Social perception and phenomenal causality

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I. INTRODUCTION

In recent years a great many studies have been made of the processes of organization in the perceptual field. It is the thesis of this paper that the principles involved in these studies can be applied profitably to the perception of other persons and their behavior, and that one of the features of the organization of the social field is the attribution of a change to a perceptual unit. When we see a moving object A, we can attribute the movement either to A itself or to another object B. In the first case we see the movement as a spontaneous act of A, in the second as passive movement induced by B. When we have a disagreeble experience, or a pleasant one, we may locate its origin in another person, in ourselves, or in fate. An attempt to investigate the role of these attributions is described in a study of «apparent movement» in which a motion picture of geometrical figures was presented to groups of subjects (16). This study showed how causal attributions influence the perception of the behavior of other persons. The relatively abstract nature of the material used in this experiment made it possible to study some of the more elementary factors of causal attribution in social perception; in the present paper an attempt is made to analyze these processes further and to show their influence in a variety of more concrete cases of so-

cial behavior. The discussion will not be restricted to purely perceptual processes but will include processes like «apperception» or «cognition». Since the organization of the social environment seems to follow similar laws whether or not the data are given perceptually it seems, in this case, profitable to treat perception and apperception from a common point of view.

Making a first approach to this analysis we many say that the origin and the change which is attributed to the origin form a unit; that is to say, the change «belongs» to the origin. The connection between origin and change is in many cases manifest and appears phenomenally as causal dependence: «The origin causes the change.» Therefore, origin attribution is a case of «phenomenal causality» (11, pp. 78 ff.) or «causal integration» (46, pp. 679 ff.).

Ryan, in discussing the case in which an object is perceived as the source of a sound, says as follows:

Such an attribute of «being a source of sound» is certainly neither a pattern of qualities (either visual or auditory) nor a spatial attribute. It is a property which belongs among what we shall call «dynamic» characteristics of an object. Such properties can be as directly perceived as color and play a great part in integrating the total sensory mechanisms (46, p. 679).

The difference between what Ryan here probably means by the term «pattern of qualities» and causal integration can be demonstrated in the field of vision. When we see a color as belonging to an object, the color is perceived as a property of the object,

and this object unit whit its properties could be called a «pattern of qualities». But when we see a color patch as a spot of sunlight, the color patch is not a property of the sun. In both cases we find an integration, although this integration is of different degree. The pattern of qualities which corresponds to an object unit is more closely knit than the unit produced by causal integration in which origin and effect are relatively independent parts.

Such causal effects often play the role of data and can be thought of as proximal stimuli through which are mediated to us properties of the origins which belong to the stable relevant psychological environment. Through causal integration changes or passing experiences are related to the framework of the invariant environment which gives the change its meaning. Thus, origin attribution is a case of the organization of experiences and has its roots in the «individual's pursuit of meaning» which has been discussed as a problem of social cognition in relation to standards of judgments and social values (8, pp. 53 ff.)[1].

II. PERSONS AS ORIGINS

That animate beings, especially persons, are the prototype of origins has been amply demonstrated by many writers.

In earlier and simpler ages men knew little and frankly referred the explanation of what they could not account for on the basis of concrete experience, to the world of spirits which, as they conceived of it, surrounded and permeated their existence. In so doing they regularly sought for an agent rather than a cause (54, p. 654).

In the development of the child's causal thought «the origin union of doer and deed forms the schema according to which causal thought can develop» (51, p. 409; this sentence has been omitted from the English translation). The child has the conviction that «all changes that concern me (actively or passively) are "made to happen"» (51, p. 410).

The tendency to attribute changes to personal origins is, of course, related to what Piaget calls animism, that is, the tendency to attribute life to inanimate objects.

Animism, or personification, has been explained in different ways. The most common explanation refers to an inference based on analogy and is similar to those theories which contend that we understand other persons' minds because we conceive them as analogous to our own mind. Similarly, it is said that in personification the child attributes to things properties which it has experienced as belonging to his own person, or to persons of his environment[2].

Werner rejects this theory. He believes that «personification in a primitive interpretation of the world is derived from the physiognomic mode of expression and perception» (61, p. 75). By the term «physiognomic perception» he understands a preference for interpretation in terms of dynamic rather than static properties.

It may be that the child apprehends persons physiognomically more readily than other objects in his surrounding world. This fact might give rise to the erroneous impression that the child first discovers physiognomic characteristics in human individuals and then transfers them to non-human objects. The more direct assumption, however, and one which is in greater accordance with the facts, is that the child, grasping the world as he does through his motor-affective activity, will understand the world in terms of physiognomics before personifying (61, pp. 75 f.).

Personification arises out of this physiognomic perception when «the child's need to handle objects in his everyday life as if they were persons comes into being. For instance, he wants something from the inanimate object, and as a result of this desire it inevitably comes to personal life. The child can become angry with it, or sympathize with it, or punish it. Personification is engendered principally by a specific attitude which the child must adopt in dealing with the objects of his world in a "social" fashion»(61, pp. 77 f.).

In this explanation it is a need, for instance, a need for revenge, which requires an object and thus leads

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1. Some authors talk of a general tendency towards causal explanation, a «causal drive». Oppenheimer (42, pp. 238 ff.) considers it as a third basic drive beside the drives for self conservation and for the conservation of the species.

2. Dennis (9) offers quotations from authors who held this view. For arguments against this kind of theory in regard to the understanding of other persons, cf. Köhler (28, pp. 233 ff.) and Koffka (27, pp. 655 ff.).

to personification. That this is not always the case is shown by experiments on apparent behavior. Personification can be compelling in the absence of such needs.

Another explanation besides those in terms of experience or needs seems to be possible. The prevalence of personification in an imperfectly structured environment might be caused, at least in part, by the simplicity of origin-organization. The changes are attributed to a single concrete unit as source, which is certainly a simpler organization than that to which an analysis in terms of a causal nexus with many conditions would lead to [3].

Discussions of the concept of responsibility would tend to support this point of view. We find in them repeatedly stressed the difference between a more differentiated causal analysis and personal causation in which an effect is attributed in an absolute way to one origin, the causal chain terminating in it. Faucannet, in presenting the views of the classical school of indeterminism, says:

There exists a causality peculiar to man, different from the causality which connects natural phenomena. Man is, in a certain sense, a first cause, if not of the physical movements which constitute his acts, at least of their moral quality. ... From this perfect causality originates his responsibility. ... Be it good or bad, the act is mine exclusively and absolutely (12, pp. 177 f.).

A true antagonism exists between this idea [the idea of human causality] and the scientific notion of causality. First of all, science knows only of secondary causes: every cause, in itself, is also an effect, and causal explanation is a regression which has no conceivable end; secondly, the cause is for science a phenomenon like the effect, the laws of causality only describe necessary relations between phenomena. On the other hand, the person conceived as cause is a first cause; the act, said Aristotle, has its beginning in itself; secondly, the two terms are here heterogeneous, between them exists, not the relation of phenomenon to phenomenon which a law express, but the relation of producer to product, of workman to finished work (12, pp. 277 f.) [4].

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3. *Cf.* J. M. Baldwin's description of the development of a child's idea of person (2, p. 124).

4. *Cf.* Stok (52, p. 357): «Things appear as homogeneous entities. ... The person, on the other hand, is a final, heterogeneous causal center (*Wirkzentrum*); everything that occurs in its region is thought of as coming from it, and only from it. All lines which one follows backwards intersect in on point, no line points beyond. The world of relations ends with the other person. The field of expla-

If we conceive of the idea of «person» in this way, light is alsothrown on the theory that personification originates in needs. Interesting in this connection is Fauconnet's description of the development of the concept of responsibility. Ha says, following to some degree Durkheim whose pupil he is, that crime violates society and menaces its life. It must be annihilated so that the moral order can be rehabilitated. But the crime is a *fait accompli;* it cannot be annulled. Therefore, a substitute has to be found, a symbol of the crime whose destruction replaces the destruction of the crime, and the beings which are taken as substitutes are considered responsible for the crime.

Is a first and personal cause anything else but a cause conceived in such a way that it can be held responsible, that it can furnish something fixed and constant to which sanction can be applied? (12, p. 278).

These theories, whether or not entirely correct, seem to illuminate the meaning of the unit «person» in our life space. Through these units the organism is enabled to teinstate an equilibrium even when otherwise irreversible changes have disturbed it. Persons, as absolute causal origins, transform irreversible changes into reversible ones. We understand now why the need for revenge, a special case of a need for the reinstatement of an equilibrium, requires a person as obejct: because of the simplicity of organization, the person can represent the disturbing change in its entirety.

That this tendency to perceive persons as origins influences social perception can be shown by many examples. It can lead, for instance, to an underestimation of other factors responsible for the effect. Changes in the environment are almost always caused by acts of persons in combination with other factors. The tendency exists to ascribe the changes entirely to persons. This is shown by the reaction to other persons' successes or failures. The interpretation will, of course, depend also on forces acting on the «alter level», that is to say, on the value level of the other person within our life space. If we are inclined to disparage him we shall attribute his failures to his own person, his successes to his good luck or unfair practices. But disregarding these forces, there probably

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nations is, in regard to personal events, convergent». Also MacIver (34, pp. 225 ff.).

exists a tendency to be «intropunitive» in regard to other persons, that is, to see the cause of their successes and faillures in their personal characteristics and not in other conditions.

When Nietzsche says, «Sucess is the greatest liar», he refers to this error in attribution. Klages, in his book on Nietzsche, devotes a whole chapter to the suasion of sucess, in which he treats the fact that success convinces us of the worth of a person even if the success is largely due to chance circumstances (26, pp. 85 ff.). Ichheiser makes the same point in several of his papers (21, 22).

Stern's concept of «personal causality» also refers to this exaggeration of the influence of personal causal factors:

«By this term we understand [with Stern] the causal connection between the doing subject and his deed. When A performs an act by which the death of B is caused, we say: "A has killed B". We say that, even if there are intermediate links between the act of A and the succeeding death of B ... which are outside the sphere of A (environmental factors). It still is the act of A which led to the death of B. This conception is certainly much more primary than the analysis of an action into intention of the actor, environmental factors, and final effect» (56, 9. 97)[5]. In the same way the layman is apt to exaggerate the importance of the personal factor in the interpretation of historical events though with some historians we can also find onesided attribution to impersonal forces (Cf. 20).

The same tendency can be seen at work in our perception of the conditions which are responsible for an act. Often the momentary situation which, at least in part, determines the behavior of a person is disregarded and the behavior is taken as a manifestation of personal characteristics. Argelander discusses the different ways in which this fact can lead to wrong judgments of personality.

The trait of character which will be ascribed to a person depends on the situation in which the person's behavior is being observed (1, p. 285).

In *She Stoops To conquer* Goldsmith presents a young man whose behavior varies extremely with the momentary situation. The other characters attribute the temporary behavior to the permanent personality and this error produces many of the comic situations of this play.

III. THE RELATIONS BETWEEN CAUSAL UNITS AND THE PROPERTIES OF THEIR PARTS

In the following sections we shall discuss the role causal attribution plays in the cognitive structure of the environment. We have to consider the factors which affect attribution, and the influence which causal integration exerts on the appearance of the parts. Following a proved procedure (*Cf.* Kofka, 27; Lewin, 33), we shall first consider the forces resulting from the structure of the cognitive field itself, and secondly the forces which relate to motivations and needs.

A. The relation between the parts as a factor in causal unit formation

Origin and effect, or a person and his act, are the parts of a causal unit. The properties of the act may be similar or in contrast to those of the person. This is possible since we often judge both persons and acts in reference to the same dimension. Many trait names which we use in describing persons can also be used in describing acts. Persons or acts may be altruistic, vicious, or brutal. This is especially true for value properties: a person or an act may be good morally. Applied to a person the adjective refers to a dispositional concept, for instance, to a permanent faculty; applied to an act it refers to a temporary event.

Therefore, the relation between an act and a person can be one of varying degrees of similarity. We know that similarity is a factor in figural unit formation (62). The same holds true for causal unit formation. In general one may say that factors making for figural unit formation also make for causal integration. Duncker (11) and Huang (20) have pointed out the importance of similarity and proximity in phenomenal causality. If two events are similar to each other, or near each other, one is likely to be perceived as being the cause of the other. The li-

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5. *Cf.* also 63, Ch. IX: «The will as the subject of moral judgment and the influence of external events».

terature on magic practices is also relevant here since magic actions are based on primitive causal ideas about the environment. Tylor (57) and Frazer (13) have shown what role similarity and proximity play in this respect (*Cf.* also Köhler, 29).

That similarity is a factor in social causal integration is demonstrated by Zillig's experiments (64). She showed that poor performances will be attributed to unpopular children by their classmates. A bad act is easily connected with a bad person.

Fauconnet says that all situations which give rise to the idea of responsibility (the attribution of a crime to a person) can be classed in two groups: responsibility by contiguity and responsibility by similarity (12, p. 261). The latter includes several varieties. A crime can be blamed on a person because of physical similarity «he looks as if he could have committed this crime» [6]. Or he can be held responsible for it because of «spiritual» similarity, that is, a similarity between a «crime as a moral event and the natural disposition of the responsible». «Can one discover in the accused a basic immorality comparable to that of which the act is held to be a symptom, does one find his crime in him, his character in his crime, in short, does he resemble his crime? His responsibility is not complete unless the answer is affirmative» (12, p. 264).

The responsibility can also be established by «affective similarity».

It is easy to assume that persons are responsible who are not loved. In a general way, «antipathy» arouses suspicion; and a special «antipathy» arouses a special suspicion. Persons dreaded for their brutality are the first ones to be suspected of a violent crime; despised persons, of a mean act; and those who arouse disgust, of an unclean act. People with bad reputations are accused and convicted on the basis of evidence which one would consider insufficient if an unfavorable prejudice did not relate them to the crime in advance. On the contrary, if the accused has won our favor we demand irrefutable proof before we impute to him the crime (12, p. 266).

The property which makes a person in our eyes «similar» to a crime or an act can be created by past experience: we know that he has committed such an act before. In causal attribution the factor of past experience cannot be separated from the factor of similarity because a person, once having been the origin of an act, takes over its quality. The person is then connected with the act also by the relation of similarity. The difficult rehabilitation of people who once were inmates of a prison or a mental hospital, or the fable of the boy who cries «Wolf» are relevant examples.

That a crime can be judged as «belonging to» a person on the basis of irrelevant circumstances is shown by incidences related by Gross:

So for example, an intelligent man told me that he suspected another of a murder because the latter's mother died a violent death. The witness stuck to his statement: «the man who had once had something to do with killing must have had something to do with this killing». In a similar manner, a whole village accused a man of arson because he was born on the night on which a neighbouring village burned down. Here, however, there was no additional argument in the belief that his mother had absorbed the influence of the fire inasmuch as the latter was told that there had been a fire only after the child was born. «He once had something to do with fire», was the basis of the judgment, also in this case (15, p. 122).

In these cases the person takes over, by assimilation, a «whole-quality» of a crime with which he was in some way connected. Then, the factor of similarity causes a new crime of the same sort to be attributed to him. Thus the factor of proximity can make for an assimilation of a person to an event. It is not so easy to find a clear case in which this factor is directly the cause of an unjustified attribution of an act to a person. The cases which Fauconnet cites as examples of «responsibility by contiguity» cannot always be called errors of attribution, — for instance, the fact that the presence at the place of crime speaks against the accused in the eyes of the jury; ... nor are they always clear cases of attribution, — for instance, the fact that a person is held to be contaminated by a contact with the criminal (pp. 261, 262).

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6. *Cf.* the Toscanini anecdote related by Oscar Levant in *Harper's*, 1939, 179, p. 589: «One such unfortunate, a violinist, was the invariable target of his criticism, because of his mottled complexion. During a visit by the orchestra to Hartford, someone in the violin section made a false entrance, and Toscanini, in a rage, placed the blame squarely on his *bête noir* — even though the musician had remained in New York, ill». (*Cf.* Also 4, p. 165 f.).

B. The influence of causal integration on the relations between parts

1. *Assimilation and contrast.* — It is known, from the study of elementary perception, that the parts of an integrated structure will tend either to look as

much alike as possible, or to look as much unlike each other as possible. Werner, who treats these phenomena in regard to intensity, says:

This organization occurs in the most important cases either in such a way that a part or whole property of the structure influences the intensity directly by assimilation, or so that ir affects the intensity by a relation of opposition (*beziehendes Gegenüberstellen*). In the first case ... we speak of a dependence of mixture or assimilation, in the second of a dependence of segregation or dissimilation (59, pp. 47 f.).

Gestalt psychologists talk in this connection of the maximum-minimum principle, that is, the tendency towards maximum or minimum simplicity. «... we must remember that there exist always two possibilities, corresponding to the minimum and the maximum; either as little or as much as possible will happen» (27, p. 109). «Roughly speaking, a minimum simplicity will be the simplicity of uniformity, a maximum simplicity that of perfect articulation» (27, p. 171). Werner (59) and Koffka (27, pp. 171 ff.) see in assimilation and contrast two different expressions of the tendency towards *Prägnanz*. Examples are given by Werner (60) [7].

2. *The influence of the origin on the effect.* - In social perception, the act is in many cases assimilated to the origin. Acts or products are colored by the qualities of the person to whom they are ascribed. A joke made by a person considered silly will usually seem silly, while the same joke made by a person with the reputation of being witty will arouse laughter.

When the woeship of Mammon is widespread the millionaire is a high authority, not only in the technique of money-making, but in everything else as well. ... His crassest stupidities have the indescribable charm of coming from a «solid» man (44, pp. 175 f.).

The phenomenon of «prestige suggestion» is familiar to social psychologists: the acceptance of statements and the evaluation of artistic products depends on the prestige of the person to whom they are attributed (47, 49).

Contrast or dissimilation occurs when the origin is taken as the standard for judging the quality of the act. We can assume that in these cases the fusion between act and origin is less complete and the act is perceived, so to speak, with the origin as background. Our reaction to praise or any personal comment depends greatly upon whether it comes from a reserved or a loquacious person. Shakespeare makes use of this kind of contrast when he describes Othello as a person to whom jealousy is foreign. If he had introduced Othello as a man inclined to be jealous, his acts of jealousy would have lost much of their dramatic force (Cf. 53). Sophocles's Philoktetes is presented as possessing a high degree of self-control. That such a man cries out loud in pain is very impressive.

It has been remarked that visual contrast phenomena are related to color transformation (usually called, in a misleading way, «color constancy») [8].

A proximal stimulus of medium intensity seen in dim illumination signifies a very white object. This relation is similar to that in the examples taken from social perception. A reaction of medium intensity coming from a person whose usual reactions are known to be feeble, will signify a strong environmental «press», to use Murray's term. This relation is similar to that in the examples just mentioned of sophocles' portrayal of Philoktetes' pain.

3. *Influences of effects on origins.* — Changes will influence the appearance of an origin if they are combined with it in a causal unit. Effects often play the role of data through which we learn to know about the origins, and it is obvious that our idea of a person can be influenced by the attribution of acts. But here, again, we have to note a difference between a causal unit and a simple object unit. We saw above that in the latter a color is directly ascribed to the object as a property. In the less highly integrated causal unit the change does not appear as a property of the origin, only the possibility or faculty of producing this change is ascribed to the origin as a property.

At the same time, the origin is assimilated to the produced effect. Effects can be the determining ele-

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7. For an experimental demonstration of assimilation see also Fuchs (14) and Campbell (7). For conditions which determine whether assimilation or contrast will be effective, *cf.* Koffka (27, p. 173, explanation in terms of disposable energy of organism), and Werner (59, p. 115; 60, p. 252; assimilation occurs with high degrees, contrast with lower degrees of integration). Usnadze's findings with experiments on sets corroborate Werner's opinion: assimilation appears when the difference between members is small, contrast when it is great (58, p. 332).

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8. *Cf.* Jaensch's thesis: Laws of contrast become laws of transformation if the term «surrounding field» is replaced by the term «illumined space» (24, p. 272). Also Werner (59, pp. 120 ff.).

ments in the whole-qualities of origins which are permeated with the color of the effects. As examples may be mentioned poisons, «hot» pepper, alcohol, or explosives. In the same way a person who is seen as the origin of a bad act is usually judged to be bad himself. MacIver mentions as one stage in the imputation of responsibility «the imputation to the conscious agent of an attitude or disposition, perhaps we might say an *animus,* which makes not the doing only but the doer susceptible to a value judgment» (34, p. 226) [9].

Contrast does not seem to occur as influence of act on person. The unit of origin and effect is a hierarchical unit: the origin is a superordinate part, the effect a subordinate one. Therefore, the effect can be seem with the origin as background and the latter can provide a standard according to which the meaning of the effect appears, but the reciprocal relation (origin with effect as background) is impossible.

However, the effect can be evaluated in reference to an environmental «press», and thereby something like a contrast phenomenon can arise. If we perceive that a person stays moderately calm under extremely exciting circumstances we shall judge him as very quiet. Just as our perceptual mechanism «knows» that the light reflected from a surface is dependent on two conditions, and represents it as a combined effect of illumination and object color, so we «know», in many cases, that the behavior of a person is dependent on situation and personal characteristics. Sometimes behavior and personal characteristics are given and the press value of the situation is inferred (on the perceptual, not rational level), as in the above mentioned example of Philoktetes; sometimes behavior and situation are given and we infer personal characteristics. In these cases we find dissimilation between personal origins and effects.

Often, the change that our idea of a person undergoes when we attribute an act to him cannot be described so simply in terms of assimilation or contrast. When we see a person lift a heavy wieght we perceive at the same time that he is strong. «Lifting a heavy wieght» and «being strong» belong together as manifestation and faculty but they can hardly be called similar. These faculty concepts play an important role in social apperception. For instance, we often have a definitie idea of what a person — our own person or another person — is able to do, or not to do [10]. This «being able to do something» is ascribed in part to the environment; for instance, the possibility of moving around freely in a region is ascribed to the fact that the region is without barriers. But it is also ascribed in part to the person, especially, when achievement or failure to do something deviates greatly from that of average people.

Ichheiser says: «It may be said with assurance that the knowledge about kind and degree of the personal basis of our own capability usually constitutes itself by way of real acts. Only in acting and in attaining goals, achievements, and successes do we learn to know what we can do» (22, p. 372).

Thus the change or act, something temporary, is correlated to something relatively stable and invariant, a possibility or capability. This is true in all cases of attribution to persons. Dynamic characteristics, too, can be ascribed in this way to persons as stable properties. If an act is seen as directed against us, we shall ascribe to the person whom we see as origin of this act a hostile intention which may be of a much longer duration than the temporary act. On the other hand, if we are convinced that the act does not originate in constant characteristics of the person we shall not hold him responsible [11].

Essentially, these cases are not so very different from simple assimilation. The origin is changed by the effect in such a way that it «fits» the effect, or, if one wants to use an analogy taken from figural units, in such a way that the effect is a good continuation of the origin. We can express this dependence in more general terms: If we are, for a certain reason X, convinced that A is responsible for act a, then we see A in such a way that A and a Would be perceived as belonging together even if reason X were absent.

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9. The influence of causal attribution on our attitudes is also referred to in Spimoza's system: «If we remove a disturbance of the spirit, or emotion, from the thought of an external cause, and unite it to the other thoughts, then will the love or hatred toward that external cause, and also the vacillations of spirit which arise from these emotions, be destroyed» (50, p. 254).

10. *Cf.* Lewin's concept of «space of free movement» (31, pp. 42 ff.), or Ichheiser's «characters of attainability» (*Erreichbarkeitscharaktere,* 22, p. 376).

11. The interesting question to what parts of a person acts are attributed, and the errors of attribution in this respect, will not be treated here. *Cf.* Ichheiser (23) who, for instance, discusses the fact that we tend to overrate the influence of the «rational» parts of our own person.

IV. CAUSAL UNITS AND DYNAMIC FACTORS

A. The influence of attribution on the dynamic state of the person

Emotions and tensions in the person are closely linked to facts of attribution. As soon as one attempts to determine the cognitive structure of the environment wichs is coordinated to emotional reaction one faces the fact of causal attribution. Spinoza's treatise \On the origin and nature of emotions» in his *Ethics* is the most thoroughly worked out system in this regard. A great number of correct observations are treated in a theoretically unified way and attribution plays a prominent role in this system [12].

This is understandable since many of these dynamic states do not refer to proximal stimuli *qua* proximal stimuli, that is to say, not to the effects as they reach our person but to effects referred to the framework of the permament psychological environment [13].

In treating these phenomena we have to consider first the influence of attribution on the dynamic state of the person; in the next section we shall discuss the influence of the state of the person on attribution.

One can say that attribution influences the needs or emotions because the latter are correlated to the meanings of effects, and the meanings of effects are determined by attribution to an origin.

That the meaning of a datum is determined by the reference to an origin can be shown by many examples. Our reaction to a disagreeable experience, for instance of pain, is greatly influenced by the attribution to a source, which we may see in another person, in the workings of chance, or in ourselves. The same datum may mean agression, misfortune, or a stupid mistake. When an injury is attributed to a personal agent, it is more likely to lead to an aggressive reaction. If we were convinced that the pain we feel at the dentist's had its ultimate source in the malevolence of a person instead of in the poor health of our teeth, we would react to it quite differently.

The same is true of the meaning of an experience of frustration. Usually, frustration leads to aggression only (and not always even then) when the origin of the frustration is attributed not to one's own person, or to impersonal causes, but to another person. Several of the critics of the book *Frustration and aggression* by the Yale group (10) point out the importance of attribution in this respect.

It is a question, however, as to whether numerous situations in which the individual does not deal directly with frustration readily translatable into terms of an aggressor, typically stimulate the aggressive rejoinder, for example, frustrations arising out of one's own inability to solve a mathematical problem and the like (30, pp. 357 f.).

Maslow has something similar in mind when he makes the important distinction between deprivation and threat to personality:

Thus a certain child deprived of an ice-cream cone which he wanted may have lost simply an ice-cream cone. A second child, however, deprived of an ice-cream cone, may have lost not only a sensory gratification, but may also feel deprived of the love of his mother because she refused to buy it for him. ... It is only when a goal object represents love, prestige, respect, or achievement that being deprived of it will have the bad effects ordinarily attributed to frustration in general (36, pp. 364 f.).

One could add that a frustration is experienced as a threat to the personality only when it is interpreted in terms of the social environment, that is to say, when persons are perceived as the origins of the frustration, and the temporary «deprivation» is related to durable environmental relevancies [14].

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12. *Cf.* Also the classifications of emotions by psychologists who were influenced by spinoza (Mercier, 38; Höffding, 17; Calkins, 5. Mercier's classification can be found in Ruckmick, 45).

13. «It is necessary to be remarked, respecting the causes of our pleasurable and painful sensations, that they are apt to become greater objects of concern to us, to rank higher in importance, than the sensations themselves ... the mind is not much interested in attending to the sensation. ... The mind, however, is deeply interested in attending to the cause; that we many prevent, or remove it, if the sensation is painful; provide, or detain it, if the sensation is pleasurable. This creates a habit of passing rapidly from the sensation, to fix our attention upon its cause» (39, p. 188).

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14. That origin attribution has something to do with the reaction to frustration is conceded also by the Yale group: «... the strongest instigation, aroused by a frustration, is to acts of aggression directed against the agent perceived to be the source of the frustration ...» (10, p. 39). *Cf.* also Koffka's brief description of experiments conducted by Dembo (27, p. 673) in which she compared anger directed against a personal cause and «impersonal» anger. The first one was much stronger and its after-effects lasted longer.

The influence of causal integration on the experience of success or failure offers another example of the determination of the meaning of a datum by origin attribution.

Not merely success or failure as such is dynamically of importance but above all the experience of belongingness of these effects to the own person, the fact that the achievement is considered as an expression of the value of the own person (19, p. 33).

In general it may be said that success or failure is experienced only when the source of the achievement (or, in the case of failure, the source of the inability to achieve a goal) is located in the own person. One of the devices used to lift morale is to restructure the field in such a way that a defeat is not attributed to one's own inferiority. Defeat undermines the morale of a nation or a person only if the cause of the defat is attributed to its own weakness. When, on the other hand, the blame is laid on a «stab in the back» or some other factor which is not connected with the relationship between the own power and that of the enemy, the self-evaluation which is basic for morale is not affected.

These examples show that causal attributions is of great importance in cognitive structures which give rise to tensions in the person since many vital equilibria concern relationships of the own person to other persons; relationships of power, of value, of benevolence or hostility. Most of the «sensory» experiences of changes having a positive or negative value for the person become relevant to these equilibria only when they are, by attribution, related to the stable social environment consisting of other persons.

But this is not entirely true of all sensory experiences, just as it would not be entirely true in the field of object perception. There exists a «stimulus directed» perception and the phenomenal representations of local proximal stimuli, in some cases, retain their identity in spite of their being organized into different object units. This is also true in regard to the experience of ego-relevant facts. Pain is disagreeable itself and, though its coloration can be widely changed by different attribution, its core of negative value persists. The meaning of frustration is changed by causal integration to a greater degree than that of pain. However, even the effect of frustration is tome degree independent of how it is embedded in the social environment. Frustration caused by a person typically leads to anger; but also one not caused by a person can lead to anger (27, p. 673). Therefore, though not being universally correct, the «constancy hypothesis» which lies hidden in the original theory of the Yale group has some limited justification.

B. The influence of attitudes on attribution

We have seen that the similarity between origin and effect, which makes for, or is brought about by, attribution, often refers to value properties which in turn are closely linked with dynamic attitudes. There exist tendencies to perceive ourselves or other persons in a certain way, and these tendencies affect origin attribution.

The tendency to keep the ego level high is an example. Hoppe showed how this tendency can influence attribution. His subjects frequently tried to clear themselves of the responsibility for failures. «Usually the blame is then put on the material. ... One evades, as far as possible, the effect of the faillure by looking for the cause of it not in the own person but in the neutral sphere of objects» (19, p. 33).

It is obvious that this tendency to keep the ego level high must play a role in attribution. Since origins are assimilated to acts attributed to them, an act of low value, when attributed to the ego, will lower the ego level, and an act of high value will raise it. However, this will happen only when the stimulus conditions are so strong as to enforce the attribution, that is, if there can be no doubt that the own person is the source. Often, the possibility of different organizations will exist. Then the tendency to raise the ego level will structure the causal units in such a way that only good acts and not bad ones are attributed to the own person.

Examples demonstrating these effects are sometimes treated as cases of rationalization [15], or projection. Claparède talks of excuse (denying the attribution of a bad act to oneself) and imputation (ascribing had acts to others).

When we have spilled ink on a lady's dress, or when we have committed a more grave sin, we consider calmly that it was not our fault, since the course of the world is determined inevitably, and this accident was already virtually contained in the structure of the primordial nebula.

Imputation appears frequently in mental pathology in the form of imaginary accusation, etc. These facts are well

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15. *Cf.* the examples given by Taylor (55).

known, and psychoanalysis has interpreted them as a means to end an interior conflict painful to the subject, by the projection on another person of sentiments condemned by conscience (6, pp. 281, 282).

Scapegoat behavior often is not simply release of aggression but includes blaming others for changes which, if attributed to the person, would lower the self esteem. Cantril says that one of the functions of scapegoat behavior is that «it exonerates the people themselves from any blame for their conditions» (8, p. 245).

Maslow's concept of «dominance feeling» is similar to that of ego level though it seems to refer to a more permanent characteristic of personality (Cf. for instance, 35). Dominance feeling is an «evaluation of the self» and high dominance feeling involves «good self-confidence, self-assurance, high evaluation of the self, feelings of general capability or superiority», etc.. If a person has high dominance feeling and his own person within his life space has the properties of high value or strength, the perceptual data will be organized in such a way that they conform to that picture. If environmental changes threaten the maintenance of this cognitive representation of the own person, needs will arise to make these changes harmless by action.

With some persons there exists a tendency to keep the ego level low. They structure the attribution accordingly, as is shown by an example Maslow gives:

For instance low dominance women can not «take» compliments in spite of the fact of their need and hunger for them. This is because they are apt at once to discount the compliment as untrue and seek suspiciously for other motives. Often, for example, they may think the compliment is making fun of them, holding them up to ridicule, or else trying to get something out of them (35, pp. 21 f.).

Rosenzweig maintains that there exist characteristic reactions to frustration which are distinguished by the kind of attribution (43). He distinguishes between three typical reactions: in the «extrapunitive» one the outer world is blamed for the frustration; in the «intropunitive» one the own person is blamed, and in the «impunitive» one the frustration is glossed over. Rosenzweig says that the kind of reaction is typical for a personality.

He relates these reactions to frustration to psychoanalytical concepts. Extrapunitive and intropunitive reactions are manifestations of outwardly or inwardly directed aggressive needs; erotic needs lead to impunitive reactions [16].

Though these reactions are expressed in terms of needs, they can also be stated in terms of attitudes, and they are obviously related to tendencies to see the relation between the own person to the environment in a certain way.

That feelings of success or faillure affect attribution is suggested by an interesting theory of Janet. He says that the feelings of joy or sorrow can influence the interpretation of an experience. It is clear that he means by «joy» (joie) and «sorrow» (tristesse) feelings of success or failure since he defines them in the following way: They «determine the end of actions which have become useless, be it because of their success, be it because of their final defeat (échec définitif): these are the joys and the sorrows» (25, p. 231). That he thinks these feelings can influence attribution is shown by an example he gives: If somebody perceives a change in his possessions, the interpretation of this change will vary according to the predominant emotional state. A diminution of possession with accompanying joy will produce in the person the belief of having given something to another person; when it is accompanied by a feeling of sorrow the belief of having been robbed will arise. An increase in the possession plus joy will lead to a feeling of having robbed somebody, the same change with sorrow will make for a feeling of having received a gift (25, p. 406). He refers, of course, mainly to abnormal states.

Besides these tendencies in regard to the value level of the own person or other persons there exist doubtlessly other tendencies to structure the environment in certain ways, and we can assume with assurance that attribution is affected by all of them. As an example we mention only the tendency to see the environment as full of hostile or of benevolent intentions directed toward oneself [17].

One could further cill attention to habitual or dominant origin attributions which Nietzsche mentions:

Not only do we try to find a certain kind of explanation as the cause, but those kinds of explanations are selected and preferred which dissipate most rapidly the sensation of

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16. In later publications Rosenzweig relates the impunitive reaction to personality dissociation.

17. The cognitive content «other persons are hostile» seems to some degree, but not at all perfectly, correlated to the content «I am of low value». Cf. Maslow on the relation between feelings of insecurity and dominance feelings (37).

strangeness, novelty and unfamiliarity — in fact the most ordinary explanations. And the result is that a certain manner of postulating causes tends to predominate ever more and more, becomes concentrated into a system, and finally reigns supreme, to the complete exclusion of all other causes and explanations. The banker thinks immediately of business, the Christian of «sin», and the girl of her love affair (41, p. 39 f.).

In all these cases we see that the organization is formed in such a way as to establish the best equilibrium possible under the circumstances. The properties of the parts, of origin and effect, are partly determined by factors external to the organization, stimuli and attitudes, partly by the internal requirement that origin and effect have to fit together. If the external factors favor the origin-effect unit then attribution will occur. If some external factors favor the unit, and others produce forces against unification, then the stronger factors will prevail and the weaker ones will be changed in such a way that they agree.

C. Needs and attribution

Nest we have to considerer dynamic factors which cannot so readily be expressed in cognitive terms. Above, we have referred to the fact that attribution can be brought about by a need for aggression. This fact is stressed, for instance, in the Yale theory of the relation between frustration and aggression. Levy (30, p. 356) present it briefly as follows:

In *Frustration and aggression* the situations in which frustration occurs always call for aggression, in terms of an attack on a frustrating agent. If no frustrating agents is present, then some object must be created for the purpose of relieving aggressive tendencies that arise in the frustrating situations. ... This is all a familiar type of psychodynamics, namely the release of tensions arising from frustration and the use of an available object for its expression.

Here the need brings about a restructuring of the environment. A scapegoat is created by false attribution. The cognitive reorganization is explained by reference to forces toward the release of tension: the false attribution is a means for this release. At the end of section II we have tried to make it plausible why a personal origin is required as object. This reorganization could be considered as similar to «wish fulfilment», though here the restructuring only provides a

means for the discharge it directly. The cognitive effect of the need is brought into accord with the discharge of it in actions, as it is done, for instance, by Lewin when he says: «The need leads to a change of structure through locomotion» (32, p. 109).

However, this may not be the only explanation. If we analyze other cases we find that needs can influence the cognitive environment in other directions than that of wish fulfilment.

Maslow makes it clear that if a person is insecure, the cognitive structure can be affected in two different ways. In some cases the person will «hide from himself as long as possible the conscious realization of rejection, or loss of love and respect» (37, p. 339). This is a simple case of wish fulfilment: The cognitive structure is changed in such a way that the goal of being loved appears to be attained. On the other hand, the person may see his environment in such a way that his opinion of the hostility of other persons is justified: «He will, so to speak, believe the snub and not believe the compliment» (37, p. 339) [18]. This kind of distorcion cannot be called wish fulfilment; rather, it is a case of what Murray called «complementary projection» [19]. It is related to rationalization in the sense in which Bartlett uses the word, «a tendency which gives to what is presented a setting and an explanation» (3, p. 84), though it is not rationalization in the narrower sense which «consists in giving an acceptable "reason" for an action, when the action really springs from an unacceptable cause» (55, p. 626). The perceptual data are organized so that they seem to contain a reasonable cause for the existence of the need, and not for the disappearance or discharge of the need.

It is a case of wish fulfilment when a person who is afraid of the dark pretends to be secure; it is a case of complementary projection when he sees dangerous animals in every tree stump.

Complementary projection can also occur in cases in which needs are absent. When a person has

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18. Maslow says that this is the reaction of the person who has given up. It is doubtful whether that is the correct interpretation since he himself says: «In every insecure person with whom the writer has worked he has always found *a continual, never dying longing for security*». Also «*continual action toward regaining this individually defined security* was found in all cases» (37, p. 336). This seems to exclude «giving up».

19. Murray (40, p. 313). As an example he cites «the case of a guilt-ridden young man who believed that his elders were secretly condemning him».

a high opinion of himself and structures his perceptions accordingly he may never leave the equilibrium of complacency for a moment, and therefore no need for regaining the equilibrium may arise. Only when objects in the environment can be responsible for unstable states (danger-insecurity, aggressive person anger) does there exist the conflict between wish fulfilment and complementary projection, between forces directed toward a stable state with discharge of tension and, paradoxically, forces directed toward the maintenance of the unstable state.

One is tempted to assume that the cognitive restructuring which occurs in complementary projection can be expressed in terms of cognitive forces more easily than in those of motivational forces [20]. The relation between dynamic states of the person and perceptual «reasons» justifying them may be analogous to the relation between a unit and similarity between its parts. Just as a good unit requires or is produced by the fact that its members are similar, so a good fear requires or is produced by danger in the environment, and similarly a good anger is connected with a personal injury to one's own person. Though these states are disequilibria from the point of view of needs for locomotion, they are also unitary states which tend to be more complete in their own right [21].

Whether the existence of a tension is rationalized by complementary projection, or is discharged by wish fulfilment, the effected change in the cognitive structure will often concern attribution, first, because through attribution data become relevant to the vital equilibria which refer to the relationship between one's own person and other persons, and secondly, because attribution, like the organization of an ambigous figure, is often not univocally determined by the stimulus configuration.

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20. Sears calls Murray's conception of complementary projection «in a sense, an example of closure» (48, p. 398). He rejects the explanation of the results of his own experiments (on ideas of reference) in terms of complementary projection. However, one can assume that his scale for the measurement of ideas of reference measures the feeling of security, and his scale for the measurement of feelings of self-criticism measures feelings of dominance. Then the results can be explained in terms of complementary projection, and they are in agreement with Maslow's findings in regard to the relationship between security and dominance feelings.

21. Maslow speaks in a similar connection of a «fundamental tendency in human nature of psychological inertia» (37, p. 342).

V. SUMMARY

A change in the environment gains its meaning from the source to which it is attributed. This causal integration is of major importance in the organization of the social field. It is responsible for the formation of units which consist of persons and acts and which follow the laws of perceptual unit formation. Similarity and proximity favor the attribution of acts to persons; and established person-act units make for assimilation or contrast between the parts. Tensions within the person can influence this social causal integration.

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