anorexia nervosa' patient broke through some of her maternal and displaced transference dependencies and acquired a fair working insight into her oral and other defences. Nevertheless, I am sure that her ultimate reality adjustments were both expedited and stabilized when, with the intelligent co-operation of her mother, family and a few friends, she moved away from home, secured self-supporting and satisfactory employment, and cultivated increasingly gratifying social, recreational, and finally heterosexual contacts. True, she would have found it difficult or impossible to take advantage of such manipulative adjuncts had she not worked through her anxieties, inhibitions and neurotic defences in the preceding analytic process, but the therapeutic principle remains: we cannot stop with verbal symbols alone; we must deal pragmatically with the totally adaptive behaviour of our patients in their everyday milieu.

Language as 'General' Communication. —But there remains to be considered a final semantic issue raised by this discussion, namely: if signs and symbols are significant only in a solipsistic and highly contingent sense, how can language be used for inter-personal discourse at all? How, for that matter, can this article be meaningfully understood by anyone but its author? It would, of course, be sophistry merely to submit that the question as stated is too symbol-minded, since it has seemed serious to many a semanticist and especially since its solution is quite consistent with psycho-biologic and linguistic theory. In brief, I submit that we develop a commonality of 'understanding' of each other's symbolic expressions only because—and in so far as—we have each experienced comparable (though never identical) motivations, frustrations and adaptations in a communal physical milieu and social atmosphere. To illustrate: the word for hunger 'means' the same in any language, since all individuals have experienced the elemental biologic need to which it refers. Conversely, symbols with more complex and contingent motivational referents such as 'home', 'family', 'work' and so on-not to mention ethereally elaborate concepts such as 'truth', 'religion' or 'fascism'-must necessarily have wide ranges of meaning among individuals with necessarily different experiences and social backgrounds. Indeed, we hardly need language at all to communicate experiences of transcendant biologic significance: thus, we can accurately discern pain, fear or rage in each other or in animals without any expressions at the verbal level. On the other hand, as the experiences become more specialized to the individual and group, their communication becomes at best only approximately 'understood' by those not personally acquainted with them. In this sense, I anticipate that many of the nuances of meaning I wished to convey by my analytic case-presentations may well be lost to those who have not previously had direct and intimate acquaintance with psycho-analytic material. These disparities of connotation, of course, increase rapidly as social and cultural gaps among individuals and groups become wider; for instance, even if we were to overcome the merely technical handicaps of language, most of us would find it very difficult to understand the Balinese terms for their intricate family relationships or peculiar directional or temporal orientations—as difficult as the Balinese find it to grasp our everyday words for time and space (23). We must, therefore, conclude that linguistics, too, is a psycho-sociologic as well as a biologic discipline: fortunately, however, this very circumstance helps us to include it in a fundamental psycho-biologic organon of total behaviour.

REFERENCES

HAYAKAWA, S. 1941 Language in Action (New York).

PAVLOV, I. P. 1928 Lectures on Conditioned Reflexes

FROLOV, J. P. 1937 Pavlov and his School

ANDERSON, O. D. and PARMENTER. R. 1941 A Long-term Study of the Experimental Neuroses in the Sheep and the Dog (Psychosom. Med. Monogr., 2 Nos. 2 and 3).

MORRIS, C. 1938 Foundations of the Theory of Signs (Chicago). RASHEVSKY, N. 1938 Mathematical

Biophysics (Chicago). CARNAP, R. 1939 Foundation of Logic and Mathematics (Chicago). KORZYBAKI, A. 1941 Science and Sanity (New York).

CARROLL, L. 1871 Through the Looking-Glass

COLE, L. W. 1912 'Observations of the Senses and Instincts of the Raccoon' J. Animal Behav. 2 302

COLE, L. W. 1915 'The Chicago Experiments with Raccoons' J. Animal Behav. 5 158

FINCH, G. and CULLER, E. 1934 'High Order Conditioning with Constant Motivation' Amer. J. Psychol. 66 596 HUDGINS, C. V. 1933 'Conditioning and the Voluntary Control of the Pupillary Light Reflex' J. gen. Psychol. 8 3 CASON, H. 1922 'The Conditioned Eyelid Reaction' J. exp. Psychol. 5 153

MASSERMAN, J. H. 1943 Behavior and Neurosis (Chicago).

MASSERMAN, J. H. Motion picture films on experimental neuroses, group relationships, and drug addiction in animals: distributed by the Division of Psychiatry, University of Chicago

MASSERMAN, J. H. and SIEVER, P. 1944 'Dominance, Neurosis and Aggression' Psychosom. Med. 4 8

MASSERMAN, J. H. and SIEVER, P. 'Neurosis and Alcohol' Amer. J. Psychiat (In press.) Also, motion picture film, distributed by the Division of Psychiatry, University of Chicago

FREUD, S. 1937 (Trans. 1937.) 'Analysis Terminable and Interminable' Int. J. Psychoanal. 18:373

FREUD, S. 1900 (Trans. Revised Edition, 1932.) The Interpretation of Dreams

MASSERMAN, J. H. and BALKEN, E. R. 1939 'The Psychoanalytic and Psychiatric Significance of Phantasy' Psychoanal. Rev. 26 343 and 535

BALKEN, E. R. and MASSERMAN, J. H. 1940 'The Language of Phantasy: III. The Language of the Phantasies of Patients with Conversion Hysteria, Anxiety State and Obsessive-Compulsive Neuroses' J. Psychol. 10 75 MEAD, MARGARET 1939 From the South Seas: Studies of Adolescence and Sex in Primitive Societies (New York).