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Goals and Values and Social Action: A Model With Complications

AS IT IS nowadays the fashion to say, let us take a simple model and then complicate it.

Several years ago, with two colleagues, I had occasion to review the annual reports of a large number of family-serving agencies in the Chicago metropolitan area. Most annual reports of nonprofit institutions consist simply of a list of activities, but-tered with self-praise and including discreet allusions to needed finances. By contrast, most annual reports of profit-making in-stitutions consist mainly of financial data, with little examination or evaluation of activities. But among the several hundred re-ports we studied, a few stood out as sophisticated instruments for self-scrutiny. Among these, one in particular appealed to us, which furnishes the beginning model here.

It was the annual report of a famous maternity hospital, one that has influenced maternity hospitals and maternity wards everywhere. This hospital was established about a half century ago on the novel proposition that giving birth is not a disease; therefore, mothers and new infants should be treated as such, in facilities more precisely appropriate to their characteristics.

The founders of this hospital were especially concerned with the reduction of mortality, which they hoped to reduce first of all by separating mothers and infants from diseased hospital patients. Health, in a word, was their most generalized value, maternal and infant health a more specific form of this value, and the re-duction of maternal and infant mortality, their concrete objective. There are a few problems of definition in calculating mortality rates — for example, how should the hospital count miscarriages and premature births — but usually deaths are easy to count, a quantitative index that is both convenient and valid. And once in possession of such a workable index, the hospital was prepared to specify definite goals for each year of its operation. The two mortality series in its annual report show a steady decline to-ward a steady low level at present.

ACHIEVEMENT OF PREVIOUS GOALS GIVES RISE TO NEW

In the early years, these goals were expressed in reaching so many deaths per thousand; in later years, by virtue of repeated success in achieving goals, further goals in reducing mortality have had to be expressed in tenths. And here we come to the first major complication of our model: As time has gone on, and further reductions of maternal and infant mortality have become more and more difficult to obtain, even in tenths, the hospital, by virtue of its long record of success, has been forced to define new goals, and even new specific values. Even so, its newer goals and values have developed consistently with its original commitment to health. To illustrate, its staff has worked hard to ascertain and correct the causes of blindness among premature infants; the hospital now operates one of the leading clinics for treating infertility; its well-baby clinic keeps track of infants long after they leave its walls; and for several years it has been experimenting with classes for expectant fathers.

What can be witnessed in the black-and-white statistical series showing the decline of mortality rates over the years among mothers and babies in this hospital is not only a magnificent story of medical achievement, but an equally interesting example of how values and goals and social action can be conceived scientifically.

There is little direct evidence in the annual report of the hospital to prove my next point, apart from the meticulous measurements that are recorded, but in my judgment the inference is justified that systematic self-scrutiny by the hospital itself contributed importantly to the regular progress that is still going on. A second inference is more arguable: To judge from the histories of other agencies, it seems to me that without such a built-in device for knowing at all times where it is going, the hospital would long since have dropped into the slumber of routine which claims most institutions after they have satisfied their original impulses; perhaps by now it would have been superseded by some new institution set up to realize new goals.

In other words, our simple model is not as simple as it may have seemed when first stated. For our contemporaries who like to talk of models as representations of systems, we have already pointed out that the hospital is an open-ended system, stretching through time. The new goals and values which emerge may appear retrospectively to flow logically out of the original statements of purpose, but in fact they were not predictable by deduction. There has been repeated uncertainty as to which way to turn; alternatives have been numerous and possible; mistakes

have occurred, and opportunities have been wasted. The hospital has critics, for example, who are not loath to denounce it for neglecting the approaches of natural childbirth, rooming-in and psychotherapy. Its scheme of rational self-direction is as open to uncertainty and controversy as any other institution, but it is a scheme which proceeds by putting its practices — both present and proposed — continually to the test of objective measurement of results.

PRACTICES ARE EVALUATED BY RESULTS

Another complication already implicit in the practice of the hospital is that its commitment is not to its practices but to their results. It is the results which are sacred, not the practices. And this aspect, however innocuous it may sound, is a radical difference between the maternity hospital and most other agencies and institutions, which concentrate more on effort than effect. Where most annual reports abound with florid descriptions of their activities — nowadays often with pictures in four colors — this hospital's fairly brief report abounded in tables and charts, showing rates of change in various indices, in comparison both with the past and with regional and national contemporary norms. The activities and the facilities are described, to be sure, but they are taken to represent the effort put forth. The value of such effort is not judged by its volume nor by the good intentions which motivate it, but by the effect. Only after both effort and effect have been specified can one begin to calculate efficiency, which is where costs and revenue properly enter the picture.

The matter of good intentions deserves some skeptical analysis. Every group and institution seems to profess some kind of generalized values by which it justifies its actions. But as far as words go, it very often happens that another group or institution which acts quite differently will nonetheless profess identical values. And meanwhile, as found especially in politics, groups professing quite different values may yet agree on specific actions. These few common-sense observations would suffice to demonstrate that the link between values and actions is at best very difficult to establish. But there are other and more sophisticated reasons to distrust any model of social action which simply predicates values as the springs of action.

The first of these reasons is that most values are quite difficult to measure operationally. The second is that, when the effort is made, the terms in which values are usually expressed splinter into many meanings, none of which is acceptable as a definition to

more than a few of those who profess the value. Jefferson, for example, thought slavery to be incompatible with the belief in equality set forth in the Declaration of Independence, so his views on slavery were excised from his original draft — to be reinstated in the Constitution nearly a century later, after civil war. Despite this painful example, which is not fully resolved after a second century of contention, the most hopeful way of dealing with the second difficulty is through struggling to solve the first. That is, the way to resolve conflicts over the meaning of general values is through trying to define them in terms of action.

Let us go back to our simple model for the progressive improvement of maternal and child health. Like the Emancipation Proclamation, merely setting up a separate maternity hospital was not deemed to be enough. At best it was conceived as a helpful precondition for reducing certain kinds of mortality. Indeed, with the invention of various of these methods, it was found that they could be adopted in conventional hospitals; hence it can now be argued that separate maternity hospitals are no longer required, if they ever were. But the main goal was to lower the mortality rate, and the institution and its practices and instruments were to be evaluated by their contribution to this result.

Let us suppose that in 1863, coincident with the extinction of legal slavery, some kind of social action had been undertaken by the federal government with the objective of adding some measurable improvement each year to the economic and social status of the former slaves, comparable to the program of school integration "with all deliberate speed" which the Supreme Court initiated in 1954. I think steady movement over the past century might have culminated in a far different picture from that which exists today.

Between our example of maternal and infant health, which will seem noncontroversial to most, and the program of integration pursued by our Negro citizens, which may seem controversial to some, many in-between examples could be introduced, but they all come within the scope of the more complicated model of social action we have adduced thus far. In the case of the major subject matter which brings this audience together — agricultural policy — it must fall somewhere near the middle of the range bounded by the values of health and equality. Agricultural policy is justified by relatively noncontroversial values like productivity on the one hand, and by fighting words like restriction and overpopulation on the other.

If we are to get out of the realm of clashing platitudes, the best way to do so is to start transforming our values into goals, our words into numbers and to tie these to definite periods of

time. Intentions thus become intended effects, which are gauged by comparison with the outcomes of efforts in previous periods of action.

THE SETTING OF GOALS AFFECTS MOTIVATION

Values stated in the abstract, while they may evoke strong feelings of group loyalty, rarely offer the steady stimulation to their achievement that comes from organizing action to achieve them in the form of successive interim goals.

There is something both realistic and stimulating about setting goals in fairly close reference to prior accomplishment. This peculiar adjustment of motivation to exceed prior accomplishment, but within a range which is reasonably possible, is what is meant by challenge. If there were some way to test the motivating effect of goal setting, it would be found that for any group or individual there is some optimum level of performance at which to place the goal of each period of performance. If it is set too high, the effect is fear of failure and discouragement. If it is set too low, the consequence is overconfidence, slackness and reduced effort. When set just right, it generates a benevolent spiral of success, enhanced aspiration and extended powers. In athletics, a good coach becomes very skilled in judging just when a player or team is ready to attempt some bigger challenge, and in communicating this expectation. Leadership in any organization must likewise repeatedly assess when it can assume a responsibility beyond its previous powers and performance. Considering how well recognized the phenomenon of challenge is, it is somewhat strange that the essentially quantitative comparison which it implies has not been more carefully worked out in annual reports, manuals of administration and leadership training. Even in studies of the planning process, much less attention is given to the social psychology of optimal goal setting than the pay-off seems to deserve. Perhaps the reason is the lack of development of the appropriate measures, which is a technical task that the ordinary group member should not be expected to handle.

EXPECTATION AND OUTCOME ALWAYS DIFFER

Just as it is reasonable to expect goals to be set at some level possible of achievement, so is it reasonable to assume that there will always be some discrepancy between the goal set and the outcome actually experienced. The goal is simultaneously a

target of effort and a prediction of outcome. As an inevitably erroneous prediction, it deserves intensive study. As a prediction, it may either overestimate or underestimate the final result. Because of hope and optimism, there is always some tendency to overestimate what can be done in the next period of action. On the other hand, with failure and impediments, the outcome may be underestimated. In either case, one question always raised is whether the goal should be raised or lowered the next time.

The discrepancy between intention and outcome is only partly a consequence of setting goals too high or too low: it may often be due to untoward circumstances which were not taken into account in making the prediction embodied in the goal. But whether the discrepancy arose from yielding to impulses of hope or fear, or from incorrectly assessing the effects of circumstances which could not be controlled, it can be studied for further insights into both the environment and the actors. It is as important to know the one as the other. The nature of both is revealed progressively by repeated testing, but it is never wholly revealed; surprises continue, as do mistakes and disappointments. Yet given the mechanism of periodic appraisal, and the basing of goals for the next period on experience in the last one, there is unmistakable progress in coping with the sources of error. Some would like to call this mechanism for self-correction "feedback," after the mechanical analogy, but I think the physical analogy demeans the human features of learning from the utilization of mistakes, as well as ignoring the open-ended feature of purposive social action to which we referred earlier.

Finally, in summary, the process of intelligent action can be said to become an object to itself in the same way that the primitive goals of the organization did. The list of goals and their appropriate measures is lengthened or shortened, modified and refined, year by year. Annual reports themselves are improved by critical scrutiny and systematic comparison. I am personally eager to promote the full-time professional employment of sociologists as collaborating technicians in the production and sophisticated development of annual reporting by all types of institutions. There is already much more known than can be said here about the structural relations of the people in organizations who perceive, proclaim and execute lines of action, as against those who observe and measure it, or the external clienteles and audiences who suffer or enjoy the consequences.

At this point, however, more of the purposes of this conference may be served by applying the model as sketched thus far than by adding further details. It is now time to stand back from

it and ask if it is appropriate for organizing analysis of goals and values and social action in agriculture.

THE APPROPRIATE UNIT OF ACTION

The first challenge to the utility of this model is sure to come from those who perceive that it starts from the assumption of action as organized by a single institution, an institution which is only a part of the total society. The model does not contemplate goals and values and social action from the standpoint of society as a whole, and advisedly so. The numerous reasons for insisting that the single institution is the appropriate unit for our model can be specified under two heads: (1) criticisms of the notion of the whole society as the appropriate unit and (2) arguments for the institution as the appropriate unit.

Especially in regard to agriculture, toward which both the federal and state governments forthrightly assert a large measure of responsibility, there is a constant temptation to conceive agricultural policy as somehow reflecting the public interest in a comprehensive way, just as the state as an institution is often unreflectively assumed to possess a comprehensive concern with every aspect of society and department of culture. Since everyone must eat and wear clothes, and thus everyone is dependent on agriculture, agricultural productivity is easily taken as a universally-shared value. Our public school system, capped by the land grant colleges and universities and the extension services, also foster this assumption. Yet it does not take much pondering of the matter to bring such an easy assumption into doubt.

Abstractly and sociologically, we know that the state is simply that institution which possesses the monopoly of force within a territory. Its scope is defined by the taxing power and its geographical boundaries. Like every other institution, its personnel are inclined to attribute pre-eminent importance to its claims on the public at large, and to identify its welfare with that of the whole society. Modern democratic ideology has given the claims of nationalism a peculiar intolerance, as the historians and students of comparative government have repeatedly pointed out. Under more tyrannical regimes, people feel far less moral obligation to recognize the claims of the state on their lives, their fortunes and their sacred honor. They therefore quite conscientiously exert themselves to frustrate the tax collector, the recruiting officer and the political police, and we of course applaud them. It is illogical, however, to accept as absolutely right the same claims on the person of the citizen when they come from

government officials who have obtained their jobs through the medium of election. Majority rule can be just as tyrannical and immoral as minority rule, and all the philosophers of democracy have recognized this possibility, as the historians have noted its recurrent actuality up to the present. Democratic theorists, at least those concerned with society as a whole and the individual as a whole, have generally sought to keep the state as an institution in its proper place, as one among many institutions, each of which is only a part, though it serve the whole. They have sought to limit the power of the state to certain minimum functions, on performance of which there is a close enough approach to unanimity to justify imposing reciprocal requirements on the citizenry uniformly. In the case of agriculture, for example, because land is finite in amount, and all of it is vested in some owner, one cannot obtain more of it without receiving it from another. Thus the state is universally accepted as the arbiter on disputed claims to possession of land.

For a tragi-comic contrast, we might note the legal and moral anomalies of the wet-back situation in southern California, in which farm labor unions and farming corporations vie over how the restrictions on immigration will be applied, with the interests of both the public and the wet-backs pretty much lost from sight in the scuffle. The issue of how government payments for restriction of production should be shared between landlord and tenant likewise makes it clear that public policy is ultimately defined by the outcome of conflicts of interest among competing groups.

There is no group, not even the Supreme Court, which rides the clouds far above the clash of all other groups in society. What we have in democratic government is at best a mechanism consisting of elections, courts and continuous legislation, by which conflicts may be resolved in a more satisfactory manner than by some other mechanisms. And the same generalization may be said to apply to any of our other institutions: they are not innately good or finally perfect but merely appreciably better, for the time being, than available alternatives. Indeed, this tentative, limited view of institutions, as instrumental rather than sacred, which springs from our view of government, is indubitably responsible for the relative success we have enjoyed in resolving differences among the many competing, relatively autonomous groups and institutions which compose our pluralistic society. The few outbreaks of overt conflict and violence we have suffered have usually arisen from challenges by groups irreconcilably committed to fixed principles of absolute rule by one institution or another.

Coming back from this disquisition on the pluralism of our society to agriculture, we find in American agriculture one of the most pluralistic arrays of groups and interests and competing segmental institutions imaginable. Who would suppose that the grain farmers of the Midwest and the dairy farmers of the Northeast are united in their goals and values simply because both are engaged in agriculture? Sheep raisers and cattle raisers have historically feuded. When the public finally quits smoking, does anyone expect the cotton planters to invite the tobacco planters to join their throng? If we look away from the conflicting interests of the producers of various commodities and at the various social groupings in rural society, we observe contests between the family farm and the corporation, the tenant and the landlord, Negro and white, small and large, cooperative and independent, Farm Bureau and Farmers Union and countless alliances with nonagricultural groups. There is such a crisscrossing of these interests — allies in one respect are so often rivals in another — that the programs of political parties, when they come to agriculture, depend more on obscuring differences than on clarifying and reconciling them. Indeed, it is in the political approach to goals and values that the greatest emphasis is put on finding the broad platitudes, the encompassing compromises, the muffled formulations of intended effects and the emotional appeals to widely shared sentiments.

For all these reasons, and more which could be readily cited, it seems wise to turn away from any model of social action which takes as its unit society as a whole, or the government, or even the United States Department of Agriculture. I have been employed in both the USDA and in a state college of agriculture and know I do not have to remind this audience of how pluralistic they are, of how policy emerges from the pulling and hauling of contending groups.

Now when we come to the positive reasons for adopting the single institution as the basic unit for interrelating goals and values and social action in a model appropriate for the analysis of agricultural policy, the most impressive reason for recommending the dynamic model of the annual cycle of review and planning is that it fairly well represents reality already, while offering a guide to more self-conscious recognition of those interrelations.

Even if not at regular intervals, there are moments in the career of any institution when its principals pause, or are made to pause, to reflect on the meaning of its past performance for future goals and values and performance. Such intermittent sessions of evaluation, alternating with sessions of action, may be

infrequent, hasty, unsupported by formal reports and measures and budgets for the coming year, yet they seem to arise from the natural tendency of human beings to structure their behavior in distinguishable units, each with a beginning, middle and end, as the social psychologists say. Some sentimental advocate of spontaneity and informality might argue more or less plausibly for letting action find its own organization, without attempting to regularize it in explicit periods. Their sentiment might constitute a minor argument against adoption of our model. But again, experience itself is on the side of making the planning process as explicit and regular as possible.

Experience tells us, for example, that when the actions of large numbers of people must be coordinated — and surely they must if social action is to be effective — there is much virtue in regular routines and schedules. The unavoidable irregularities get placed in relation to the regularities and are thereby made more manageable. Without routines, every action is an emergency, but no one can live long or maintain consistent direction in the midst of perpetual emergencies. The very idea of goals and values implies policy stretching over time and encompassing some fairly organized universe of particulars. Agriculture pre-eminently and originally has based its routines on the cycle of the seasons; in this respect, the influence of agriculture is still written heavily over the practices of all other institutions of every society.

In terms of widening conceptions of what has been called methodology, our model is uniquely adapted to the application of scientific method to social action. By utilizing quantitative measures of performance over regular intervals, it permits exact comparisons of results in one period with those in another. Hence trends can be validly compared. Moreover, the actions of one institution can thereby be validly compared with those of another, one of which can be construed quite legitimately as the experimental and the other as the control group. From the experimental standpoint, any new practice can be considered as a hypothesis or as the independent variable in a hypothesis, its effect to be measured by the variation it causes in the measures of accomplishment — the annual goals — of the institution.

Additional virtues of the model could be adduced. Also, there are other models of social action, such as the numerous versions of an equilibrium model, with which it could be compared as to relative advantages and disadvantages. An equilibrium model, for example, is not only essentially a static model, but represents a closed system. From this point on, probably the most welcome question which might be raised is how the conception of

goals and values and social action here presented works when it is applied to agriculture.

Perhaps the most satisfying way to answer this question is to attempt to apply the model to the operations of the institution which is sponsoring this conference, the college of agriculture at Iowa State University. I do not have at hand its annual report, although I feel safe in assuming there is one. I also feel safe in assuming that it falls short of being the kind of sociological document which a thorough application of our model might make it.

For example, how accurately is this institution able to appraise both the productivity of Iowa agriculture and the contribution of the university to this productivity year by year?

To what extent does the college of agriculture assess year by year the ratio of ownership to tenancy among the farmers of the state, making predictions beforehand on the basis of cumulative understanding of the conditions governing this changing ratio, and then analyzing the discrepancies between expectations and outcomes in order better and better to grasp — and potentially manipulate, or enable others to manipulate — these conditions?

How current is our picture of full-time family farming and how is it faring in terms of acreage and income, in comparison to corporation farming and part-time farming? How far has the farm population of the state been analyzed with a view to distinguishing its various values and motives for being in agriculture? One hears on every hand that even with the steep decline of recent years there are still too many people on our farms. If this be true, has anyone identified those who ought to leave? By what criteria? Are these the ones who are actually leaving? How much effect, if any, does their leaving have on production and productivity? Over the years, can the rural sociologists' findings about the composition of migrants from farm to city be reconciled in some intelligent pattern with the kinds of loan policies of credit institutions, the educational policies of the secondary schools in rural areas and the kinds of service and advice given to the smaller producers? The farm population is very heterogeneous and its motives for staying on the land are mixed. If this population were regularly classified into several relevant categories by the college of agriculture, and the differential rates of migration for each category were predicted and then checked against actual moves, the running picture of how much or how little population behavior is affected by the policies of this and related institutions would probably moderate the strong opinions heard from both sides of the issue. The most productive probably migrate least of all.

Even in the realm of the pure technology of productivity,

despite its ostensible noncontroversiality, I wonder what might be learned and what policies might be altered by studying the relative contributions to rising productivity from chemical manufacturers, machine manufacturers, agricultural educators and biological researchers.

If we look at the control of overproduction in terms of the distribution of acreage among alternate land uses, I wonder if anyone is maintaining a continuous flow-chart which shows in percentages of the total land surface of Iowa how the ratios are changing. For example, it seems to me that road building and the growth of suburbs are taking land out of the production of basic commodities faster than legislation is.

Most important of all, I wonder if a more objective scrutiny of the practices and policies of the college of agriculture, with respect to production and productivity, comparing intended and actual effects year by year, might not bring this institution to the point reached by our introductory example, the maternity hospital. The college of agriculture has striven mightily over the years to increase the productivity of Iowa agriculture. The year-by-year quantitative record of achievement of goals has been magnificently impressive. But now the very holding of this conference, and the note of crisis which pervades many of the papers, make evident that disturbing doubts are emerging as to whether the more basic value of farmer welfare is being served by further enhancing the output of corn and hogs and wheat and milk and the other major commodities. So far most of the political discussion has been concerned with disposal of surplus and adjustment of prices to producers. There is no evident disposition, however, among the multiple contending proponents of divergent interests or within the college itself to slow down or halt the pursuit of higher productivity. The problem of overproduction which the college is now gingerly approaching with its left hand is still being vigorously aggravated by its right.

Frankly, I do not sympathize more than moderately with the notion that the college of agriculture's most appropriate role in the current situation is to engender at every crossroads the kind of discussion of public affairs which would imitate the clash of interests in Congress or before public hearings of decision-making bodies. Academic discussion by definition does not make decisions. Decisions are made either by constituted decision-making bodies, subject to pressures from contending advocates, or by separate organizations with respect to their own actions only. Since the college of agriculture is neither in a position to advocate a specific political proposal, nor is it a forum in which the conflicts between groups can actually be resolved, it can at

best pursue its traditional, nonpartisan educational role. And that would not be to bring all its talents and capacities to the support of agricultural welfare in Iowa.

There is a certain limited analogy between the uncomfortable situation of Iowa farmers and those mass producers of durable goods who have seen their products descend, if you will pardon the expression, to the status of commodities, indistinguishable from those of other producers, all thrown into an overproduced market in which every move each makes to increase his productivity or productive capacity drives down the prices of all. In this situation, the way out that is being pursued by the mass producers of industrial commodities might also serve as an enlightening analogy for Iowa farmers, and possibly suggest an appropriate revision of its goals by the Iowa State University College of Agriculture. Without abandoning the value of productivity, the new value becomes innovation, the search for new products. If too many corn and hogs are being produced for the good of producers, let new uses be found for the land and the people, instead of trying either to remove them from production or find ways of taxing consumers to perpetuate redundancy. I cannot help believing that if the human and material resources of the college of agriculture were systematically oriented to developing new farm products, such a reorientation would be welcomed on every hand, and the crisis of goals and values would subside.

The problem then would be execution. Success could hardly be expected to come at once, but as we described the concept of challenge, success in achieving such a new goal seems possible. The technical problems would call on the talents of many specialists, but even to an amateur and spectator, numerous opportunities for new farm products seem to be obvious. We also have a few real examples from which to take heart.

Right here in Iowa, to illustrate, we have the example of hogs specially reared to produce superior bacon, that commands at the consumer level a premium of twenty cents per pound.

Looking forward, the upgrading of consumer diets that is going on at a tremendous rate indicates an array of opportunities of unprecedented scope. The whole banana industry, it is said, has been reconstituted by the development of dwarf varieties. But perhaps the most interesting opportunities for agriculture lie in other directions than food production. Except for minerals, it appears that agriculture could actually produce its own fertilizer. The vast growth in the uses of paper, plastics and synthetic films and fibers suggests an immense array of possibilities for agricultural products in making these. All the trends in building materials, construction and the manufacture of major consumer

durables plainly indicate a series of huge markets for wood substitutes here. The volume of imports of organic materials from abroad and the pressure on domestic supplies of fossil materials suggest, in fact, that the capacity of Iowa farmers to synthesize them year by year from solar energy may before this century is out prove all too insufficient.

I see no reason for worry over goals and values, if alongside productivity, on which all agree, we write in also new products, and get on with action.

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Discussion

DR. FOOTE'S PAPER is predicated on one fundamental value — rationality. It is a value so basic to the contemporary academic mind that it is taken for granted and it is, furthermore, expressed in a form familiar and attractive to scholars. It calls for objectivity and, preferably, measurement. The underlying model implied in the empirical case of the maternity hospital, and off and on in the paper, is an input-output type, one that lends itself to quantification and exactness once the preliminary problems of unit definition and the like have been solved. He makes unit definition as easy as possible by setting productivity as the specific and single objective measure against which effort is to be assessed. But at the very outset, and despite his disclaimers, the normative presupposition of his paper should be recognized. His preference for interim goals against values arbitrarily moves the point of focus but does not really simplify the problem.

Dr. Foote has warned against obscuring and confusing the evaluation and formation of policy by paying attention to values. He has said in effect, "Take care of productivity and the values will take care of themselves." (As a matter of fact, I think that the notion of the market place, whether it be for goods, political candidates or ideas, is a major theme in the American value system, and that it deserves far more attention than the lip service it usually gets. Note, however, that his implicit use of the marketplace principle makes fundamental value assumptions that are bound to affect the rest of his analysis.)

Let me reflect for a moment on the problem of how open the market place of ideas ought to be. The scholar assumes that it ought to be as open as possible and this conference is founded on

an article of faith: that the best way to resolve conflicts is to make differences explicit. Scholars are not politicians and cannot be expected to approach problems as do politicians. Where the scholar strives for clarity even at the cost of exacerbating tensions, the politician in a plural society may strive for obscurity in order to mute tensions that may be disruptive to the social order. The politician can assume social functions for ignorance; the scholar cannot. As we go about our business we ought to remind ourselves from time to time that we are talking about the conditions of action, not action itself.

Dr. Foote says that values are hard to specify, that they won't hold still, and that they tend to come apart under scrutiny. All these observations are to a degree true, but to be useful guides for analysis or action, models must admit the relevant variables. A simpler world would be a happier world for social scientists, and a large part of our job is to discover simplicity and order in the welter of apparent disorder. Model building is one of the ways to approach order, but the social scientist cannot impose order on the world; he must discover it. A model is never more than a plausible first approximation. By eliminating values from inquiry, or rather by restricting himself by implication to one value-invested goal — productivity — Foote has built a spurious order into his model, and it must fail in the face of reality unless the implicit is made explicit.

What happens if we accept, for the sake of argument, the value criterion of productivity? What kind of productivity is meant:

The maximum number of units?

The maximum number of units of highest value?

The maximum monetary return?

The maximum return with a minimum of capital investment?

... with the minimum of labor, etc., etc.?

Dr. Foote knows that productivity is capable of many interpretations, depending on the underlying value system. Indeed, we can confidently guess what value criteria he prefers. But we cannot assume that the same value criteria are taken for granted in American agriculture, even Iowa agriculture. Let me illustrate by quoting from the Wall Street Journal of June 21, 1960:

FOREIGN BUYERS complain about the poor quality of U.S. cotton, tobacco and flour.

The charges hurt some export sales, though the extent of the impact can't be precisely figured. A Federal study shows foreign importers and

spinners are disappointed by the condition of U.S. cotton. It's poorly packaged, dirty and thus more expensive to use, foreign buyers say. A big complaint is tattered covers caused by frequent sampling by wary buyers each time U.S. bales change hands. Spinners said surface cleaning was necessary on 76% of U.S. bales. The foreigners rated American cotton among the "poorest packaged." Russian cotton was listed among the best.

Foreigners claim U.S. tobacco quality is slipping. Britons in particular sound warnings over maleic hydrazide, a chemical used to control growth of leaf-depleting "sucker" branches. The chemical is said to affect taste and burning quality. Canada and Rhodesia, other U.K. suppliers, have cut use of the chemical. Some buyers say U.S. leaf is poorer because of too-close planting and use of too much fertilizer.

As for flour, changed European baking habits call for a higher quality product. Some buyers find U.S. quality inconsistent even within the same grade. The Soviets deliver a consistent, state-controlled product.

This is a rather polite quote to read in Iowa: cotton, tobacco and flour. The state of affairs described obtains under conditions of high unit productivity. Clearly, productivity as a criterion needs to be qualified by other value criteria.

Furthermore, if the Wall Street Journal story is a true story, a question is raised about the viability of certain underlying values that are conditional to the achievement of consistent productivity, however defined. In a competitive world economy can American agriculture succeed if pride of workmanship is lacking? If what is frequently called the work ethic is no longer sufficiently strong to insure good performance and good quality in some parts of American agriculture, can it be revived? Or can another set of motivating values be substituted? These may be preliminary questions but their answers are absolutely essential. I shall leave to others who are informed and wise about American agriculture to say what its goals ought to be. But whatever goals are accepted, they must be assessed against an understanding of the underlying values of the operators of American farms.

It might seem that I have concluded that Dr. Foote's model is defective and that its application is useless. This is not the case. He has given us many insights, and the analysis that he proposes of such service institutions as the college of agriculture (I would add the department of agriculture) deserves to be undertaken, although, as I have said, I am skeptical about the monolithic productivity criterion. I do feel that the first and last unit of analysis is the producing unit, not the auxiliary control and guidance machinery, and that value analysis would loom large in such inquiry.

Dr. Foote touched upon another line of investigation which may be mentioned here in the form of a postscript. You will recall his observation about road and suburb building taking land out of production. This is an important problem, not merely for

its immediate effects, but because it is an essentially irreversible phenomenon. Let me underscore the theoretical significance of this. If a given choice or action forecloses other important alternatives, it must obviously be approached with far greater care than if the action may be reversed. For example, building a factory on farm land may ruin the land for farming; this would be an irreversible act. On the other hand, the experimental introduction of a new crop, even though it might disrupt farming routine, would obviously be easy to reverse. It seems to me that the purposes of wise planning would be served if policies were labelled as reversible or irreversible or, even better, according to their ease of reversibility. Because I am a former resident of southern California, the relation of industrial building to farming struck a familiar note in my memory. In the 40's and 50's irreplaceable alluvial fans of great agricultural productivity became the sites of housing developments, aircraft factories and freeways. There is nothing unique about the southern California case. It has been going on all over the world ever since Man decided to live in cities and to place his cities on the alluvial plains and along watercourses. The southern California case impresses us because of its recency and rapidity of development and because it happened when its cost was understood. To prove that the short-run market place model needs the restraint of a longer perspective, we need only observe that the southern California incident is continuing and is now being replicated in the San Francisco Bay area, a region that would not demean itself by learning from southern California. A countervailing value, conservation, and its organizational embodiment, conservationism, is one expression of society's reservations about the market place model. Many lessons may be drawn from this example. I choose this: that the goals and values of agriculture are inextricable from the goals and values of whole societies. And I would add that the assessment of the interaction of competing values is essential to scientific understanding and the development of informed policies.

Discussion

IN KEEPING with the structure of Mr. Foote's chapter, I shall comment (1) on his model of social action; (2) on his rejection of society-as-a-whole as a legitimate unit for the discussion of goals and values and social policy, and (3) on his application of his model of social action to the agricultural college.

The only difficulty with Mr. Foote's model of social action, so far as I can see, is that it has very little bearing on the problems of goals and values in agricultural policy. It certainly is true that if one knows in a general way what he wants to accomplish, it is very helpful to specify intermediate objectives and establish quantitative measures of year-by-year progress toward the achievement of the goal. In the insurance business, this method of incitement to accomplishment has been developed into a fine art, an art slightly amusing to the outsider in some of its aspects, but highly effective in selling insurance.

But the problem is not primarily to establish intermediate goals on the way to the accomplishment of some generally accepted objective of agricultural policy, but rather to arrive at a consensus concerning the objectives themselves. Thus, Professors Heady and Burchinal state that there is a "need to appraise our values and chart a policy course which is consistent with general society goals." The basic problem, they add, is one of "determining what mix or combination of goals, at the various levels of the means-ends hierarchy, is optimum, desirable or acceptable." "There exists," they assert, "some combination of competing goals . . . which must be decided upon by society." In view of these statements by the organizers of the conference, I cannot but question the relevance of Mr. Foote's model, which, as he himself says, "does not contemplate goals and values and social action from the standpoint of society as a whole."

This would seem to dispose of Mr. Foote's model, but we cannot leave the matter there. Mr. Foote defends his rejection of the general societal viewpoint vigorously. If his argument is sound, this conference may as well close shop and go home. But is it sound?

He begins by asserting that "public policy is ultimately defined by the outcome of conflicts of interest among competing groups." From this he jumps to the conclusion that we must reject "any

model of social action which takes as its unit society as a whole, or the government, or even the United States Department of Agriculture." I submit that the conclusion does not follow from the premise. It is undeniable that public policy is determined to a very considerable extent by the pulling and hauling of competing interest groups. The purpose of public policy is precisely to reconcile conflicting interests and points of view, to establish some harmony of purpose amidst the welter of interests. But how is this possible? It is possible in a democratic society only because (and to the extent that) the government officials who formulate policy and the individuals comprising the competing interest groups are capable of being influenced by conceptions of national interest transcending their particular interests.

If individuals and groups and government officials were incapable of entertaining and being influenced by conceptions of national interest, there could be no public policy, for there would be no public. It would make no sense to speak, as Professors Heady and Burchinal do, of "melding" out of the maze of interest groups the elements of an agricultural policy which would allow reasonable attainment of broader national purposes and goals. Mr. Foote misses the point of the democratic process when he accuses political parties of doing more to obscure issues than to clarify them. The "broad platitudes," the "muffled formulations," the "encompassing compromises" which irritate him are inevitable concomitants of the effort to find a common basis of action amid the welter of divergent views and interests.

The essential unsoundness of Mr. Foote's argument against taking the general societal viewpoint can be shown by applying his pluralistic analysis to the single institution which he selects as a proper unit for the application of his model of social action. This unit is the agricultural college, by which I presume he means a land grant institution like Iowa State University. As he himself recognizes, a college or university is itself a collection of interest groups, each seeking to influence administrative policy. The power politics of the academic world is too familiar to most of us to require documentation. By Mr. Foote's own argument, then, it makes no sense to talk of college policy as if it represented a concerted effort to achieve certain educational objectives. Far from interrelating goals, values and social action, the college would be, on this view of things, a chaos of conflicting goals, values and interests, many of which would have only the remotest connection with education. But Mr. Foote does not apply the pluralistic argument to the case of the college. He assumes, quite sensibly in this case, that a college cannot only have general

values and goals, but can specify intermediate objectives on the road to attaining those goals.

Unfortunately, however, Mr. Foote's conception of the goals proper to an agricultural college is much too narrow. It is several decades out of date. He overlooks the fact that there are no more agricultural colleges in the sense of colleges composed primarily of farm students and concerned primarily with teaching methods of agriculture. Iowa State is now a university of science and technology. The majority of its students do not come from farms; the majority will not go into farming after college. Even if one restricts the argument to the agricultural college proper, i.e., to that part of the college or university specifically concerned with agriculture and related subjects, Mr. Foote's ideas are still too narrow. The college certainly should concern itself with the things he mentions — productivity, new products, careful analysis of conditions, problems and trends in agriculture. But, as Messrs. Heady and Burchinal point out, these efforts may prove self-defeating unless they are balanced by equally strenuous efforts to teach the farm population to think in national and international terms. The crisis of goals and values cannot be eliminated by the simple expedient of developing new farm products, as Mr. Foote seems to think. It may be somewhat alleviated, however, if the state colleges will stop thinking of themselves as agricultural colleges and set out to inculcate in all of their students, whether farm or nonfarm, a broad range of knowledge and information and a profound sense of responsibility as citizens of a great world power. It is not necessarily true that, as Charles Wilson is reputed to have asserted, "what is good for General Motors is good for the country," but it is undoubtedly true that, in the long run, what is good for the country will be good for General Motors, for the farmer and for everyone else.