

The Bases of Social Power

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The processes of power are pervasive, complex, and often disguised in our society. Accordingly, one finds in political science, in sociology, and in social psychology a variety of distinctions among different types of social power or among qualitatively different processes of social influence (1, 6, 14, 20, 23, 29, 30, 38, 41). Our main purpose is to identify the major types of power and to define them systematically so that we may compare them according to the changes which they produce and the other effects which accompany the use of power. The phenomena of power and influence involve a dyadic relation between two agents which may be viewed from two points of view: (a) What determines the behavior of the agent who exerts power? (b) What determines the reactions of the recipient of this behavior? We take this second point of view and formulate our theory in terms of the life space of P, the person upon whom power is exerted. In this way we hope to define basic concepts of power which will be adequate to explain many of the phenomena of social influence, including some which have been described in other less genotypic terms.

Recent empirical work, especially on small groups, has demonstrated the necessity of distinguishing different types of power in order to account for the different effects found in studies of social influence. Yet there is no doubt that more empirical knowledge will be needed to make final decisions concerning the necessary differentiations, but this knowledge will be obtained only by research based on some preliminary theoretical distinctions. We present such preliminary concepts and some of the hypotheses they suggest.

Power, Influence, and Change

Psychological Change

Since we shall define power in terms of influence, and influence in terms of psychological change, we begin with a discussion of change. We want to define change at a level of generality which includes changes in behavior, opinions, attitudes, goals, needs, values, and all other aspects of the person's psychological field. We shall use the word *system* to refer to any such part of the life space. Following Lewin (26, p. 305), the state of a system at time 1 will be denoted $s_1(a)$.

Psychological change is defined as any alteration of the state of some system a over time. The amount of change is measured by the size of the difference between the states of the system at time 1 and at time 2: $ch(a) = s_2(a) - s_1(a)$.

Change in any psychological system may be conceptualized in terms of psychological forces. But it is important to note that the change must be coordinated to the resultant force of all the forces operating at the moment. Change in an opinion, for example, may be determined jointly by a driving force induced by another person, a restraining force corresponding to anchorage in a group opinion, and an own force stemming from the person's needs. . . .

The Bases of Power

By the basis of power, we mean the relationship between O and P, which is the source of that power. It is rare that we can say with certainty that a given empirical case of power is limited to one source. Normally, the relation between O and P will be characterized by several qualitatively different variables which are bases of power (30, Chapter 11). Although there are undoubtedly many possible bases of power which may be distinguished, we shall here define five which seem especially common and important. These five bases of O's power are: (1) *reward power*, based on P's perception that O has the ability to mediate rewards for him; (2) *coercive power*, based on P's perception that O has the ability to mediate punishments for him; (3) *legitimate power*, based on the perception by P that O has a legitimate right to prescribe behavior for him; (4) *referent power*, based on P's identification with O; and (5) *expert power*, based on the perception that O has some special knowledge or expertness. . . .

Reward Power

Reward power is defined as power whose basis is the ability to reward. The strength of the reward power of O/P increases with the magnitude of the rewards which P perceives that O can mediate for him. Reward power depends on O's ability to administer positive valences and to remove or decrease negative valences. The strength of reward power also depends upon the probability that O can mediate the reward, as perceived by P. A common

example of reward power is the addition of a piecework rate in the factory as an incentive to increase production.

The new state of the system induced by a promise of reward (for example the factory worker's increased level of production) will be highly dependent on O. Since O mediates the reward, he controls the probability that P will receive it. Thus P's new rate of production will be dependent on his subjective probability that O will reward him for conformity minus his subjective probability that O will reward him even if he returns to his old level. Both probabilities will be greatly affected by the level of observability of P's behavior. Incidentally, a piece rate often seems to have more effect on production than a merit rating system because it yields a higher probability of reward for conformity and a much lower probability of reward for nonconformity.

The utilization of actual rewards (instead of promises) by O will tend over time to increase the attraction of P toward O and therefore the referent power of O over P. As we shall note later, such referent power will permit O to induce changes which are relatively independent. Neither rewards nor promises will arouse resistance in P, provided P considers it legitimate for O to offer rewards.

The range of reward power is specific to those regions within which O can reward P for conforming. The use of rewards to change systems within the range of reward power tends to increase reward power by increasing the probability attached to future promises. However, unsuccessful attempts to exert reward power outside the range of power would tend to decrease the power; for example if O offers to reward P for performing an impossible act, this will reduce for P the probability of receiving future rewards promised by O.

Coercive Power

Coercive power is similar to reward power in that it also involves O's ability to manipulate the attainment of valences. Coercive power of O/P stems from the expectation on the part of P that he will be punished by O if he fails to conform to the influence attempt. Thus negative valences will exist in given regions of P's life space, corresponding to the threatened punishment by O. The strength of coercive power depends on the magnitude of the negative valence of the threatened punishment multiplied by the perceived probability that P can avoid the punishment by conformity, i.e., the probability of punishment for nonconformity minus the probability of punishment for conformity (11). Just as an offer of a piece-rate bonus in a factory can serve as a basis for reward power, so the ability to fire a worker if he falls below a given level of production will result in coercive power.

Coercive power leads to dependent change also; and the degree of dependence varies with the level of observability of P's conformity. An excellent illustration of coercive power leading to dependent change is provided by a clothes presser in a factory observed by Coch and French (3). As her efficiency rating climbed above average for the group the other workers began to "scapegoat" her. That the re-

sulting plateau in her production was not independent of the group was evident once she was removed from the presence of the other workers. Her production immediately climbed to new heights.¹

At times, there is some difficulty in distinguishing between reward power and coercive power. Is the withholding of a reward really equivalent to a punishment? Is the withdrawal of punishment equivalent to a reward? The answer must be a psychological one—it depends upon the situation as it exists for P. But ordinarily we would answer these questions in the affirmative; for P, receiving a reward is a positive valence as is the relief of suffering. There is some evidence that conformity to group norms in order to gain acceptance (reward power) should be distinguished from conformity as a means of forestalling rejection (coercive power) (5).

The distinction between these two types of power is important because the dynamics are different. The concept of "sanctions" sometimes lumps the two together despite their opposite effects. While reward power may eventually result in an independent system, the effects of coercive power will continue to be dependent. Reward power will tend to increase the attraction of P toward O; coercive power will decrease this attraction (11, 12). The valence of the region of behavior will become more negative, acquiring some negative valence from the threatened punishment. The negative valence of punishment would also spread to other regions of the life space. Lewin (25) has pointed out this distinction between the effects of rewards and punishment. In the case of threatened punishment, there will be a resultant force on P to leave the field entirely. Thus, to achieve conformity, O must not only place a strong negative valence in certain regions through threat of punishment, but O must also introduce restraining forces, or other strong valences, so as to prevent P from withdrawing completely from O's range of coercive power. Otherwise the probability of receiving the punishment, if P does not conform, will be too low to be effective.

Legitimate Power

Legitimate power is probably the most complex of those treated here, embodying notions from the structural sociologist, the group-norm and role-oriented social psychologist, and the clinical psychologist.

There have been considerable investigation and speculation about socially prescribed behavior, particularly that which is specific to a given role or position. Linton (29) distinguishes group norms according to whether they are universals for everyone in the culture, alternatives (the individual having a choice as to whether or not to accept them), or specialties (specific to given positions). Whether we speak of internalized norms, role prescriptions and expectations (34), or internalized pressures (15), the fact remains that each individual sees certain regions toward which he should locomote, some regions toward which he should not locomote, and some regions toward which he may locomote if they are generally

attractive for him. This applies to specific behaviors in which he may, should, or should not engage; it applies to certain attitudes or beliefs which he may, should, or should not hold. The feeling of "oughtness" may be an internalization from his parents, from his teachers, from his religion, or may have been logically developed from some idiosyncratic system of ethics. He will speak of such behaviors with expressions like "should," "ought to," or "has a right to." In many cases, the original source of the requirement is not recalled.

Though we have oversimplified such evaluations of behavior with a positive-neutral-negative trichotomy, the evaluation of behaviors by the person is really more one of degree. This dimension of evaluation, we shall call "legitimacy." Conceptually, we may think of legitimacy as a valence in a region which is induced by some internalized norm or value. This value has the same conceptual property as power, namely an ability to induce force fields (26, p. 40-41). It may or may not be correct that values (or the superego) are internalized parents, but at least they can set up force fields which have a phenomenal "oughtness" similar to a parent's prescription. Like a value, a need can also induce valences (i.e., force fields) in P's psychological environment, but these valences have more the phenomenal character of noxious or attractive properties of the object or activity. When a need induces a valence in P—for example, when a need makes an object attractive to P—this attraction applies to P but not to other persons. When a value induces a valence, on the other hand, it not only sets up forces on P to engage in the activity, but P may feel that all others ought to behave in the same way. Among other things, this evaluation applies to the legitimate right of some other individual or group to prescribe behavior or beliefs for a person even though the other cannot apply sanctions.

Legitimate power of O/P is here defined as that power which stems from internalized values in P which dictate that O has a legitimate right to influence P and that P has an obligation to accept this influence. We note that legitimate power is very similar to the notion of legitimacy of authority, which has long been explored by sociologists, particularly by Weber (42), and more recently by Goldhammer and Shils (14). However, legitimate power is not always a role relation: P may accept an induction from O simply because he had previously promised to help O and he values his word too much to break the promise. In all cases, the notion of legitimacy involves some sort of code or standard accepted by the individual by virtue of which the external agent can assert his power. We shall attempt to describe a few of these values here.

Bases for Legitimate Power. Cultural values constitute one common basis for the legitimate power of one individual over another. O has characteristics which are specified by the culture as giving him the right to prescribe behavior for P, who may not have these characteristics. These bases, which Weber (42) has called the authority of the "eternal yesterday," include some things as age, intelligence, caste, and physical characteristics. In some cultures, the aged are granted the right to prescribe behavior for others in practically all behavior areas. In

most cultures, there are certain areas of behavior in which a person of one sex is granted the right to prescribe behavior for the other sex.

Acceptance of the social structure is another basis for legitimate power. If P accepts as right the social structure of his group, organization, or society, especially the social structure involving a hierarchy of authority, P will accept the legitimate authority of O who occupies a superior office in the hierarchy. Thus legitimate power in a formal organization is largely a relationship between offices rather than between persons. And the acceptance of an office as *right* is a basis for legitimate power—a judge has a right to levy fines; a foreman should assign work; a priest is justified in prescribing religious beliefs; and it is the management's prerogative to make certain decisions (10). However, legitimate power also involves the perceived right of the person to hold the office.

Designation by a legitimizing agent is a third basis for legitimate power. An influencer O may be seen as legitimate in prescribing behavior for P because he has been granted such power by a legitimizing agent whom P accepts. Thus, a department head may accept the authority of his vice president in a certain area because that authority has been specifically delegated by the president. An election is perhaps the most common example of a group's serving to legitimize the authority of one individual or office for other individuals in the group. The success of such legitimizing depends upon the acceptance of the legitimizing agent and procedure. In this case it depends ultimately on certain democratic values concerning election procedures. The election process is one of legitimizing a person's right to an office which already has a legitimate range of power associated with it.

Range of Legitimate Power of O/P. The areas in which legitimate power may be exercised are generally specified along with the designation of that power. A job description, for example, usually specifies supervisory activities and also designates the person to whom the jobholder is responsible for the duties described. Some bases for legitimate authority carry with them a very broad range. Culturally derived bases for legitimate power are often especially broad. It is not uncommon to find cultures in which a member of a given caste can legitimately prescribe behavior for all members of lower castes in practically all regions. More common, however, are instances of legitimate power where the range is specifically and narrowly prescribed. A sergeant in the army is given a specific set of regions within which he can legitimately prescribe behavior for his men.

The attempted use of legitimate power which is outside of the range of legitimate power will decrease the legitimate power of the authority figure. Such use of power which is not legitimate will also decrease the attractiveness of O (11, 12, 36).

Legitimate Power and Influence. The new state of the system which results from legitimate power usually has high dependence on O though it may become independent. Here, however, the degree of dependence is not related to the level of observability. Since legitimate

power is based on P's values, the source of the forces induced by O include both these internal values and O. O's induction serves to activate the values and to relate them to the system which is influenced, but thereafter the new state of the system may become directly dependent on the values with no mediation by O. Accordingly, this new state will be relatively stable and consistent across varying environmental situations, since P's values are more stable than his psychological environment.

We have used the term *legitimate* not only as a basis for the power of an agent, but also to describe the general behaviors of a person. Thus, the individual P may also consider the legitimacy of the attempts to use other types of power by O. In certain cases, P will consider that O has a legitimate right to threaten punishment for nonconformity; in other cases, such use of coercion would not be seen as legitimate. P might change in response to coercive power of O, but it will make a considerable difference in his attitude and conformity if O is not seen as having a legitimate right to use such coercion. In such cases, the attraction of P for O will be particularly diminished, and the influence attempt will arouse more resistance (11). Similarly the utilization of reward power may vary in legitimacy; the word *bribe*, for example, denotes an illegitimate reward.

Referent Power

The referent power of O/P has its basis in the identification of P with O. By identification, we mean a feeling of oneness of P with O, or a desire for such an identity. If O is a person toward whom P is highly attracted, P will have a desire to become closely associated with O. If O is an attractive group, P will have a feeling of membership or a desire to join. If P is already closely associated with O, he will want to maintain this relationship (39, 41). P's identification with O can be established or maintained if P behaves, believes, and perceives as O does. Accordingly, O has the ability to influence P, even though P may be unaware of this referent power. A verbalization of such power by P might be, "I am like O, and therefore I shall behave or believe as O does," or "I want to be like O, and I will be more like O if I behave or believe as O does." The stronger the identification of P with O the greater the referent power of O/P.

Similar types of power have already been investigated under a number of different formulations. Festinger (7) points out that in an ambiguous situation, the individual seeks some sort of "social reality" and may adopt the cognitive structure of the individual or group with which he identifies. In such a case, the lack of clear structure may be threatening to the individual, and the agreement of his beliefs with those of a reference group will both satisfy his need for structure and give him added security through increased identification with his group (16, 19).

We must try to distinguish between referent power and other types of power which might be operative at the same time. If a member is attracted to a group and he conforms to its norms only because he fears ridicule or expulsion from the group for nonconformity, we would call this coercive power. On the other hand, if he conforms in order to obtain praise for conformity, it is a case of reward

power. The basic criterion for distinguishing referent power from both coercive and reward power is the mediation of the punishment and the reward by O: To the extent that O mediates the sanctions (i.e., has means control over P), we are dealing with coercive and reward power; but to the extent that P avoids discomfort or gains satisfaction by conformity based on identification, regardless of O's responses, we are dealing with referent power. *Conformity with majority opinion* is sometimes based on a respect for the collective wisdom of the group, in which case it is expert power. It is important to distinguish these phenomena, all grouped together elsewhere as "pressures toward uniformity," since the type of change which occurs will be different for different bases of power.

The concepts of "reference group" (40) and "prestige suggestion" may be treated as instances of referent power. In this case, O, the prestigious person or group, is valued by P; because P desires to be associated or identified with O, he will assume attitudes or beliefs held by O. Similarly a negative reference group which O dislikes and evaluates negatively may exert negative influence on P as a result of negative referent power.

It has been demonstrated that the power which we designate as referent power is especially great when P is attracted to O (2, 7, 8, 9, 13, 23, 30). In our terms, this would mean that the greater the attraction, the greater the identification, and consequently the greater the referent power. In some cases, attraction or prestige may have a specific basis, and the range of referent power will be limited accordingly: A group of campers may have great referent power over a member regarding campcraft, but considerably less effect on other regions (30). However, we hypothesize that the greater the attraction of P toward O, the broader the range of referent power of O/P.

The new state of a system produced by referent power may be dependent on or independent of O; but the degree of dependence is not affected by the level of observability to O (6, 23). In fact, P is often not consciously aware of the referent power which O exerts over him. There is probably a tendency for some of these dependent changes to become independent of O quite rapidly.

Expert Power

The strength of the expert power of O/P varies with the extent of the knowledge or perception which P attributes to O within a given area. Probably P evaluates O's expertness in relation to his own knowledge as well as against an absolute standard. In any case expert power results in primary social influence on P's cognitive structure and probably not on other types of systems. Of course changes in the cognitive structure can change the direction of forces and hence of locomotion, but such a change of behavior is secondary social influence. Expert power has been demonstrated experimentally (8, 33). Accepting an attorney's advice in legal matters is a common example of expert influence; but there are many instances based on much less knowledge, such as the acceptance by a stranger of directions given by a native villager.

Expert power, where O need not be a member of P's group, is called "informational power" by Deutsch and

Gerard (4). This type of expert power must be distinguished from influence based on the content of communication as described by Hovland et al. (17, 18, 23, 24). The influence of the content of a communication upon an opinion is presumably a secondary influence produced after the *primary* influence (i.e., the acceptance of the information). Since power is here defined in terms of the primary changes, the influence of the content on a related opinion is not a case of expert power as we have defined it, but the initial acceptance of the validity of the content does seem to be based on expert power or referent power. In other cases, however, so-called facts may be accepted as self-evident because they fit into P's cognitive structure; if this impersonal acceptance of the truth of the fact is independent of the more or less enduring relationship between O and P, then P's acceptance of the fact is not an actualization of expert power. Thus we distinguish between expert power based on the credibility of O and informational influence which is based on characteristics of the stimulus such as the logic of the argument or the "self-evident facts."

Wherever expert influence occurs, it seems to be necessary both for P to think that O knows and for P to trust that O is telling the truth (rather than trying to deceive him).

Expert power will produce a new cognitive structure which is initially relatively dependent on O, but informational influence will produce a more independent structure. The former is likely to become more independent with the passage of time. In both cases the degree of dependence on O is not affected by the level of observability.

The "sleeper effect" (18, 24) is an interesting case of a change in the degree of dependence of an opinion on O. An unreliable O (who probably had negative referent power but some positive expert power) presented "facts" which were accepted by the subjects and which would normally produce secondary influence on their opinions and beliefs. However, the negative referent power aroused resistance and resulted in negative social influence on their beliefs (i.e., set up a force in the direction opposite to the influence attempt), so that there was little change in the subjects' opinions. With the passage of time, however, the subjects tended to forget the identity of the negative communicator faster than they forgot the contents of his communication, so there was a weakening of the negative referent influence and a consequent de-

layed positive change in the subjects' beliefs in the direction of the influence attempt ("sleeper effect"). Later, when the identity of the negative communicator was experimentally reinstated, these resisting forces were reinstated, and there was another negative change in belief in a direction opposite to the influence attempt (24).

The range of expert power, we assume, is more delimited than that of referent power. Not only is it restricted to cognitive systems, but the expert is seen as having superior knowledge or ability in very specific areas, and his power will be limited to these areas, though some "halo effect" might occur. Recently, some of our renowned physical scientists have found quite painfully that their expert power in physical sciences does not extend to regions involving international politics. Indeed, there is some evidence that the attempted exertion of expert power outside of the range of expert power will reduce that expert power. An undermining of confidence seems to take place.

Summary

We have distinguished five types of power: referent power, expert power, reward power, coercive power, and legitimate power. These distinctions led to the following hypotheses.

1. For all five types, the stronger the basis of power, the greater the power.
2. For any type of power, the size of the range may vary greatly, but, in general, referent power will have the broadest range.
3. Any attempt to utilize power outside the range of power will tend to reduce the power.
4. A new state of a system produced by reward power or coercive power will be highly dependent on O, and the more observable P's conformity, the more dependent the state. For the other three types of power, the new state is usually dependent, at least in the beginning, but in any case the level of observability has no effect on the degree of dependence.
5. Coercion results in decreased attraction of P toward O and high resistance; reward power results in increased attraction and low resistance.
6. The more legitimate the coercion, the less it will produce resistance and decreased attraction.

Notes

¹ Though the primary influence of coercive power is dependent, it often produces secondary changes which are independent. Brainwashing,

for example, utilizes coercive power to produce many primary changes in the life space of the prisoner, but these dependent changes can lead

to identification with the aggressor and hence to secondary changes in ideology which are independent.

References

- ¹ Asch, S. E. *Social psychology*. New York: Prentice-Hall, 1952.
- ² Back, K. W. Influence through social communication. *J. abnorm. soc. Psychol.*, 1951, 46, 9-23.
- ³ Coch, L., & French, J. R. P., Jr. Overcoming resistance to change. *Hum. Relat.*, 1948, 1, 512-32.
- ⁴ Deutsch, M., & Gerard, H. B. A study of normative and informational influences upon individual judgment. *J. abnorm. soc. Psychol.*, 1955, 51, 629-36.
- ⁵ Dittes, J. E., & Kelley, H. H. Effects of different conditions of acceptance upon conformity to group norms. *J. abnorm. soc. Psychol.*, 1956, 53, 100-107.
- ⁶ Festinger, L. An analysis of compliant behavior. In Sherif, M., & Wilson, M. O., (Eds.). *Group relations at the crossroads*. New York: Harper, 1953, 232-56.

- ⁷ Festinger, L. Informal social communication. *Psychol. Rev.*, 1950, 57, 271-82.
- ⁸ Festinger, L., Gerard, H. B., Hymovitch, B., Kelley, H. H., & Raven, B. H. The influence process in the presence of extreme deviates. *Hum. Relat.*, 1952, 5, 327-346.
- ⁹ Festinger, L., Schacter, S., & Back, K. The operation of group standards. In Cartwright, D., & Zander, A. *Group dynamics: research and theory*. Evanston: Row, Peterson, 1953, 204-23.
- ¹⁰ French, J. R. P., Jr., Israel, Joachim, & Ås, Dagfinn. "Arbeidernes medvirkning i industribedriften. En eksperimentell undersøkelse." Institute for Social Research, Oslo, Norway, 1957.
- ¹¹ French, J. R. P., Jr., Levinger, G., & Morrison, H. W. The legitimacy of coercive power. In preparation.
- ¹² French, J. R. P., Jr., & Raven, B. H. An experiment in legitimate and coercive power. In preparation.
- ¹³ Gerard, H. B. The anchorage of opinions in face-to-face groups. *Hum. Relat.*, 1954, 7, 313-325.
- ¹⁴ Goldhammer, H., & Shils, E. A. Types of power and status. *Amer. J. Sociol.*, 1939, 45, 171-178.
- ¹⁵ Herbst, P. G. Analysis and measurement of a situation. *Hum. Relat.*, 1953, 2, 113-140.
- ¹⁶ Hochbaum, G. M. Self-confidence and reactions to group pressures. *Amer. soc. Rev.*, 1954, 19, 678-687.
- ¹⁷ Hovland, C. I., Lumsdaine, A. A., & Sheffield, F. D. *Experiments on mass communication*. Princeton: Princeton Univer. Press, 1949.
- ¹⁸ Hovland, C. I., & Weiss, W. The influence of source credibility on communication effectiveness. *Publ. Opin. Quart.*, 1951, 15, 635-650.
- ¹⁹ Jackson, J. M., & Saltzstein, H. D. The effect of person-group relationships on conformity processes. *J. abnorm. soc. Psychol.*, 1958, 57, 17-24.
- ²⁰ Jahoda, M. Psychological issues in civil liberties. *Amer. Psychologist*, 1956, 11, 234-240.
- ²¹ Katz, D., & Schank, R. L. *Social psychology*. New York: Wiley, 1938.
- ²² Kelley, H. H., & Volkart, E. H. The resistance to change of group-anchored attitudes. *Amer. Soc. Rev.*, 1952, 17, 453-465.
- ²³ Kelman, H. Three processes of acceptance of social influence: compliance, identification and internalization. Paper read at the meetings of the American Psychological Association, August 1956.
- ²⁴ Kelman, H., & Hovland, C. I. "Reinstatement" of the communicator in delayed measurement of opinion change. *J. abnorm. soc. Psychol.*, 1953, 48, 327-335.
- ²⁵ Lewin, K. *Dynamic theory of personality*. New York: McGraw-Hill, 1935, 114-170.
- ²⁶ Lewin, K. *Field theory in social science*. New York: Harper, 1951.
- ²⁷ Lewin, K., Lippitt, R., & White, R. K. Patterns of aggressive behavior in experimentally created social climates. *J. soc. Psychol.*, 1939, 10, 271-301.
- ²⁸ Lasswell, H. D., & Kaplan, A. *Power and society: A framework for political inquiry*. New Haven: Yale Univer. Press, 1950.
- ²⁹ Linton, R. *The cultural background of personality*. New York: Appleton-Century-Crofts, 1945.
- ³⁰ Lippitt, R., Polansky, N., Redl, F., & Rosen, S. The dynamics of power. *Hum. Relat.*, 1952, 5, 37-64.
- ³¹ March, J. G. An introduction to the theory and measurement of influence. *Amer. polit. Sci. Rev.*, 1955, 49, 431-451.
- ³² Miller, J. G. Toward a general theory for the behavioral sciences. *Amer. Psychologist*, 1955, 10, 513-531.
- ³³ Moore, H. T. The comparative influence of majority and expert opinion. *Amer. J. Psychol.*, 1921, 32, 16-20.
- ³⁴ Newcomb, T. M. *Social psychology*. New York: Dryden, 1950.
- ³⁵ Raven, B. H. The effect of group pressures on opinion, perception, and communication. Unpublished doctoral dissertation, University of Michigan, 1953.
- ³⁶ Raven, B. H., & French, J. R. P., Jr. Group support, legitimate power, and social influence. *J. Person.*, 1958, 26, 400-409.
- ³⁷ Rommetveit, R. *Social norms and roles*. Minneapolis: Univer. Minnesota Press, 1953.
- ³⁸ Russell, B. *Power: A new social analysis*. New York: Norton, 1938.
- ³⁹ Stotland, E., Zander, A., Burnstein, E., Wolfe, D., & Natsoulas, T. Studies on the effects of identification. University of Michigan, Institute for Social Research. Forthcoming.
- ⁴⁰ Swanson, G. E., Newcomb, T. M., & Hartley, E. L. *Readings in social psychology*. New York: Henry Holt, 1952.
- ⁴¹ Torrance, E. P., & Mason, R. Instructor effort to influence: An experimental evaluation of six approaches. Paper presented at USAF-NRC Symposium on Personnel, Training, and Human Engineering. Washington, DC, 1956.
- ⁴² Weber, M. *The theory of social and economic organization*. Oxford: Oxford Univer. Press, 1947.