



MANAGEMENT IN A DYNAMIC ECONOMY

Dr. Abraham Zaleznik

Program for the
Management of the
Armed Forces
Industrial College of the
Armed Forces
Washington, D. C.

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Reviewed by: Colonel Edgar J. Ingmire, 3 October 1962

INDUSTRIAL COLLEGE OF THE ARMED FORCES
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18 September 1962

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COLONEL MARTHENS: Admiral Rose, Gentlemen:

Today we continue on with the Management Section of Unit I, and our topic this morning, Management in a Dynamic Economy, is one that is certainly appropriate in our present-day economic posture. It is a subject that is interwoven throughout our entire course here at the Industrial College.

To discuss this challenging subject, we are fortunate indeed today to have with us Dr. Zaleznik from Harvard University. We are doubly fortunate in that he came to Washington today on a day that there is a great migration out of Washington to Boston. There is an election on up there today. But he hasn't ignored this, and he will have to leave quite rapidly after the lecture to return to Boston to perform some job up there. I have an idea it has to do with the election also.

Dr. Zaleznik is well qualified to discuss this subject with us due to his wide research and his extensive experience in this area.

Doctor, I am delighted to welcome you to the Industrial College and to present you to the class.

Gentlemen, Dr. Zaleznik.

DR. ZALEZNIK: Thank you very much. It is a great pleasure for me to appear on this platform to speak on a subject that is of considerable interest to both practitioners and researchers and to persons who are more interested in

the theoretical aspects of the problem.

The reference to my quick return to Boston for the election is part of it. As you know, the issues in Massachusetts have something to do with the legitimacy of power and the sources of power, and whether power is a commodity that can be transferred on the basis of name or whether it has to be demonstrated on the basis of performance. This has a little something to do with the subject of my talk this morning, *Management in a Dynamic Economy*, simply because no matter what the structure of formal organizations and the content of their problems the pervasive issue of power, its nature, its allocation, and its distribution are some of the most central questions in management of all kinds of organizations.

The term "dynamic economy" in the title of my talk I think refers to one very basic fact about our structure today, and has to do with the rate of change that industrial organizations are facing. There are several trends at work that result in a highly marked degree of change, and this becomes a central problem of concern to managers.

One development that is leading to the particular type of dynamic system we are living in has to do with the fact that industry is becoming more and more science based and less and less based on traditions. By "science based" I am not referring to management as a science, because this hasn't emerged. I am referring to the fact that the production and distribution of goods and services are more nearly rooted today in the developments of science than they ever have been, and this means the introduction of new kinds of specialists, new kinds of professional persons, individuals with unique training, with a language system all their own,

making for some very complex problems of communication. We are in a stage now where we are facing the emergence of some very strikingly new technological systems that have no relationship to common-sense experience. There is no way in which any individual, by living a life in the ordinary course of his experience, would be able to learn apart from the educational system about things such as higher forms of mathematics, electrons, nuclear physics, chemistry, and so on.

Another aspect of our changing industrial scene is the fact that managers are facing increasingly the challenge of learning to work in cross-cultural settings. It is no longer possible for top leadership in government and business, certainly, to work within a limited and carefully defined cultural boundary. The development of the Common Market in Europe raises some highly complex competitive issues that will demand of our industrial leadership the capacity to communicate with individuals whose cultural experience is quite different from our own, and this will put them to a very severe test.

The third aspect of change contributing to our dynamic economic system today is a greater degree of interdependence among the various subsystems of our society. Business cannot function apart from developments in government, and of increasingly greater significance industry cannot function apart from developments in universities.

To cite one very simple example, our universities today are supporting research based more on a higher proportion of funds for research which come from private industry and government than has ever been experienced before. This is a matter of some concern to people in the universities. But, aside from that point,

it testifies to the fact that industry, government, and education are interdependent in the management of our economy.

Perhaps the fourth point that needs to be mentioned, contributing to the dynamic nature of our economic system, is the fact that we are dealing with an accelerating rate of change which becomes an important problem in and of itself. Change has been with us always, I suppose, but I don't think there has ever been a period in history in which time and space are so easily manipulable as they are today, where individuals are faced with making plans and decisions where the unknowns are so vast, and where the areas of specialization and of new knowledge are so great that it is completely impossible for any one person to hope to stay abreast of all these developments and to have expert knowledge in even a few of them. This accelerating rate of change becomes a condition that is of very great significance in understanding the challenges and issues facing managers in our society.

If I had to sort out what one of the main functions of management is, I would state it somewhat as follows: That the job of management is to build an internal organization capable of adapting to external reality conditions. As I have indicated before, the external reality conditions are the result of change. But, more importantly, the job of a manager today, it seems to me, is to build an organization, an internal organization, that is capable of functioning as a pro-active unit. I distinguish pro-active from reactive. Organizations in the past have reacted to change externally imposed, but they have not learned how to become a pro-active organization where they search out opportunities in the environment and seek to affect or change the environment to conform with some sort of objectives that are

considered desirable by the members of an organization. A pro-active organization is one that is actively seeking new opportunities in the environment and is not waiting for events to unfold before it moves. This is one of the basic definitions in my mind of the function of a manager today.

But, in the face of this attempt to become a pro-active organization, in the face of all of these external conditions and changes I have described briefly, I think we should bear in mind one very important theme in the discussion and study of management problems. This theme is simply that there are certain very basic and pervasive issues in human organizations that have been with us for a long time, ever since man decided to group into some collaborative unit in an attempt to affect his environment. These are classical issues in human organization that did not begin with man's race to the moon nor will these issues end when he achieves this objective.

If one reads Biblical reference, Biblical stories, the great literature that has been handed down through the ages, these classical themes appear again and again, and /certainly in the Greek tragedies and in Shakespeare, and become very great challenges to all of us. This only attests to the fact that these classical issues have something to do with the nature of man and his relations to other men in organized human activities.

Because of the particular time limits we are working within this morning, I am certainly not going to attempt to cover all of these, but I would like to mention four such classical issues and organize the main body of my remarks around them.

First is the issue of managing power and authority in formal organizations;

second, the management of cooperation and conflict in formal organizations; third the problem of managing change; and, fourth, the problem of developing leadership talent.

What I am suggesting is that for all of us it would be very worth-while, in studying new trends in organizational practices, to see how these trends are related to these basic classical management problems. With this perspective I think we can achieve a much more sensible diagnosis of these issues. Let me restate them.

The management of power and authority. How do men with unequal quantities of power organize their relationships to each other to enhance the effectiveness of an organization and to achieve creative solutions to problems?

Second, the management of cooperation and conflict. Under what conditions is cooperation a super-goal? Under what conditions is conflict a value goal which should be sought in organizational relationships? What is the relationship between cooperation and conflict? How are these relationships managed?

Third, the problem of managing change. When I get into this question I will deal in the main with the problem of resistance to change, which is a very important area.

Fourth, the problem of developing leadership talent. This has always been a scarce resource in any society, and it is an even scarcer resource today.

After discussing these four classical issues of management, I'd like to briefly again turn to the question of implications--what might be some developments looking ahead that would be worth watching and being a part of in understanding the evolution

of the managerial function.

The management of power and authority, as I indicated, represents one of the basic issues facing all managers in all organizations. What isn't too clear in the minds of some is the fact that there are different types of power and authority in organizations. It is not one type of thing--authority. There are several components to it, and it is worth while keeping in mind what the various sources or bases of power and authority are and how these tend to interact, how they tend to play in with each other.

There are three types of power and authority in organizations that interact. The first and probably the best known to all of us is the hierarchical authority. Hierarchical authority is the capacity that an individual has to influence and control the behavior of other people, based on a position that he occupies. It is sometimes called positional authority, and any person who holds an office is vested, initially, at least, with a certain degree of power or potential to influence the thoughts, feelings, ideas, and behavior of other people.

Hierarchical authority is based essentially on the capacity to reward and punish. That is at least the classical position. If an individual in an organization isn't influenced in a certain direction, a direction, say, desired by a person who has a higher status than he, then presumably that individual will find this affects the degree to which he is rewarded and also punished. It's related to the fact that individuals are seeking to gratify needs as they work in organizations, and the more needful a person is, the more highly motivated he is, the more he seeks to satisfy these needs through his work activity in organizations, the more he is susceptible

to influence utilizing reward and punishment. This is the essence of hierarchical authority.

Psychologically, the roots of hierarchical authority reside in the earliest experience of the individual in his family, in the sense that a son's relation to his father classically is based on a perceived capacity to be rewarded and punished by an omnipotent power figure. Psychological studies of human development indicate quite clearly that individuals, by the time they are 4 or 5 years old, are experts on problems of power and authority. They have experienced tremendous fantasies about what it's like to have power. They have been susceptible to extraordinary wishes to be in a powerful, omnipotent, position themselves, and they develop a whole set of logic about the nature of power relationships that we like to call infantile, but the only trouble is that the vestiges of these infantile ideas about power seem to persist through adult life. So it's quite difficult to limit it to just this fairly formative period.

I mention the early formative years to indicate the pervasiveness of this preoccupation with power, and the extent to which individuals are terribly tuned into how power works. They have been trained this way. They have thought about it consciously and unconsciously for many years. And, as I indicated before, they are most familiar with the nature of hierarchical authority, because their earliest training has been in this area.

The most important aspect, again, of hierarchical authority is the fact that it tends to reside in a position. You recall the military slogan--at least this was the one I heard during the Second War in the Navy--that one salutes the uniform and not

the man, which is a way of saying that the mantle of authority and power is symbolized and institutionalized in a position, that the personality characteristics of the individual are not as significant, theoretically at least, as the very fact that an incumbent in a certain position has vested in him a certain degree of power and authority.

The second type of power and authority in organizations is professional authority. This is sometimes called the capacity to influence the thinking and behavior of other people through the application of expert knowledge and opinion, based on professional qualifications that are understood, and sometimes misunderstood, and that there are ways of solving problems and dealing with reality issues that are not vested in a position but are vested in the training, experience, background, and knowledge that the individual brings to bear on the problem.

Professional authority, theoretically, at least, has its roots in the educational system of our Nation as well as other nations. Presumably the tradition of science in Western civilization is rooted in the exercise of professional authority and it is exemplified by the idea that you never judge the quality of the work by the motivation of the actor or his personality or his position, but that the extent to which his expert knowledge is able to be demonstrated^{and} / the extent to which his knowledge leads to the solution of problems become the main criteria^{and} for judging the results.

This, too, the application of professional authority, is also related to reward and punishment, but through a much more complex and subtle root. It's not a direct relationship. But, insofar as any individual, through the application of professional authority and knowledge, is able to solve problems, then there is some neat

satisfaction for somebody along the way. Probably the simplest case I can give of this is the relationship between a doctor and a patient. The doctor can't hire you, he can't fire you, he can't give you a pay increase or a decrease. You go to him basically on the expectation that he has some ability that will make it possible for you to become well when you are sick. You invest your trust and confidence in these qualifications, and sometimes unwisely, but at least basically this is the initial position, and you listen to him because you generally expect that if you follow his advice there will be a happy outcome for you and that if you don't follow it the outcome will be poor. It represents in effect a state of dependency that you have in that point in time on an individual with different knowledge from that which you and I have.

The third type of power and authority, that I won't dwell on too long, has to do with the power associated with affect, or love, to put it very simply. The great leaders of the ages have been people who have had extraordinary personal magnitude or the capacity to stir up the emotions in men and women, such that these individuals identify with these leaders and are willing to follow their advice and influence. Affect means the expectation or the desirability of being loved by a person whom one admires very much. There is a term for this type of leader. He is called a charismatic leader, the one who generates tremendous emotion. It's the stuff out of which dictators come, and also some very great leaders with very strong ethical and moral principles.

Our earliest experience with the power residing in affect is also in the family, because the exchange of love and affection in the family unit is one of the most basic

experiences to all mankind. It, too, carries over in our relations as adults in organizations and becomes a very important source of influence.

In developing how these types of power and authority interact and what sorts of problems they raise, I am merely going to concentrate on hierarchical and professional authority. The authority residing in affect is much too complicated to develop this morning. That doesn't mean it is not important. It's just very tricky, and, given the limits in time, I'd like to concentrate on hierarchical and professional authority.

These two types of authority exist in varying degrees and combinations in all organizations. None of them is inherently good or bad. It is the way they are utilized and toward what ends that becomes very significant.

In science-based industrial organizations, professional authority is on the increase. We are introducing specialists, people with very unique backgrounds and training, whose job it is to bring to bear their expertise on the solution of problems. But, in the course of becoming science-based in our industrial society, we are seeing the emergence of a conflict between these two types of authority-- hierarchical and professional. Hierarchical is traditional, and by and large it tends to be dominant, simply because it is traditional. Those individuals who consider themselves generalists tend to be very much suspicious of professional authority. There is nothing that a general likes to do better than to debunk the specialist. There are some well known ploys for debunking that I am sure that we have seen, and maybe some of us have practiced these in the course of our careers. This form of debunking is more an attempt to act out the latent suspicions

and hostilities that individuals who exercise hierarchical authority have toward the professional type. I'll mention later on the case of the line-staff relations, which is a very good instance of the interactions of these two types of authority.

By and large, our studies of authority relationships in organizations tend to show that where the two interact, unless there is some very wise management and some very careful attention paid to power relations, professional authority will always come out second best. In discussing this with colleagues we came up with the notion that we may have operating here a parallel to Gresham's law. You are familiar in economics literature with Gresham's law of money. I think-- I always get this twisted--it's bad money drives good money out. I think by and large in organizations we have a Gresham's law of authority. Hierarchical authority drives professional authority out.

This becomes a very serious issue, because, if modern organizations are to be based on scientific applications, if modern organizations are to introduce more and more specialists, then somehow these two forms of authority have to learn to live together and to be mutually supported rather than in competition. This takes some very wise management and some very careful attention to the nature of the interaction of these two types of authority.

Hierarchical authority tends to thrive under conditions of clarity and tight control among the relationships of superior and subordinate. It trusts no ambiguity. Things have to be spelled out--objectives, means toward achieving the objectives, what the relations between superior and subordinate are, and so forth. Professional authority, on the other hand, thrives least well under conditions of clarity and

structure. It thrives most well under conditions of, I would almost say, maximum ambiguity. If you have watched people doing research, if you have watched the process of problem-solving at work, you will know that there is sudden death to creative problem-solving when there is an intolerance for ambiguity. Individuals have to be capable of living comfortably in ambiguous situations in order for them to toy with a problem and to see alternatives and relationships that they couldn't dream of before, and any attempt to structure a problem too quickly or to achieve clarity too quickly is anathema to those who seek to exercise professional authority.

This suggests the flavor of the conflict between professional and hierarchical authority. People who function under systems of professional authority are interested in questions, whereas on the other hand people who function under systems of hierarchical authority tend to be more interested in answers.

You heard, I think it was on television, a very novel program in which individual panelists had answers for which they were seeking questions. I think this all too frequently happens in our organizational life.

People who operate under professional authority like fluid lines of communication. They like to be able to talk to most anybody they want to when they want to. They like flexible work units and the capacity to restructure working relationships given newly emerging problems and issues. They like to operate under a system in which there are a minimum number of levels of authority, in other words, a flat type of organization structure. This runs contrary to one of the so-called principles of scientific management, the span of control. Basically the span of control tends to operate or function in hierarchical structures, but under those

conditions of the play of professional authority, span of control is not necessarily valid.

Now, I have tried to describe the nature of these two cultures, hierarchical and professional authority, and some of the characteristics of each, and I would like to cite two common organization problems as case examples of issues involving the interplay or interaction of the professional and hierarchical authority.

One I mentioned before, which is line-staff relations. The second is problems of centralization and decentralization. I am sure these are two well known issues that you have studied and examined many, many times in your experience and in your reflection.

In line-staff relations, line officers, line executives, frequently get very much disturbed at staff people who basically are the only influence they tend to have, at least formally, and we'll get to the informal influences in a second. Staff people's influence is based primarily on their exercise of expertise and knowledge. Frequently line executives have a great deal of difficulty understanding why these people in staff positions go all over the place, violate certain norms of how one communicates in an organization. I submit that it's basically because the staff people have grown up under a different kind of cultural experience. They have been conditioned to expect fluidity and ambiguity, whereas line people may have a lot of good reasons and even be conditioned to expect order and structure.

But many times the issue becomes more complicated, because staff officers and staff executives become seduced by hierarchical authority in the sense that they get a taste of it and they like its potential for influencing and controlling.

They are not content to influence through the exercise of their expertise but would like to jump into the competitive arena and start slugging it out, desiring a great deal more power themselves. But they play it two ways. When they are accused of engaging in power struggles they'll deny it and creep behind the shield of professional authority and say, "See, it's not really true. I'm just here in the position of the expert. I'm not out to influence other than through my knowledge." But as soon as that little interchange is over they are back into it. They become seduced. They lust after power. But they don't do it squarely, oftentimes. They'll do it through hidden ways.

It seems to me that one very important issue for staff people is to understand the nature of the legitimacy of the power and authority that they have, rooted in their specialized activity, and to avoid crossing over to the power plays using hierarchical authority. This means avoiding the kinds of rivalries that are really based on being close to individuals who themselves have a great deal of power and trying to indirectly use them to fight one's own battles.

It seems to me that an analysis of any organizational problem in terms of these dimensions of power and an attempt to encourage individuals to examine with each other what the bases of authority and influence are in their relationships with each other can produce a great deal of clearing of the air and a great deal of understanding and a great deal of progress in the solution of organizational problems with less waste of time and energy.

The second case in point that I want to refer to has to do with problems of centralization and decentralization. In terms of the analysis I have presented so

far, you can define decentralization as an attempt to redistribute hierarchical power from the top to lower echelons in the organization. It involves the redistribution of power. When we say an organization is going to decentralize, the district manager or the division manager can now make certain decisions that up until this time had been made by top levels. We are in effect seeing a process of redistributing power and reallocating it from the top to the lower echelons.

But the difficulties and, I think, much of the problem of centralization and decentralization arise because any given decision to redistribute power can't stick; it's not binding; it isn't permanent; it's subject to change. This is simply because of the peculiar nature of accountability at the top. There is no way in which top-level executives in any organization can redistribute their responsibility for the successful outcome in their organization. This means that, because they have this responsibility, they also are in a position to take the authority back that one time had been delegated. This tends to lead to confusion, except that individuals in the middle management levels of organization who are very mature and wise understand this and don't operate under the adolescent assumption that, once power has been given to you, it is yours to keep and will never be taken back. They understand the nature of responsibility and accountability and are perfectly willing to recognize the limits under which they operate.

On the other hand, the failure of many decentralization schemes results in part because top executives themselves are very reluctant frequently to give up portions of their power, even though they know that some day, because of accountability, they might have to take it back. They are afraid to give it up because they

distrust power as it exists in somebody else's hands.

One of my favorite analogies that helps me understand the nature of the executive who distrusts power in someone else's hands is the reading of Shakespeare's Macbeth. I call this the Macbeth complex. I am sure this is referred to generally. It's nothing new with me. You recall that in Shakespeare's Macbeth Macbeth killed the king and took over, and in the course of this he became very much suspicious of all his subordinates and began chasing them all out. He simply was afraid they were going to do to him what he did to the top man himself. This Macbeth complex is an easy one to develop in highly competitive organizations that are engaged in power struggles, and it's under these conditions that you will find top executives very distrustful and unwilling to let go of power, even though rationally they ought to for the successful functioning of the organization.

Let me move on to a consideration of the problems of cooperation and conflict. There are some basic points I want to describe, although somewhat rapidly. For some reason there seems to be the pervasive notion that cooperation is a desired state, that this is an ideal, and that any time there is an absence of cooperation this is an indication of trouble, and that the trouble needs to be eliminated and a return to this idealistic state is desirable.

I don't think this is true. I think one can argue just as well that the absence of conflict or the maintenance of cooperation as an ideal state is an indication that an organization is less creative than it can be, is less willing to engage in the exploration of reality issues, with individuals usually afraid to trust their own aggressions, unwilling to expose themselves to the thinking and ideas of others,

and that therefore the result is some inadequate organizational solutions to problems.

It seems to me that individuals in organizations should be encouraged to expose themselves to the thinking of other people and to fight out conflicts of interest/ and competition of ideas on their own merits. One of the ways in which this can be done best is through stressing openness of communication in organization relationships. Under an open system individuals are encouraged and expected to communicate fully. There is to be no withholding of thoughts and opinions on a particular area. The leadership of these types of organizations stress the value and importance of bringing conflict up to the surface. They will never invoke the idea of cooperation because they'll recognize that this tends to make people feel quite guilty and it will drive conflict underground where it is no longer available for work.

Another aspect of the resolution in dealing with conflict in a creative way in organizations, besides this openness of communication, has to do with a skill on ordering goals, in stating priorities. Where conflict goes awry and where it tends to become destructive is under those conditions where individuals involved in it have no sense of what the priorities and what the common objectives in the problem-solving activity are. The executive who is an articulate man, who has the capacity to synthesize and restate objectives for others to hear and think about has a characteristic which is exceedingly important because this articulation becomes a basis for containing and controlling conflict so that it doesn't reach destructive stages but maintains itself at a very constructive level of activity. It's the type of talent

that also is able to assess risk, talent that has the courage to take risks but also that has the courage to say that a risk at a certain point in time is one that the individual isn't willing to take. I think we have a case in point in our international relations in the relationship between our Government and Cuba, where the individual in command is willing to state what the risks are and that at this point in time he is not ready or prepared to run them.

Let me turn now to certain issues of change. Again I hope you understand that I am trying to cover various things and at the same time it is very difficult to get into depth in each of these. We could spend quite a lot of time, I think, on any one of these issues.

On problems of change I want to deal especially here with the issue of resistance to change, which is a very common phenomenon and one that badly needs understanding. The basic point I want to make here is that resistance to change has gotten a dirty name among members of organizations. The worst thing you can be accused of in contemporary organization life is not cooperating, and the second worse thing you can be accused of is resisting change. These two are very neploys for inducing guilt in individuals. Just as I said that there is no super virtue in cooperation, there is also no great crime in resisting change. They are basically two types of resistance that badly need to be distinguished. For want of better terms we call these rational and irrational resistances to change.

Let's take a case to illustrate rational resistance, where an individual who, say, heads a department finds that, because of new technological developments, his function is to be integrated into another group and, to put it boldly or bluntly, he

doesn't have a job. If you watch, as I have, in organizations, what happens, it is that the individual feels terrible, and when he tentatively tries to express these feelings to indicate what his reactions are, he is plainly told he shouldn't feel this way, that the goals of the organization are superior and demand this, and therefore he should really buck up and go along with it.

If wouldn't be rational for him, he wouldn't be a sensible person, if he took this literally and didn't feel bad. Any time an individual is in a state of deprivation, he should feel lousy. If he doesn't, he's not well. He's sick. A sign of health, it seems to me, is the capacity to recognize when one is operating in a state of deprivation and to acknowledge the feelings that this tends to arouse.

On the other hand, irrational resistance to change represents the collective expression of fear of the unknown. That is where individuals don't have any tangible basis for feeling deprived. They can't see events in the real world that indicate where and how they are going to be deprived, but they still feel anxious and concerned. This is an irrational basis for resistance and is also a very serious problem. It's like, very much, anxiety. Anxiety is that terrible feeling when you don't know what causes it. That is, you can't objectify easily the events in the real world that make you feel the way you do. It seems to me that one of the basic processes we have to introduce in modern organizations is to learn and to help others to learn what the difference is between rational and irrational resistance and the different methods of coping with it. Perhaps we can get into that shortly.

Let me just move on quickly to the fourth area, the development of leadership talent, and then we'll stop for our break. Of course it is an old saw that

leadership talent is scarce, and one of the main functions of any society and any organization is to train the young so that they can succeed the older generation. This means bringing up and developing new talent as it emerges. The problem, however, is complicated by the fact that our present methods of training the young, so called, are based on a very traditionalistic society that really can conceive of man as being in a state of learning only through adolescence, that somehow, when adolescence is passed the need to learn stops and magically you are fully prepared to cope with the problems of the world, and there is no need for learning.

Now, I take it that one of the reasons for this school and schools like this is the recognition of the fact that there are intermediate periods in the development of individuals where the learning process has to become the major activity, has to become central to the individual. I think this is a very important development and one that badly needs experimentation. I don't think that we have found fully the correct pattern for this type of developmental experience and it's going to take quite a lot of experimentation and thinking in the future.

I think one of the issues, too, is the need for career counseling of individuals in organizations. Because of the absence of career counseling individuals many times are left too much on their own and can't get help at points where they need it in order for them to develop as fully as they might.

I think today one of the issues we face in the development of leadership talent is the peculiar and very special problem of the middle manager in our present structure. I think this is one of the most crucial stages in the developmental process, simply because it is in the middle-management period that the honeymoon is

over, that the individual starts competing with a vengeance and becomes preoccupied with whether there is room at the top for him, that he becomes entrenched in his specialty, and for him to make the next step into a top position he has to be able to adapt and learn to deal with certain kinds of reactions and issues that he didn't have to face before.

This whole question of middle management in the area of development of executive talent is one that will require a good deal of thinking and attention in the future in industry, as well as in government and in the military, and it is something that we can all expect will be given a great deal of attention.

Where I end as far as implications are concerned is really to make a plea for, first, some organizational experimentation. We need to become inventive socially and to create new forms of organization, to try them out in pilot-plant stages, to get some data on how they work, and to learn to be as innovative as we possibly can in the area of formal organization.

I think, secondly, we need to utilize the talents of people involved in social research in the area of organization planning. There is a great deal that can be done in setting up a collaboration between responsible executives, practitioners, and individuals who make it their career to study organizational processes. This might be interpreted as a selling pitch, and I guess it is one, to get greater interchange between people doing research in this field and the practitioners.

The third has to do with increasing or hastening this trend toward professionalization of management. Basically this means providing a medium through which individuals can share their experience as managers and learn from it and through

it.

I think there will be time for discussion, so I will conclude my formal remarks at this point and then pick up questions as they come.

Thank you very much.

QUESTION: Doctor, last summer I read in some trade journals that top management was beginning to take a dim view of some of the training that was being conducted at colleges and universities around the country for managers. They didn't seem to think that there was much of a payoff. Do you care to comment on that?

DR. ZALEZNIK: Yes. I think the question refers to the problem that some managers have experienced with graduates from schools of business administration and public administration and others, where the emphasis in the program is not toward immediate payoff. In other words, it doesn't involve a high degree of technical specialization. They find that their job in bringing in these graduates is to provide some additional training, to help them get established and become useful in the organization. The worst example of this is the one of the graduates who have been accustomed to dealing with broad issues and problems and find that these aren't the kinds of things that they are expected to deal with right away, and they get a little impatient.

There was a cartoon some time ago illustrating this issue. It showed an elderly minister talking to a new graduate of a school of theology, and the elderly gentleman said to the younger man, "Well, Smith, what I had in mind was something other than concerned with immediate policy problems." I think this illustrates

the anxiety that executives experience with the younger person who has had this broad and sometimes fairly general training.

Justifying it for a minute on the side of the universities, the problem is simply this, that to develop leadership talent over the long range, as in any profession, the job of the university is to provide the structure that the individual can use throughout his lifetime, and the risk you run is that it is less immediately applicable to his immediate situation. But presumably it should enable him to work more creatively when he gets into the middle-management levels and also to work more creatively at the higher levels.

But this is a very real problem, and there are some things to be said on both sides.

QUESTION: Doctor, in larger industries is there a distinct trend toward either centralization or decentralization of authority?

DR. ZALEZNIK: It works-like the fashion cycles. For quite a while there was a very strong trend toward decentralization, notably the case of the General Electric Company. It developed a philosophy of decentralized operations, but then when you find episodes like the price-fixing on contracts for power-generating equipment and certain other problems of a related nature, in which an organization is held accountable to obey the law, then top executives learn that they can't hide behind the maxim of delegating authority to somebody else. They have to remain accountable in the eyes of the law, since they are the responsible officers of the organization.

Another force that has resulted in this movement away from decentralization

somewhat has come about because of the development of data-processing systems that make it quite possible to generate and deal with highly complex data in relatively short periods of time, so that it becomes increasingly more easy for top executives to make decisions over a wider span of activities.

It seems to me that there is no fixed position that can be taken. I think the most sensible argument that is made is to view decentralization and centralization in some way other than an all-or-nothing way. In other words, certain functions are decentralized but others are not. The job of an organization is to think through the problem of what sorts of management issues they want to decentralize and what sorts they do not, and to constantly make these discriminations.

This means that there is no solution to the problem at any point in time that will last for a considerable period of time. This has to be constantly reviewed and explored and the whole issue thought through, as to what sorts of things can be decentralized and what sorts of things can best be centralized, and then some guidelines have to be established accordingly.

QUESTION: Doctor, from your comments, I am sure you are familiar with C. P. Snow's thesis, "The Danger of Science in Government." Do you think we have that danger in the U. S. today? What do you think about it?

DR. ZALEZNIK: I don't know that C. P. Snow was dealing entirely with the danger of science in government. I think he was also dealing with the challenges of science in government. Essentially C. P. Snow, in his Harvard lectures a couple years ago indicated that where government policy is built on the utilization of scientific knowledge, where confidence is placed in one man and one point of

view, you will run risks, and one risk you run is that the scientist who is influencing policy forgets the nature of his authority and enters into the power place and therefore allows his scientific judgment to be distorted.

What this suggests, and this is what I think we do, is we set up competitive scientific activities in government, just as we find scientific competitive activities in the universities. A good illustration of this, for example, is the fact that in the attack on poliomyelitis there were two quite different theories about the principles of immunization. It turned out that both proved effective for somewhat different results.

What this means is that top administrators will have to rely on panels of experts, set up competitive study groups and competitive orientations, and then evaluate them as best they can. The danger that Snow is pointing to is the undue reliance on one man who is fallible and subject to a lot of distortions.

I sometimes think, though, that the problem of the scientist, and this applies to industry as well as government, results from the fact that what isn't too well understood is the nature of scientific tradition, and executives are unwilling to deal with the scientist on his own terms. I have frequently heard the comment made by an executive that he wished the scientific people in his organization would be different and could think like administrators. This is a bad position for him to take. The worst thing to want a scientist to do is think like an administrator, because, once he does he will lose the validity of his position.

Snow's theme of two cultures, I think, dramatizes the issue we are facing-- two cultures, two completely different orientations toward life, toward experience,

toward inquiry, toward solving problems. Somehow the two have to get a good deal of understanding of how each works. It seems to me we need a lot of experimentation with these forms.

QUESTION: My question concerns two concepts of authority. As I understand it, we have the traditional concept, which could be expressed as the right to give an order and to exact obedience. Then we have the concept suggested by Chester Barnard, which is that the only authority an individual has is that which his subordinates are willing for him to exercise. I wonder if you will comment on this.

DR. ZALEZNIK: Chester Barnard's notion that the executive has authority only insofar as the subordinates are willing to give it to him represents the position that hierarchical authority, or authority of position, works only as long as the activity of the top people results in positive outcomes. In other words, if the leaders make the right decisions as defined by the outcome then they get increasingly a willingness of subordinates to follow their lead. Chester Barnard also uses a term that I think characterizes this. He refers to it as a zone of indifference. He says that hierarchical authority works best under those conditions where the decision is within the zone of indifference of the subordinates. In other words, the decision at what time we should have a coffee break is within my zone of indifference, and I am thoroughly happy to let hierarchical authority call the shot. But the decision of what kind of research to undertake is outside of my zone of indifference. That is, I care quite a lot, and that's where I want to pitch and work hard.

It seems to me that the concept of the zone of indifference is a fairly useful one. You will get the least reaction to the exercise of hierarchical authority when

the decision itself is within people's zones of indifference. Otherwise it becomes a bit more complex.

QUESTION: Doctor, in your summation you referred to a plea for new types of organization. Would you care to comment on that?

DR. ZALEZNIK: Yes. By new types of organizations I am thinking of the following: Setting up flexible task groups as a unit of organization; in other words, instead of rigid departments as the basic framework for an organization structure you might have a departmental setup where individuals within it become identified with task groups. These task groups will shift depending on the nature of the problem, the timing, and so on.

Another aspect of organizational experimentation, or another type, has to do with establishing flat organizations in contrast to pyramid. That is, there is no organization that is completely flat. It will have some sort of pyramid shape to it, but, instead of a steep pyramid it can have a relatively flat shape. This means experimenting with organizations in which you will have one man who has many subordinates reporting to him, and his method of supervision changes. What you are doing with a flat organization is putting the emphasis on the work unit as the basic center of activity and you are placing less emphasis on problems of reporting through to the top.

Another form of experimentation has to do with new types of problem-solving activities. I mean, we have to do a lot more work with the kinds of group structures that exist for solving problems. We need to do some experimentation with line-staff relations, where, for example, we might eliminate this distinction for

• certain periods of time in the interest of moving on a particular problem.

There are a whole host of experimental forms. In the area of technology there are a lot of opportunities for experimentation that haven't been tried.

Part of my plea, I suppose, is that we never undertake an experiment in organization planning unless we have built into it some method of assessing or evaluating the results. In other words, we build in a feed-back mechanism so that we can learn from it.

I think this again is where we have many opportunities for collaboration between research people in universities and administrators in organizations. A group of us, my colleagues and I, are working on one such study in a development center of a large organization in which essentially we are studying their change process. They are experimenting with a new form of organization, collecting a lot of data, analyzing it, and attempting to measure outcomes and effect. I think this is quite challenging. All it does really is try to apply the same methods that were used in physical research on the study of social and formal organizations.

COLONEL MARTHENS: Dr. Zaleznik, I am sorry there is not more time to probe into your background and wide experience in this area. I know I speak for us all and the Commandant of the school. We thank you very much for coming here at this busy time and giving us the advantage of your lecture this morning. Thank you very much.