

"phenomenology," a word which has several other meanings which must not be confused with ours. For us phenomenology means as naïve and full a description of direct experience as possible. In America the word "introspection" is the only one used for what we mean, but this word has also a very different meaning in that it refers to a special kind of such description, namely, the one which analyzes direct experience into sensations or attributes, or some other systematic, but not experimental, ultimate. ⁴

What was said by Koffka about his own approach to phenomenology applies to those of Wertheimer and Köhler as well. Phenomenological inquiry is a preliminary to research of an empirical nature, not a substitute for it.

Of the three cofounders of Gestalt psychology, Koffka was the most prolific and perhaps the most effective as the spokesperson for Gestalt psychology in America.

LEWIN ON FIELD THEORY AND ACTION RESEARCH

KURT LEWIN (1890-1947), German-American psychologist, early in his career worked in the Psychological Institute of the University of Berlin where Köhler and Wertheimer had appointments. Although never an orthodox Gestalt psychologist, he was stimulated by Gestalt holism, especially by its concern with the relation of the individual to the psychological environment. In fact, Koffka's preceding excerpt on geographical, behavioral, and psychophysical fields, serves as an introduction to Lewin's work on the life space—that a person lives in a psychological field.

Lewin systematized the psychological characteristics of the field by an analogy with fields of force in physics. These characteristics are derived from or dependent on the total, of which for a time they are parts. People's behavior and experience expend energy and may be defined by the field forces thus exhibited. A summary of some of the properties of field theory follows:

... to understand or predict the psychological behavior (B) one has to determine for every kind of psychological event (actions, emotions, expressions, etc.) the momentary whole situation, that is, the momentary structure and the state of the person (P) and of the psychological environment (E). $B = f(PE)$. Every fact that exists psychologically must have a position in this field and only facts that have such position have dynamic effects (are causes of events). The environment is for all of its properties (directions, distances, etc.) to be defined not physically but *psychobiologically*, that is, according to its quasi-physical, quasi-social, and quasi-mental structure.

of the environment by means of mathematical concepts. The coordination between the mathematical representation and its psychodynamic meaning has to be strict and without exception.

We shall first describe the psychological field forces and their mode of operation, without consideration of the question whether the object in any particular case has acquired its valence through some previous experience or in some other way.

The first presupposition for the understanding of the child is the determination of the psychological place at which the child concerned is and of his region of freedom of movement, that is, of the regions that are accessible to him and of those regions that psychologically exist for the child but are inaccessible to him by reason of the social situation (prohibition by the adult, limitation by other children, etc.) or because of the limitations of his own social, physical, and intellectual abilities. Whether his region of freedom of movement is large or small is of decisive significance for the whole behavior of the child.

One can characterize these possible and not possible psychodynamic locomotions (quasi-bodily, quasi-social, and quasi-mental locomotions) at every point of the environment with the help of the concept of topology, which is a nonquantitative discipline about the possible kinds of connections between "spaces" and their parts.

The basis for the coordination between mathematical and psychodynamic concepts so far as environmental questions are concerned is the coordination of topological path and psychodynamic locomotion. The topological description determines which points the different paths lead to and which regions these paths cross. The region which a child cannot reach one can characterize by means of barriers between these regions and their neighboring regions. The barrier corresponds as a dynamic concept to the mathematical concept of boundary. One must distinguish between different strengths of barriers.

A force is defined through three properties: (1) direction, (2) strength, and (3) point of application. The first and second properties are to be represented through the mathematical concept *vector*. The point of application is indicated in the figures (as is the custom in physics) by the point of the arrow.

Dynamically the force is correlated with psychobiological locomotions in a one-to-one correspondence. "The real locomotion must occur in every case according to the direction and the strength of the resultant of

the momentary forces" and "In any case of locomotion there exists a resultant of forces in its direction."

The direction which the valence imparts to the child's behavior varies extremely, according to the content of the wants and needs. Nevertheless, one may distinguish two large groups of valences according to the sort of initial behavior they elicit: the positive valences (+), those effecting approach; and the negative (-), or those producing withdrawal or retreat.

The actions in the direction of the valence may have the form of uncontrolled impulsive behavior or of directed voluntary activity; they may be "appropriate" or "inappropriate."

Those processes which make an especially goal-striving impression are usually characterized dynamically by a reference to a positive valence.

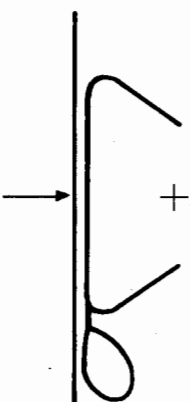
One has to distinguish between *driving* forces, which correspond to positive or negative valences, and *restraining* forces, which correspond to barriers.

Direction of the Field Force. That the valence is not associated merely with a subjective experience of direction, but that a directed force, determinative of the behavior, must be ascribed to it, may be seen in the fact that a change in the position of the attractive object brings about (other things being equal) a change in the direction of the child's movements.

An especially simple example of an action in the direction of a positive valence is illustrated in Fig. . . . 2. A six-months-old infant stretches arms, legs, and head toward a rattle or a spoonful of porridge in accordance with the direction of the vector (V).

The direction of the field forces plays an important part in such intelligent behavior as has to do with detour [*Umweg*] problems. The child perhaps wants to get a piece of chocolate on the other side of a

Figure 2



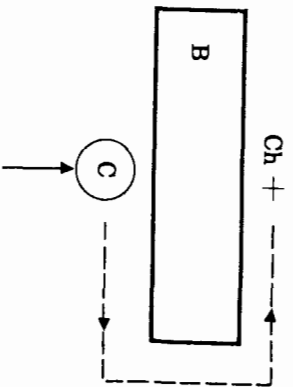


Figure 3. C, child; Ch, chocolate; B, bench.

bench (see Fig. 3). The difficulty of such a problem consists primarily not in the length of the detour (D) but in the fact that the initial direction of the appropriate route does not agree with that of the vector from the valence. The detour is the more difficult, other things being equal, the more the barrier makes it necessary for the child in making the detour to start off in a direction opposed to the direction of the valence (Fig. 4).

The situation is similar when the child wants to take a ring off a stick, while the stick stands so that the ring cannot be pulled directly toward the child, but must first be moved upward or away from himself. Similar forces are operative when a child at a certain age may have difficulties in sitting down on a chair or a stone. The child approaches with his face toward the stone (S). In order to sit down he must turn around, that is, execute a movement opposed to the direction of the field force (Fig. 5).

When the child finds the solution of such a detour problem, it happens by reason of a restructuring of the field. There occurs a percep-

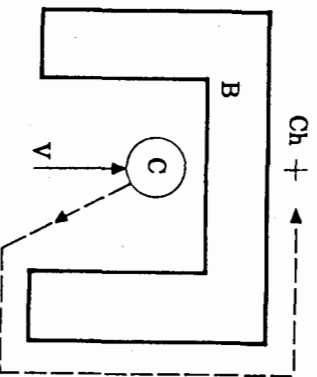


Figure 4

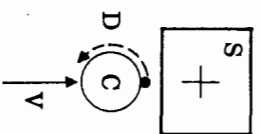


Figure 5

tion of the total situation of such a kind that the path to the goal becomes a unitary whole. The initial part of the route, which objectively is still a moment away from the goal (see Fig. 4), thereby loses psychologically that character and becomes the first phase of a general movement toward the goal.

How critically important the question of *direction* is in this case is indicated by the fact that one cannot force a solution of the detour by increasing the *strength* of the valence. If the attraction is much too weak, it is, to be sure, unfavorable, because the child does not concern himself sufficiently with the affair. But if we continue to strengthen the valence, the solution of the task ceases to be facilitated and instead becomes more difficult. The strength of the attraction then makes it doubly difficult for the child to start in a direction opposed to the field force. Instead, the child will execute, with all its energy, affective meaningless actions in the direction of the valence. . . . Above all, that relative detachment and inward retirement from the valence which are so favorable to perception of the whole situation and hence to the transformation [*Umstrukturierung*] of the total field, which occurs in the act of insight, are made much more difficult. . . . For the same reason, the prospect of an especially intense reward or punishment may impede the solution of intellectual tasks.

To older children of normal intelligence the preceding examples of detour problems offer no difficulty, because they already have a sufficient survey of such situations or corresponding experiences. For them, it no longer requires a special act of intelligence in order that, instead of the spatial directions, the *functional* directions become decisive for the movement.

We may at this point remark a circumstance of general importance: direction in the psychobiological field is not necessarily to be identified with physical direction, but must be defined primarily in psycholog-

ical terms. The difference between psychological and physical direction appears more prominently in older children. When the child fetches a tool or applies to the experimenter for help, the action does not mean, even when it involves a physical movement in a direction opposite to the goal, a turning away from the goal but an approach to it. Such indirect approaches are more rare among babies. This is due to the slighter functional differentiation of their environment and to the fact that social structure has not yet the overwhelming significance for them that it has for older children.¹

The field with which Lewin was concerned was not the brain field isomorphic with the experience of the individual as it was for the Gestalt psychologists, for example. (p. 301) but rather the environment of the person, including other individuals. Hence, his was a social psychological approach to the motivational forces working on the individual and expressed by him through relating need, valence, and vector which had been adapted from mathematical topological theory and vector analysis, the former supplying the life space, the latter, the motives of the individual.

Lewin remained at the University of Berlin until the early 1930s; thereafter, he held appointments at Stanford, Cornell, Iowa, and the Massachusetts Institute of Technology, where he was director of the Research Center for Group Dynamics. As the name implies, he had now come to stress motivational factors in groups. This research occurred both in laboratory and social settings. Lewin became interested in "action research," that is, the investigation of a contemporary social problem while it is taking place.

A characteristic expression of this interest is to be found in his discussion of an attempt to produce change in intergroup minority relations.

One example may illustrate the potentialities of co-operation between practitioners and social scientists. In the beginning of this year the Chairman of the Advisory Committee on Race Relations for the State of Connecticut, who is at the same time a leading member of the Interracial Commission of the State of Connecticut, approached us with a request to conduct a workshop for fifty community workers in the field of intergroup relations from all over the state of Connecticut.

A project emerged in which three agencies co-operated, the Advisory Committee on Intergroup Relations of the State of Connecticut, The Commission on Community Interrelations of the American Jewish Congress, and the Research Center for Group Dynamics at the Mas-

sachusetts Institute of Technology. The State Advisory Committee is composed of members of the Interracial Commission of the State of Connecticut, a member of the State Department of Education of the State of Connecticut, and the person in charge of the Connecticut Valley Region of the Conference of Christians and Jews. The state of Connecticut seems to be unique in having an interracial commission as a part of its regular government. It was apparent that any improvement of techniques which could be linked with this strategic central body would have a much better chance of a wide-spread and lasting effect. After a thorough discussion of various possibilities the following change-experiment was designed co-operatively.

Recent research findings have indicated that the ideologies and stereotypes which govern inter-group relations should not be viewed as individual character traits but that they are anchored in cultural standards, that their stability and their change depend largely on happenings in groups as groups. Experience with leadership training had convinced us that the workshop setting is among the most powerful tools for bringing about improvement of skill in handling inter-group relations.

Even a good and successful workshop, however, seems seldom to have the chance to lead to long-range improvements in the field of inter-group relations. The individual who comes home from the workshop full of enthusiasm and new insights will again have to face the community; one against perhaps 100,000. Obviously, the chances are high that his success will not be up to his new level of aspiration, and that soon disappointments will set him back again. We are facing here a question which is of prime importance for any social change, namely the problem of its permanence.

To test certain hypotheses in regard to the effect of individual as against group settings, the following variations were introduced into the experimental workshop. Part of the delegates came as usual, one individual from a town. For a number of communities, however, it was decided the attempt would be made to secure a number of delegates and if possible to develop in the workshop teams who would keep up their team relationship after the workshop. This should give a greater chance for permanency of the enthusiasm and group productivity and should also multiply the power of the participants to bring about the desired change. A third group of delegates to the workshop would receive a certain amount of expert help even after they returned to the community.

The first step in carrying out such a design calls for broad fact-finding about the different types of inter-group problems which the various

communities have to face. Communities and teams of group workers in the communities would have to be selected so that the results of the three variations would be possible to compare. In other words, this project had to face the same problems which we mention as typical for the planning process in general.

The experiences of the members of the State Advisory Board of the Interracial Commission of the State of Connecticut were able quickly to provide sufficient data to determine the towns which should be studied more accurately. To evaluate the effect of the workshop a diagnosis before the workshop would have to be carried out to determine, among other things, the line of thinking of the community workers, their main line of action and the main barriers they have to face. A similar re-diagnosis would have to be carried out some months after the workshop.

To understand why the workshop produced whatever change or lack of change would be found, it is obviously necessary to record scientifically the essential happenings during the workshop. Here, I feel, research faces its most difficult task. To record the content of the lecture or the program would by no means suffice. Description of the form of leadership has to take into account the amount of initiative shown by individuals and subgroups, the division of the trainees into subgroups, the frictions within and between these subgroups, the crises and their outcome, and, above all, the total management pattern as it changes from day to day. These large-scale aspects, more than anything else, seem to determine what a workshop will accomplish. The task which social scientists have to face in objectively recording these data is not too different from that of the historian. We will have to learn to handle these relatively large units of periods and social bodies without lowering the standards of validity and reliability to which we are accustomed to in the psychological recording of the more microscopic units of action and periods of minutes or seconds of activity.

The methods of recording the essential events of the workshop included an evaluation session at the end of every day. Observers who had attended the various subgroup sessions reported (into a recording machine) the leadership pattern they had observed, the progress or lack of progress in the development of the groups from a conglomeration of individuals to an integrated "we" and so on. The group leaders gave their view of the same sessions and a number of trainees added their comments.

I have been deeply impressed with the tremendous pedagogical effect which these evaluation meetings, designed for the purpose of sci-

entific recording, had on the training process. The atmosphere of objectivity, the readiness by the faculty to discuss openly their mistakes, far from endangering their position, seemed to lead to an enhancement of appreciation and to bring about that mood of relaxed objectivity which is nowhere more difficult to achieve than in the field of inter-group relations which is loaded with emotionality and attitude rigidity even among the so-called liberals and those whose job it is to promote inter-group relations.

This and similar experiences have convinced me that we should consider action, research, and training as a triangle that should be kept to improve the action pattern without training personnel. In fact today the lack of competent training personnel is one of the greatest hindrances to progress in setting up more experimentation. The training of large numbers of social scientists who can handle scientific problems but are also equipped for the delicate task of building productive, hard-hitting teams with practitioners is a prerequisite for progress in social science as well as in social management for intergroup relations.

As I watched, during the workshop, the delegates from different towns all over Connecticut transform from a multitude of unrelated individuals, frequently opposed in their outlook and their interests, into cooperative teams not on the basis of sweetness but on the basis of readiness to face difficulties realistically, to apply honest fact-finding, and to work together to overcome them; when I saw the pattern of role-playing emerge, saw the major responsibilities move slowly according to plan from the faculty to the trainees; when I saw, in the final session, the State Advisory Committee receive the backing of the delegates for a plan of linking the teachers colleges throughout the state with certain aspects of group relations within the communities; when I heard the delegates and groups of delegates from various towns present their plans for city workshops and a number of other projects to go into realization immediately, I could not help feeling that the close integration of action, training, and research holds tremendous possibilities for the field of inter-group relations. I would like to pass on this feeling to you.

Inter-group relations are doubtless one of the most crucial aspects on the national and international scene. We know today better than ever before that they are potentially dynamic. The strategy of social research must take into account the dangers involved.

We might distinguish outside adversities and barriers to social science and the inner dangers of research procedures. Among the first we find a group of people who seem to subscribe to the idea that we do not

need more social science. Among these admirers of common sense we find practitioners of all types, politicians and college presidents. Unfortunately there are a good number of physical scientists among those who are against a vigorous promotion of the social sciences. They seem to feel that the social sciences have not produced something of real value for the practice of social management and therefore will never do so. I guess there is no other way to convince these people than by producing better social science.

A second threat to social science comes from "groups in power." These people can be found in management on any level, among labor leaders, among politicians, some branches of the government, and among members of Congress. Somehow or other they all seem to be possessed by the fear that they could not do what they want to do if they, and others, really knew the facts. I think social scientists should be careful to distinguish between the legitimate and not legitimate elements behind this fear. For instance, it would be most unhealthy if the findings of the Gallup Poll were automatically to determine policy for what should and should not become law in the United States. We will have to recognize the difference between fact-finding and policy setting and to study carefully the procedures by which fact-finding should be fed into the social machinery of legislation to produce a democratic effect.

Doubtless, however, a good deal of unwillingness to face realities behind the enmity to social research of some of the people in power positions.

A third type of very real anxiety on the part of practitioners can be illustrated by the following example. Members of community councils to whom I have had the occasion to report results of research on group interrelations reacted with the feeling that the social scientists at the university or in the research arm of some national organization would sooner or later be in the position to tell the local community workers all over the states exactly what to do and what not to do.

They obviously envisaged a social science "technocracy." This fear seems to be a very common misunderstanding based on the term "law." The community workers failed to realize that lawfulness in social as in physical science means an "if so" relation, a linkage between hypothetical conditions and hypothetical effects. These laws do not tell *what* conditions exist locally, at a given place at a given time. In other words, the laws don't do the job of diagnosis which has to be done locally. Neither do laws prescribe the strategy for change. In social management, as in medicine, the practitioner will usually have the choice between various

methods of treatment and he will require as much skill and ingenuity as the physician in regard to both diagnosis and treatment.

It seems to be crucial for the progress of social science that the practitioner understand that through social sciences and only through them he can hope to gain the power necessary to do a good job. Unfortunately there is nothing in social laws and social research which will force the practitioner toward the good. Science gives more freedom and power to both the doctor and the murderer, to democracy and Fascism. The social scientist should recognize his responsibility also in respect to this.

Lewin's adroitness in transforming a life problem into a controlled research study, that is action research, was to broaden and invigorate social psychology in a unique and important way, and still is very much part of contemporary social psychology.