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# **Authority**

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### Authority\*

James S. Coleman

For a long time, sociologists, who call themselves social theorists, have placed themselves under the authority of men long since dead. And nowhere is this more true than with the concept of authority itself. Since Max Weber, sociologists have, with increasing obedience, submitted themselves to the three ideal types of traditional, rational, and charismatic authority, sometimes with an enthusiasm and a blindness that would make Weber uncomfortable if he were here to observe it.

I think it is time to begin afresh in thinking about authority, to attempt to establish some conceptions that will do more for us than the concept of authority has done in the past.

And I think that it is appropriate to do so at the Deutscher Soziologentag. The challenge I am posing is to theoretical work which was carried out on German soil, and it is well to make the challenge on German soil.

I focus on the concept of authority for two reasons. First of all, it is central to social theory, and without a strong foundation-stone at this point, it becomes difficult to build a social theory. Second, there has grown up in social theory recently a set of ideas, loosely borrowed from economics, which go under the heading of "exchange theory." In the United States, the names of Peter Blau and George Homans are most fully associated with these ideas. Yet a broad-minded or imperialistic economist, looking at that work, could easily argue that there is nothing new here, that sociologists are introducing no principles over and above those which economists had been using all along. And some economists, such as my colleague Gary Becker at the University of Chicago, have already been applying ideas of economic exchange to such sociological domains as marriage and divorce, friend-ship, apparent altruism, crime, and racial discrimination.

Few sociologists would concede to the economist that a theory of social organization can be constructed wholly from economists' principles of exchange; and it is here that *authority* is especially important. For authority, the obedience by one person to another's commands, lies wholly outside the domain of economists, and is a concept wholly foreign to them (except for those who take it as given). Yet it is

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obviously central to the functioning of society, and as I will try to show this morning, it important in understanding an extremely wide range of action.

My agenda, then, is to sketch the outlines of a concept of authority which will be useful in this way. But to be less vague, these are some of the things I would like a concept of authority to be useful for: What are the conditions under which revolutions against an established authority system arise? Why is is that workers in large firms work less hard than workers in small firms, and that those who work for themselves work hardest of all? Why is it that the most rapidly growing form of economic organization in the United States (which is the only place I have observed it) is the franchise, that is, an enterprise which is owned locally, yet part of a national or international chain (like a McDonald's restaurant, for example)?

Why are petty officials in government bureaucracies so insensitive to clients' needs or demands? Why do communes exhibit such a high degree of instability in comparison to other organizations? When there is a fire alarm in a crowded theater, there is often a panic. Why is this? Equally important, why is it that under similar circumstances, a panic will sometimes occur, sometimes not? Why is it that in the behavior of crowds that erupt into violence, there is the commonly-noted period, during which the crowd is "milling around," before any action takes place?

There are also some more concrete questions, specific to time and place, which I would like to be able to answer. For example, what is it that makes Honda automobiles, for example, of higher quality than most automobiles? Why is it, in the communes that grew up in the late 1960's, that the principal problems of childrearing were those of inattention to children? Why is it, in large automobile firms in the United States, that managers are much better motivated than workers?

Now this is a wide range of questions indeed, and I will not pretend that before I finish today I will have answered them all. Rather, I want the questions to indicate the range or scope of phenomena that I believe should be explainable through use of a single theoretical framework.

The framework I will introduce to do this has several important characteristics. The first is that it is individualistic, like the exchange theory I just cast aspersions on. The elements of the theory are individual persons, not groups, organizations, or societies. Second, these persons are regarded as purposive, acting in what they see as their own best interest. Third, they are endowed with certain resources, consisting of control over, or rights to control, certain events or actions or things. You may, if you like, think of this as compatible with a natural rights philosophical perspective. Or you may think of the processes I will describe as occurring within a legal system in which ownership of rights is well defined.

We begin, then, with purposive actors, who know their interests and have certain resources by which they can act to realize those interests. The nature of the theory I will describe consists of specifying what such actors will do under various circumstances, and seeing just what social configurations result. The interest, of course, is in the predicted social configurations, for it is these that may allow us to answer the kinds of questions I have just posed. Thus although the theoretical starting point is individualistic, the end point, after authority systems are constructed, includes corporate actors as well.

Although this starting point as I have described it has often been associated with what is called "exchange theory" in sociology, I want to specify actions that are more general than excannge, though leading under certain circumstances to exchange. In particular, the one social action that these purposive persons may take, leading

to the creation of authority systems, is that of transferring control or the rights of control over resources they control. There need in fact be no reciprocation, no exchange. All that is necessary is that the transfer of control be made in what the person regards as his best interest—as, for example, when a person who is lost follows the directions of a stranger, thus giving to that stranger control over the direction he takes.

At this point, it becomes possible to define an authority relation. An authority relation exists when there has been a transfer of control of a particular kind of resource: one's own actions. The person who has made this transfer becomes the subordinate, the person to whom the transfer is made becomes the superordinate.

Now some of you may be surprised at my focus upon the subordinate. But this is essential to the theory that I will outline, and I believe it is essential to the understanding of authority systems. In fact, I believe the failure to do so is the crucial error in most attempts to develop a theory of authority. In the theory as I will sketch it, the superordinate's action, while not quite incidental, is nevertheless not so important as that of the subordinate. The reason is that the superordinate's action is less problematic. What is problematic is one person's voluntarily subordinating himself to the will of another.

There may also be some objection to my insistence on voluntary action, since authority systems are commonly regarded as coercive, and we all know of cases that are exceedingly so. But even the classical theorists who looked at authority more nearly from the point of view of the superordinate's action recognized this. Max Weber (1947) said in his definition of authority that "Imperative coordination (control) was defined above as the probability that specific commands (or all commands) from a given source will be obeyed by a given group of persons ... A criterion ... is a certain minimum of voluntary submission." And Georg Simmel (1950), in his discussion of authority, emphasized that choice existed even for persons subject to the most despotic authority. As Weber and Simmel both recognized, although the capacity of the superordinate in certain authority relations to inflict harm as well as to extend rewards may lead us to describe the relation as coercive, it does not change the fact that the subordinate always exercises a choice of whether or not to obey, since it is he who has immediate or direct control over his actions.

But if you don't agree with me, I ask you to take these starting points on faith, or in effect to put yourself temporarily under my authority, in order that we may proceed. An authority relation exists, then, when there has been a transfer of rights of control by a person, who becomes the subordinate, over certain of his own actions. The fact that it is his own actions over which rights of control are transferred has an important implication. This is an inalienable resource. It is not like a good which he may physically hand over to another, as in the classic economic model of transitory exchanges. When rights of control over inalienable resources have been transferred into another's hands there is an ongoing relation—in this case the authority relation—which continues until those rights are withdrawn. I should point out also another aspect of this definition. Although the authority relation is an asymmetric one, this does not preclude overall symmetry, as when two persons each transfer control over certain of their actions to each other: the prototypical case is that of two persons deeply in love, each placing most of their actions under the control of the other.

So far I have directed attention to the transfer of rights of control, what we may call the *vesting* of authority in another. But some may rightly object that in certain

authority systems, such as that of a nation-state and its citizens, or parents and children, the person is born into the authority relation, and does not make such a voluntary transfer. In that case, the voluntary action at issue is not that of transferring rights of control over one's own action, not vesting authority, but withdrawing the transfer, divesting authority. Shortly, I will divide the problems of authority systems into those of statics and those of dymanics. The vesting and divesting of authority will be the two actions of the subordinate, which, taken together with two actions of the superordinate, comprise the dynamics of authority systems. But more of that shortly.

For the present, it is necessary to introduce two distinctions that will lead to differing "types" of authority systems. I do this with full recognition of the skepticism with which typologies have come—and properly so—to be regarded in social theory. Thus I will indicate, as I introduce each distinction, something about what I expect its utility for the theory to be.

The first distinction is the distinction between two kinds of transfers: one in which the transfer is made in return for some extrinsic benefit, such as a monetary wage, and the other in which the transfer is made wholly without such extrinsic benefit. In the first case, the subordinate has no expectation that the authority as exercised will benefit him, since there are extrinsic benefits, while in the second, the transfer is made in the expectation that the very exercise of the authority will benefit him. When a prospective employee transfers to a prospective employer the right to control certain of his actions during certain periods of time during the day, he does so in return for monetary payment. When, on the other hand, he joins a union, he transfers to a union representative his rights to conduct wage bargaining with the employer and be bound by the results of that bargaining.

He thus gives the union representative authority over certain of his actions, not because of an extrinsic benefit, but because he believes the very exercise of this right by the union representative will benefit him more than would his own exercise of that right.

The first of these authority relations I will call disjoint, and the second conjoint, denoting that in the first the interests that the subordinate expects will be pursued in the exercise of authority are not the same as those of the subordinate, while in the second, those interests are the same. Systems of authority made up wholly or largely of disjoint authority relations may be called disjoint authority systems, while systems made up wholly or largely of conjoint authority relations may be called conjoint authority systems.

The utility of this distinction between disjoint and conjoint authority relations or systems lies not simply in the fact that the distinction separates into two broad classes of authority systems that we would see as phenotypically very different from each other. It lies, rather, in the fact that the problems of statics in the two kinds of systems are very different. In the disjoint system, the subordinate has no interest in the goal of the organization, for his own goals are extrinsically satisfied. This means first that he need pay less attention to "democratic control" of the superordinate's actions; he need only be concerned that the superordinate is acting in his own interest. Second, when he acts under the authority of the superordinate, his actions are not reinforced by his own parallel interests or motivations, since he is not interested in the outcome, and in obeying authority is only carrying out his part of a bargain. As a consequence, the problems faced by the superordinate in policing his actions are much more serious than in the conjoint system. In disjoint

authority systems, we would expect to see far more in the way of policing mechanisms than in conjoint systems.

A different kind of motivational problem can be expected to arise in a conjoint authority system, the ideal-typical case of which is the commune. In such an authority system, all members have the same interest. Thus my fellow-members' actions will benefit me as much as will my own, and it is wise for me to let them do it all—to sit and be a free rider. We would predict, then, that conjoint authority systems which survive will generally be small; we would also predict that some substitute motivational force, such as the presence of social norms or ideological fervor, will be used in conjoint authority systems to overcome motivational problems.

A second major distinction I will make is between simple authority system and complex authority systems. In a simple authority system, the authority is exercised by the same actor in whom it is vested, that is, the superordinate. In a complex authority system it is not, but rather is exercised by someone I shall call a lieutenant or an agent. Thus a simple authority system at minimum may contain only two persons, subordinate and superordinate, where the minimum number in a complex authority system is three, subordinate, superordinate, and leiutenant. This does not mean that authority systems composed of simple authority relations need be flat, though there is a tendency for that to be the case. But historically, there have been numerous examples of multi-layered systems composed of simple authority relations. Perhaps the best example is the feudal system of the Middle Ages. A vassal was enfeoffed to his lord, who stood in authority over him, and that lord was enfeoffed. as a vassal, to his lord. But the higher lord had no direct authority over the vassals of his subordinate, the lower. They paid homage only to him, were subject wholly to his authority, had no rights of appeal to the higher lord nor were bound by his orders. The system thus consisted of a concatenation of simple authority relations from which a multi-layered structure was built.

A complex authority system can arise only when the transfer made by a subordinate includes both the right to control his actions, and another right: the right to transfer or delegate the first right to another. We may ask just when such a more comprehensive transfer by the subordinate occurs, to get some idea of the kind of authority system that tends to become complex. First, it is clear that when an actor vests authority not in a natural person but in a corporate actor, as an employee of Siemens does for example in becoming an employee, then he must include the right to delegate this authority to a lieutenant. For corporate actors, by their very intangibility, must act through the agency of natural persons. Or whenever a person swears allegiance to a nation-state, he does the same thing: the nation acts only through its agents, government officials, and the person implicitly includes in his vesting of authority the right to delegate that authority. Thus whevever a person places himself under the authority of a corporate employer, he includes the right to delegate that authority, and thus facilitates a complex authority system.

A person is also more likely to include the right to delegate in a disjoint authority relation than a conjoint one. This is not, as in the preceding case, a logical necessity, but stems rather from rationality on the part of the subordinate. If he has no interest in the goal toward which the authority is exercised (as he does not in a disjoint relation), then he is uninterested in whether the authority is exercised directly by the person in whom he vests it, or by another. If he expects the authority to be exercised in a way that will benefit him, as in a conjoint relation, he is in effect placing trust in the superordinate to act in his interest, and he may not include

the right to delegate authority. This suggests something of a paradox: he must trust a person more to vest authority without an extrinsic benefit (i.e., in a conjoint relation), but despite this greater trust he will less likely include in that vesting of authority the additional right to delegate. A person gives much authority over his actions to someone he loves; but he does not give to the other the right to transfer that authority to a third party. In a charismatic vesting of authority, which is another conjoint relation, the follower may transfer control over an extraordinary range of his actions to the charismatic leader, but he may be wholly unwilling to take orders from a lieutenant. (It is for this reason that lieutenants in such systems often begin any command by "In the name of Jesus Christ" or "In the name of Napoleon Bonaparte, I command you to ...") Thus there appear to be strong reasons why a conjoint authority relation is less likely to include the right to delegate than a disjoint one. But in this as well as in the broader question of when the right to delegate is included in the vesting of authority, there is extensive need for empirical investigation. Just when is this right included in the vesting of authority, and when is it not? And how (as in the problem of succession or routinization in charismatic authority) does the superordinate sometimes manage to acquire that right when it is initially not part of the authority vested in him? For as is generally known, it becomes practically impossible for a charismatic leader to exercise direct authority with no lieutenants, as his following grows large. Thus no matter how exclusively authority is vested in him personally, he will have a strong incentive to exercise that authority not directly, but through lieutenants.

The existence of this second right, the right to transfer authority once vested, makes possible an action on the part of the superordinate other than mere exercise of authority. This is, of course, the delegation of authority to a lieutenant or agent. Once having authority vested in him, the superordinate may either keep it to be exercised directly, or may delegate it to a lieutenant, subordinate to him but in authority over the subordinate.

As in the case of the conjoint-disjoint distinction made earlier, it is necessary to justify the simple-complex distinction in terms of its utility in the study of authority systems. First, in the simple authority system, authority is exercised by an actor directly interested in the outcome of the action. The superordinate exercises authority toward a goal he has himself established. But in a complex authority system, this is true only for the superordinate. For the lieutenants and sub-lieutenants who exercise authority at intermediate levels and directly over the original subordinate, their interest is satisfied by the extrinsic benefits they have received (such as a money wage). It is not of direct interest to them, unless the superordinate has in some way managed to make their benefits contingent on it, whether the outcome desired by the superordinate is achieved or not. Thus one can expect some possible conflicts of interest among the lieutenants, between their own personal interests and those that the superordinate has directed them to pursue, and one can expect also defects in the functioning of these authority systems, arising from the conflict of interest. Just as the subordinate has no interest in the outcome of action in a disjoint authority relation, the lieutenant has no interest in a complex disjoint authority relation.

It is also in the complex authority relation that the concept of position apart from the person, and the notion of a person ,,occuping a position" in the organization arises. For in delegation of authority, it becomes useful for the superordinate to delegate the authority, and the resources which accompany it, to something

other than the lieutenant himself, so that they do not become his personal property. The right to use certain resources is a right delegated to the lieutenant himself, as part of the authority, but not ownership rights--not the right to dispose of the resources, nor the right to benefit personally from them. What has naturally evolved as a convenient device is invention of the concept of "position," so that the authority and the resources to exercise it are delegated to the position, remain the property of the position (which is part of the authority system), and are merely used by the person who occupies that position. With this device, the conception of an abstract position as distinct from the person occupying it, and as the recipient of delegated authority, authority systems came to be able to take on a wholly new character. The idea of a system or structure or organization quite apart from the particular persons who occupied it became possible. Historically, this was not easily arrived at, but when it was, the scope and variety of organizations multiplied. The organizational form that has come to be known as bureaucracy carries with it certain problems and difficulties that seem peculiar to it, as well as certain potential versatility that some other kinds of authority systems do not possess.

In terms of the two conceptual distinctions I have made here, a bureaucracy is a disjoint complex authority system, disjoint because interests or ends are not shared by superordinate and subordinate, and complex because the authority is delegated to a structure of intermediate positions that constitute the bureaucracy.

These two distinctions I have made form four logically possible types, conjoint-simple, conjoint-complex, disjoint-simple, and disjoint-complex. In the cells of the fourfold table I have indicated examples of each of these four types.

	Simple	Complex
Conjoint	1. Commune	2. Nation-state
Disjoint	3. Small shop	4. Bureaucracy

Why is it that there is a tendency toward organizations of types 1 and 4? I think that 2 is infrequent because in conjoint transfers of control it is often not rational to transfer the right to delegate; and 3 is infrequent because of the problems of policing in disjoint authority relations limit the span of control, and thus limit simple conjoint authority systems to small size.

#### Statics and Dynamics of Authority Systems

Having made these minimal distinctions among different kinds of authority systems, it becomes possible to divide the processes and problems of authority systems into statics and dynamics. What I mean by the statics af authority systems are those processes and problems that arise within a given established authority structure. By the dynamics of authority systems, I mean those processes and problems involved in establishing or changing the structure an authority system. Making this division, it becomes possible to be clear about just when we are investigating problems of social change, or potential change, and when we are confining ourselves to the study of problems within or between authority systems that do not imply change in the structure of those systems.

Viewed in this way, there are four actions that comprise the dynamics of authority systems, two on the part of the subordinate, and two on the part of the super-

ordinate. The subordinate (or subordinate-to-be) may vest authority in a superordinate, and he may divest the superordinate of the vested authority, that is, withdrawing authority previously vested.

The vesting of authority creates the potential for an authority structure. The delegation of authority by the superordinate creates that structure. The superordinate has two actions that change the structure: delegation of authority, and revoking of delegated authority.

Actions involved in the statics of authority systems are the *exercise* of authority by the superordinate or the agent, and *response* to the exercise of authority by the subordinate (or by the agent, if the authority is exercised over him by an actor superordinate to him).

I believe that much of the reason for the relatively uninteresting character of much theory of authority systems is their concentration upon the statics of authority systems. Much of organization theory, and most of that which stems from the "management decision making" literature, is concerned with the exercise of authority by superordinates in ways that lead to efficient achievement of organizational goals. Much sociological theory and research into the malfunctioning of organizations is concerned with the response of subordinates to the exercise of authority within a given authority structure. But some of the more interesting problems of authority systems, that expand into a far wider range of sociological phenomena than merely "organization theory," are those concerned with the dynamics of authority systems rather than their statics.

Thus I will begin the investigation of sociological problems of authority systems with the dynamics.

#### **Dynamics of Authority Systems**

As indicated earlier, in some authority systems such as those of the nation-state and the family, persons are born into the system. The exercise of choice is thus not a decision to vest authority in a superordinate, but to divest the superordinate of authority. Yet this may not be possible for an individual to do alone, depending on the kind of authoritative or coercive resources held by the superordinate. To divest oneself of the authority of a national government requires leaving the territory of the nation-state, an action that is sometimes prevented by force.

Another alternative may exist, however: to oppose the coercive authority of the state, and by organized action to replace the regime in authority with another. Such actions are revolutions or coups d'etat. The empirical question is the question of the conditions under which revolutions occur, and the question of the conditions under which coups d'etat occur. Similar empirical questions arise concerning revolts and overturns of administrative regimes in other conjoint authority systems: in trade unions, where leadership is thrown out by the members, in schools where a principal is removed after opposition by teachers and parents, in churches where the minister is removed by a revolt in the congregation, and in other bodies of conjoint authority. The broader theoretical question in the dynamcis of authority systems is the question of the conditions under which authority vested in a superordinate in a conjoint authority system is withdrawn by subordinates.

The empirical regularities concerning revolutions are becoming increasingly clear. First, contrary to Marx, revolutions do not arise when the oppression of the working

classes increases; rather, they occur when social change is especially rapid, which ordinarily is accompanied by a general improvement in social conditions, rather than the reverse. Second, though there are a number of revolution theorists who would argue otherwise, the revolution does not arise as a result of an increased sense of relative deprivation on the part of the population. Third, revolutions do tend to arise in conditions when the existing regime has shown itself particularly weak either (as Theda Skocpol (1979) has recently shown for the French, Russian, and Chinese revolutions) due to external military reversals, to inability to solve internal economic problems (as Charles Tilly (1978) shows for the French revolution), or even in some cases due to reforms that are seen as a sign of weakness. Fourth, revolutions do not arise as spontaneous rebellions, springing from simultaneous action on the part of the mass of the population. Rather, they are initiated by relatively well organized and highly committed opponents of the regime. If mass participation does occur, it is only after the existing regime is near to being overthrown either in the country as a whole or in a local area (as in China, for example, where peasants were not mobilizable in the north until the landlords had left).

These facts taken together suggest the following theoretical formulation: If we start with the purposive conception I outlined earlier, an actor's likelihood of withdrawing authority through participating in a rebellion depends on the benefits he sees given a successful overthrow, the effectiveness of his action in bringing about that overthrow, and the costs of failure if he does participate. The empirical facts described above indicate that in most revolutions of which we have examples, the critical factor is the second of these three elements: for it is when the regime is weak that effectiveness of this reaction will be greatest, and it is only those who are part of an organized opposition group who, even under a weak regime, can stand any chance of success. (What sometimes happens, of course, is that once a relatively powerful and organized group has brought about the revolution, as the nobles in part did in France through withdrawing support from the King, or as the Muslim Mullahs did in Iran, the absence of an authority frees the masses to revolt and take the revolution in another direction. This happened in France, and could well happen in Iran, if the central government remains weak.)

One problem with revolutions, of course, as empirical aids for the study of dynamics of authority systems, is that as macrosocial phenomena, they are exceedingly complex, involving not only single events but complex sequences of events, not only persons as actors, but corporate actors as well, both existing and emergent and evanescent corporate actors. Collective behavior, in contrast, such as panics and riots, occurs on a smaller scale, over a shorter sequence of events, and involves fewer complexities of organization.

Perhaps I am assuming too much when I assume you will automatically agree that collective behavior involves the dynamics of authority systems. For these phenomena are very unlike the stable forms of social organization we call authority systems. Yet let us look at one such case: panic in a crowded theater. Social psychologists have shown that panic cannot be explained in terms of some irrational emotional state. Roger Brown (1965) shows that it can be accounted for as wholly rational behavior in a prisoner's dilemma-like situation: we all may be better off if none of us run for the exits, but each person must make a decision not for all, but only for himself. As it turns out under reasonable conditions, a person in the theater will find that if others panic and run, he himself is more likely to escape if he joins the rush; and if others do not panic, but walk toward the exit, he himself is

still better off to run to the exit. As Brown points out, if all make this assessment,

a panic results.

Yet this is unsatisfactory, for it fails to account for the fact that often a panic does not occur, in very similar circumstances to those in which, on another occasion, it does occur. An actor on a stage, or a particularly strong-voiced person in a prominent place, or some other circumstance, will bring order to the crowd.

We can account for both the panic and the non-panic if we conjecture that in a crowded theater, most members of the audience may have implicitly transferred authority over their crisis actions to the crowd. It turns out, if we make some calculations based on this conjecture, that a rational occupant of the theater will under certain conditions transfer control to the crowd, making his behavior contingent on theirs. An important one of these conditions is that their actions are contingent on his. (For the defect in the prisoner's dilemma reasoning is that it assumes his action in rushing to the exit will not affect others, and thus not, in the end, impede him.) Just how contingent on his own action the others' actions must be in order for him to transfer control over his actions to them is given by the ratio of the losses he can expect by walking rather than running (controlling on the others' actions) to the gains he can expect from the others' walking rather than running (controlling on his own actions). The larger the latter quantity, that is, the more he gains by the absence of panic, and the smaller the former, that is, the less he loses by not running, whatever the others do, the less the others' action must be contingent on his own for him to find it rational to make his contingent on theirs, rather than running unilaterally-that is, to transfer authority to them. When this occurs, when there is this widespread mutual transfer of authority, to others in the crowd, or to ,,the crowd" itself, the outcome becomes unpredictable, depending on chance events. On the other hand, if those conditions are not met, and persons find it not to their interest to make their behavior contingent on others (i.e., to transfer authority to them), the crowd will definitely panic.

Thus if we have a broad enough conception of authority systems to allow that persons in a crowded theater may make a unilateral, voluntary, and transient vesting of authority over their escape actions in the other theater occupants, then we can account both for the existence of panics and for their non-universality. Furthermore, we can predict, if we look carefully enough at the structure of the situation, who is more likely to panic and who less likely. We would expect, for example, perhaps counterintuitively, to find those relatively close to the exits to be more likely to run ("panic") unilaterally, while those farthest from the exits to

transfer control, making their actions contingent on what others do.

In another area of collective behavior, the hostile riot, the conception of a transient vesting of authority helps account for certain processes, in particular the peculiar "milling" period, before a hostile outbreak occurs. In ordinary circumstances, most persons have transferred authority over their observably unlawful actions to the police or other authorities. In a hostile crowd with a target (such as a crowd in Cicero, Illinois in the 1950's which gathered around an apartment building into which the first black family had moved, or preceding the Columbia University student revolt in the spring of 1968 when students were milling around the sundial and wandering back and forth between the sundial and the new gymnasium excavation site, which was their target), the members of the crowd would find satisfying some hostile but unlawful action. So long as the police or other authorities are able to maintain control, then (by definition) there is no riot.

But sometimes, as occurred in Cicero and at Columbia, there is an extensive period of "milling around," followed by a single action (in the Cicero case, a teenager throwing a rock at the apartment window, or in the Columbia case, a shout, something like "Let's take over Hamilton Hall'), and then in an instant, all are galvanized into action.

From the perspective I have been developing today, what appears to be happening is this: authority remains vested in the police or other attendant authorities, despite the fact that some other action, if successful, would be felt as highly satisfactory by members of the milling crowd. During the period of milling, an assessment is going on, of each by the others: What would he do if ...? and, What would the authorities do if ...? Each recognizes that the consequences he can expect if he takes an action which is not in compliance with authority depend wholly on whether the large mass of others also withdraws control over their actions from the authorities, divesting them for a time of their authority. Finally, someone who has less to lose than the others, estimating a sizeable following from that assessment, takes an action. Immediately authority is withdrawn from the police or existing authorities by crowd member, vested in the new leader, and the milling period is over.

How do such collectivities differ from those in which no mutual vesting of authority has occurred? Some hint of this is given by a recent book by Irving Janis, Victims of Groupthink (1972), in which he analyzes situations of this sort-where each has given up a high degree of authority over his judgment to others in the group. Janis shows that of course a consensus is achieved but the cases he analyzes suggest that the consensus is less likely to be correct than the situation in which each retains authority over his own actions. If Janis's inferences are correct, they are somewhat disconcerting, for they indicate the dangers of group processes in which each member of the group vests in the group large amounts of authority over his actions. But these illustrations constitute only a beginning. Once we have the conception of each person in a group transferring some portion of authority to the other group members, it becomes possible experimentally to fix the amounts of authority that each transfers to the other, and to examine outcomes of experiments under different structural conditions. And these empirical results also constitute a challenge to the theory: Can the theory account for these results, and if so, how?

The example of persons in a collectivity placing themselves under the authority of others can show another point as well. Such processes are ordinarily described, not from the point of view of the person subjecting himself to the authority of others, but from the opposite side, as "influence processes." A person's or a group's influence may be said to spread widely. But there is something that a physical scientist would regard as an aesthetic appeal that is missing here but exists if one looks at matters as I have suggested. This is the fact that "influence" is not a conservative quantity, subject to laws of conservation, while control over action is subject to conservation. That control is always a constant quantity, and differs only in its distribution. It may remain in the hands of the original actor, or he may have distributed it among others in any of a variety of ways. But as I indicated, this is merely an aesthetic difference, until it can be shown that the property of conservation is valuable for the theory. So I introduce this point only as an aside.

I have pointed to a few problems and processes in the dynamics of authority systems. The last example, of the members of a group who distribute authority over their actions to other group members, contains also problems in statics, because

we are not only interested in what brings about such extensive vesting of authority in others, but how such a system, once established, functions. It is to problems of statics in authority systems that I now turn.

#### Statics of Authority Systems

The kinds of problems in statics of authority systems that come most quickly to mind are those involving formal organizations, and especially ideal-typical bureaucracy. What is it, for example, that makes petty officials in government offices so insensitive to clients' demands? The answer to this turns on a fundamental property of a disjoint authority relation and a fundamental property of complex authority systems that I have alluded to earlier: the fact, in a disjoint authority relation, that the subordinate's interests are not satisfied through his actions that are directed by a superordinate, but apart from them, and the fact that in a complex disjoint authority system, the same is true of the lieutenant or agent. Thus in an ideal-typical bureaucracy, there is the peculiar spectacle (if we were not so inured to it) of a whole structure of persons, at every level in the hierarchy, acting in the interests of an actor other than themselves. It is this structural condition, this conflict of interest between the interests of the superordinate under whose authority the subordinate or lieutenant has contracted to act, and his own residual personal interests, which have not vanished despite the fact that he has contracted to act in another's interest, that creates most of the defects of functioning that are found in bureaucracies. It is responsible for petty officials' inattentiveness to clients' demands (for however service-oriented the goal of the bureaucracy as an entity, the goal of its petty officials is to draw a paycheck with minimum effort). It is responsible for loafing on the job, featherbedding, developing norms to limit production, stealing from a firm by employees, or appropriation of the firm's resources for personal use, excessive attention to rules rather than goals (for the bureaucrat's supervisors find it much easier to punish disobedience of rules than to reward achievement of goals). There are, of course, other sources of malfunctioning in bureaucracies and in complex disjoint authority systems generally, such as the communications costs that arise with size and structural complexity; but the class of problems I have described is probably responsible for a larger fraction of the malfunctions that any other. It is the cause of the extensive policing costs that arise in every large complex organization, and the cause of numerous modifications (of which more shortly) that have been introduced into bureaucratic organizations.

This problem of whose interests are being pursued in a disjoint complex authority system also helps answer the question of why workers in small firms work harder than those in large firms, or why salaried persons in large automobile companies in the United States (though not in large government agencies) work harder than blue collar workers. In both these cases, some conjointness has been introduced: in the first, by the small size of the firm, which leads each subordinate to see his interest bound up with that of the superordinate; and in the auto firms, by a complex system of bonuses dependent on their unit's performance, bonuses which are paid to salaried workers but not to hourly workers.

Turning to a very different form of authority system, the commune, we can describe it as a simple conjoint authority system, in which all have vested large amounts of authority either in a single charismatic leader (as is true in some com-

munes, like that of Jonesville) or in the commune as a corporate actor. Why are communes so unstable? Part of the answer lies in a special property of simple authority systems: the elements of the structure are not positions, as in a complex authority structure. Rather, they are persons. While a position as an abstract entity is not subject to vagaries of sickness. temperament, or mental instability, persons are. Thus a simple authority structure under a charismatic leader is inherently unstable. (A classic example is the case of the Jewish mystic of Smyrna in the 17th Century, Sabbatai Zvi, who imagined himself the Messiah, and was widely believed to be so. But at the height of his appeal, he confounded his followers by converting to Islam (Sholem, 1973).)

This, however, does not account for instability of those communes in which authority is vested in the collectivity as a whole. First, we would expect them to be more stable than the sort under the authority of a single leader. Second, we see empirically that in many such communes, the commune, as a corporate actor, delegates much of its collected authority to an "agent," who is then in much the same role as the charismatic leader. When the commune does not, however, and governs itself through some kind of collective instrument, there remains the fact that the elements of the structure are persons rather than positions. If each has so vested authority in the other commune members, we can expect extremes of psychic instability in the commune: collective euphoria, collective depression, the kind of collective mental instability ordinarily attributed to manic depressives.

But what about the other phenomenon in communes of the 1960's that I mentioned earlier? Why was the principal problem of child-rearing one of inattention to children? The answer lies in a peculiar characteristic of conjoint authority systems: All, leader and followers, share the same interest, and the work of each contributes to the goals of all. As I indicated earlier, such a structure has one major defect: what economists call the free rider problem. If all share the same interests, and the efforts of each benefit all, then my own efforts contribute mostly to the welfare of others, little to my own. Consequently, I may be better off as a free rider, depending on the efforts of others. Unlike a disjoint authority system, the conjoint system has no extrinsic benefits which may be made contingent on my performance. Thus unless the commune has devised some system of punishments for non-performance, it is likely to be beset with a massive free rider problem. In many of the communes of the 1960's, established with an anti-authoritarian ideology, such punishments were not established, care of children was the responsibility of all and thus of no one. As a result, the children were neglected.

Before turning to the question of why Hondas are of especially high quality, there is one other example that I gave earlier which exhibits a pervasive process in the statics of authority systems. Why do people vote (although, of course, not all do)? It would seem that those who do vote in an election, recognizing that those who did not were no worse off than they, would not put forth the effort, small as it is, in the next election. The same free rider problem exists here as in the case of child rearing in the commune. But why does voting not suffer the neglect that children in the communes of the 60's suffered? One answer, of course, is that if it took as much effort to vote as it does to raise children, voting would very likely not be widespread—since the government under whose authority I will find myself is hardly dependent on how I cast my vote, or whether I cast it at all.

This answer, however, is not sufficient, for it does take *some* effort to vote, and my vote has virtually *no* effect on the election outcome. There have been many

attempts by political scientists to account for what they call "the paradox of participation." But only one explanation seems at all satisfactory to me. This is that we have all placed our voting actions under the authority of our fellow citizens, accepting from them mild rebukes if we do not vote, and support if we do, and offering the same to them if they vote or fail to do so. I find it uncomfortable, for example, to admit to my fellow citizens that I do not vote, no matter that I can demonstrate to them that it is irrational to do so. This discomfort is the effect of the mild rebukes that I experience from them. And why do we impose these sanctions? Clearly as in the case of other norms: because it is in each of our interests for others to be bound by this collective authority, and we accede to being bound by it as part of the task of insuring that others are bound by it. We would have very specific predictions from this explanation: persons removed from their social context should be much less likely to vote, for example.

Now, why are Hondas of high quality? The answer lies in one organizational innovation that Honda has introduced. Inspection occurs at the beginning of each unit of operation, each sub-assembly, the final assembly, each painting operation. The receiving operation exercises a "buy off," of its inputs from the departments supplying its inputs, rejecting any item that does not meet quality specifications. The compensation of the department performing the prior operation thus depends on the acceptance of its product by the subsequent operation. This creates an interest, in that department, in two things: carefully inspecting the inputs it receives, so that it is held responsible only for its own defects; and exercising care in its own operations. Thus acceptance-rejection buy-off at the end of the production process reverberates back through the production operations, giving each department a strong interest in maintaining the quality, as well as the quantity, of its output. The end result is an automobile which, when measured by objective standards against others from traditionally-organized manufacturing departments, is of higher quality.

I will call this method of policing the actions of subordinates in an authority system ,,backward policing," beacuse it is policing that begins at the end point of the process and moves backward. It contrasts to the traditional ,forward policing" of complex organizations, which consists of supervision or monitoring by a superordinate (a foreman, a supervisor, a "boss," a manager). The contrast is in two respects: backward policing is not policing by an actor in authority, but cuts across the authority system; and backward policing is policing of the product, while forward policing is policing of actions. In forward policing, the superordinate or his agents exercise authority directly, through the hierarchical structure of authority. In backward policing, authority is not exercised directly. Rather, the authoritative action consists of establishing or delegating the structure of rights that gives each operating group the right to accept or reject the inputs to its operations. But the most fundamental change induced by backward policing is that it restructures the subordinate's interest: his interest, which is satisfied by extrinsic payments in a disjoint authority system, is directly linked to the interest of the superordinate. For the superordinate's interest is in the product of the organization, and backward policing makes this in the subordinate's and lieutenant's interest as well.

Backward policing is an example of one of two general classes of modifications of complex disjoint authority systems that have occurred in recent years.

Other examples within this class are bonus schemes for executives, incentive payments for workers, and internal markets in corporations (an innovation introduced by another automobile company, General Motors, in the 1930's; the Honda

buy-off at the assembly line level carries the internal markets down to the intradepartmental level). These modifications of complex disjoint authority systems have become increasingly widespread; they remain, however, less widely used in government and other bureaucracies that do not have a marketed product. Another more drastic modification of a complex disjoint authority system that falls within this same general class is franchising. The use of franchises in hotels, fast food restaurants, gasoline stations, ice cream parlors, real estate firms, and a number of other geographically dispersed retail markets, has become widespread. When we ask why the franchise, rather than its alternative, an extended authority system, with each manager under the authority of the central executive, the answer is clear: This substitute for authority (since no authority is involved in the franchise relation) again concerns the absence of necessity for policing. Franchise relations are wholly self-policing, at the opposite extreme from the disjoint-complex relations they replace.

A second general class of modifications of complex disjoint authority systems is that of introducing conjointness, inducing a direct interest on the part of the subordinate in the success of the superordinate (which may be a corporate actor, such as a corporation). This is attempted in a variety of ways, which some of you will recognize from experience: company songs (such as the IBM song, which continued to be sung by some employees long after the company was a billion dollar corporation), company social events, collective or joint activities of employees such as war bond or blood donation drives, induced competition with an external competitor, and other devices intended by the superordinate to make the organization ,,like a family." This has probably been done most successfully in Japanese corporations. All these modifications are modifications in the direction of making the subordinate's interest not merely contingent on, but identical to those of the superordinate-that is, in the direction of moving a disjoint authority system toward one that is conjoint. The aim is to bring about identification of the subordinate's interests with those of the superordinate. Elsewhere I call such a subordinate an "affine agent," in contrast to a "compensated agent," for at the extreme, the affine agent requires no compensation-like the volunteer worker for a political candidate, whose sole compensation lies in his candidate's winning. But that brings us to more complex issues of authority systems, for which there is not time here.

What I have attempted to do with the Honda example and the example of the IBM company song is to indicate how authority systems may be modified to eliminate or reduce some of the malfunctioning that exists in the statics of authority systems. Thus one can conceive of matters in this way: the statics of authority systems include processes that produce under certain conditions malfunctioning of the authority system from the point of view of the superordinate. Cognizant of these, he may use his authority to restructure the system, through a different delegation of rights, or through attempting to induce conjointness. These actions belong in the category of dynamics of authority systems, for they are actions by the superordinate that restructure the system. As they indicate, it is problems in the statics of authority systems that induce dynamic processes that change the system. It is also the case that one may profitably explore authority systems that consist of amalgams of different types, for these amalgams have problems and processes unique to them. For example, a nation-state can be regarded as a conjoint-disjoint authority system: on the side of citizen as subordinate vis-a-vis state as superordinate, it is conjoint; on the side of government employee as subordinate, state as superordinate, it is disjoint. Trade unions and some voluntary associations have a similar dual structure. These amalgams have unique problems of their own, one of which has been described by Robert Michels as the iron law of oligarchy. But all this gets into a greater level of complexity than there is time for today. I must content myself with having outlined the elements of a theory of authority systems and having indicated some of the processes in the dynamics and the statics of authority systems. They have given some sense, I hope, of the nature of the theoretical enterprise, and perhaps, if I have been successful, a little more insight into various social phenomena.

The challenge to "theories of authority" as developed by classical theorists is just begun here. I use this forum to initiate the challenge, and will develop it further in more comprehensive work.

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