

OLAF F. LARSON
Cornell University

Basic Goals and Values of Farm People

MY UNDERLYING ASSUMPTION is that the central rural-centered problem in American society is that of adjustment to the rapid cultural changes associated with the complex of impersonal social forces represented especially by science and technology.¹ The changes and adjustments are taking place in a society in which an achievement orientation, especially as indexed directly or indirectly by economic measures, has had particular importance for the individual. In economic terms the current consequence of the application of science and technology in agriculture — within the existing economic and social structure and accompanying value systems, and with the existing demand situation — is excess agricultural productive capacity in the United States. In more personal terms, too many people are working at producing food and fibre.

We are aware that the origin of the impersonal forces for current change is largely external to agriculture and the small community. We are aware that these forces have their impact upon the whole of American society, not just the agricultural part. Any student of American agriculture and rural life knows that the problems of adjustment to change are not being experienced for the first time in our society. But the rate of innovation — especially of the technological — has stepped up, and the capacity — or perhaps the inclination — of rural society to resist the external forces for change has been greatly reduced (for such reasons as commercialization, the minority role of the farm population nationally and within communities of residence, shifts in power and sanctions from the local community and from agricultural groups, and, perhaps, changes in values and goals).

The conclusion of economists that there is excess productive

¹Other major forces for change are reviewed in Olaf F. Larson, Rural-Centered Problems of American Society, to be published in the Proceedings of the National Workshop for Extension Specialists in Rural Sociology, Community Development and Extension Studies, held August 28 - September 2, 1959.

capacity and too many workers in agriculture can be purely analytical. However, the policy implications of this conclusion immediately enter the area of values. Further, there is even a challenge that the economists' conclusion really defines the most important agricultural problem, if judged from the standpoint of the long-run interests of society as a whole.² For example, would the conclusion still hold in the event of a societal crisis such as war?

In this paper, however, the economists' conclusions are accepted as providing the guide-line for discussion. Within this framework, rejecting recommendations to lower productive capacity and to reduce the number of farm workers conflicts with a certain set of values and goals commonly ascribed to American farm people. Accepting the recommendations runs into conflict with another set of values ascribed to the same people.

In this paper, we will concentrate on reviewing existing knowledge of the values and goals actually held by farm people, trying to emphasize the values and goals which facilitate or retard acceptance of the alternatives to economic adjustment in agriculture.

SOME PRELIMINARY OBSERVATIONS ON DIFFICULTIES AND LIMITATIONS

One can readily concur that the value structure of a society is of central concern and agree that the current problems of American agriculture are related to value orientations. But the field of values is beset with obstacles.

First of all is the matter of defining and conceptualizing. If there is to be any communication in this area, it is necessary to indicate the definitions being used and then immediately to acknowledge that there are ambiguities and alternatives.³

Values and ends or goals are closely related. For the purposes at hand, the sociological approach to values used by Robin Williams in his book American Society is followed.⁴ Here value

²See, for example, Charles P. Loomis' discussion of Earl O. Heady and Joseph Ackerman, *Farm Adjustment Problems: Their Cause and Nature and Their Importance to Sociologists, Rural Sociology in a Changing Economy*. Published for the North-Central Rural Sociology Committee by the University of Illinois College of Agriculture, Urbana. November 13, 1958.

³Alternative approaches are reviewed by Clyde Kluckhohn and others, *Values and Value-Orientations in the Theory of Action*, in Talcott Parsons and Edward A. Shils (editors), *Toward a General Theory of Action*. Harvard University Press, Cambridge. 1952. Pp. 388-433.

⁴Chapter 11, *Value Orientations in American Society*, in Robin M. Williams, Jr., *American Society: A Sociological Interpretation*. Alfred A. Knopf, New York. 1951.

is regarded as "any aspect of a situation, event or object that is invested with a preferential interest as being 'good,' 'bad,' 'desirable,' and the like."⁵ Values thus are conceptions which influence "the selection from available modes, means, and ends of action."⁶ Values are construed not as goals but as the criteria by which goals are chosen. Social values are those which are not only shared but regarded as matters of collective welfare by group consensus. Clusters of values around important concerns become value systems or value orientations. Vogt, with concrete illustrations from a dry-land farming community in New Mexico, indicates that the value orientations serve a selective function in giving direction to cultural processes, a regulatory function in defining limits of permissible behavior in a given role, and a goal-discriminating function for future action.⁷ Concerning goals, others have pointed out that what is a goal in one situation operates as a means to a goal in another: i.e., "While income may be viewed as a means to other goals, it operates as a goal in many situations, as, for example, in changing occupations."⁸

Second, one is beset not only with the fact that values are of different orders — that there is some sort of hierarchy of dominance and intensity of values — but also with the fact that there is a situational aspect to values. It has been observed that individual and group crises and conflict situations throw values into relief; such situations may even bring out values otherwise latent which are actually more dominant than those ordinarily manifest. Merton suggests that it is often impossible at present to determine whether cultural values are or are not consistent in advance of the actual social situations in which the values are implicated.⁹ Ramsey and associates at Cornell, attempting to relate value orientations to practice adoption by New York dairy farmers, concluded a need to deal with values in relation to specific situations, rather than with generalized societal values, if high correlations were to be obtained.¹⁰ Too, one is plagued with the fact that American society "does not have a completely consistent and

⁵ Ibid., p. 374.

⁶ Kluckhohn, *op. cit.*, p. 395.

⁷ Evon Z. Vogt, *Modern Homesteaders: The Life of a Twentieth-Century Frontier Community*. The Belknap Press of Harvard University Press, Cambridge. 1955. Pp. 4-7.

⁸ Chapter 5, *The Value System*, in Lowry Nelson, Charles E. Ramsey, and Coolie Verner, *Community Structure and Change*. The Macmillan Company, New York. 1960.

⁹ Robert K. Merton, *Social Theory and Social Structure*. Glencoe, The Free Press. 1957. Pp. 501-2.

¹⁰ Charles E. Ramsey, Robert A. Polson, and George E. Spencer, *Values and the Adoption of Practices*. *Rural Sociology*, 24 (1, March, 1959): 35-47.

integrated value-structure."¹¹ Williams suggests that this is because of the division of labor, regional variations, culturally diverse groups, and proliferation of specialized institutions and organizations which tend to insulate differing values from one another.

Third, the methods for determining values and for measuring their distribution and intensity are poorly developed. What must be done is to make inferences about values from such evidence as choices observed or reported (as expenditures of money, time, and effort), directions of interest, emotional responses, and social sanctions employed. The study of values, as presently conceptualized, is a recent development. "There is little reliable data concerning the value system of American rural society in any previous period."¹² Inferences must be made from the evidence supplied by law, history, literature, philosophy, and religion.¹³

Fourth, there is currently a paucity of data, on a national or representative basis, to portray in any scientifically adequate way the values currently held by the farm people of the nation. One must depend upon limited data, scattered and not necessarily representative studies, and upon inferences from studies and data not directly concerned with values. Consequently, what can be said here is extremely general or is so specific to a situation as to raise a question about its generalizability. One accomplishment of this conference should be recognition of the meager empirical evidence for the topic under discussion.

SOME GENERALIZATIONS

Mindful of the obstacles and limitations, we proceed to venture some generalizations about the values (and inferentially the goals) currently held by farm people in the United States.

First, on the whole, farmers share the major value orientations, the countercurrents, and the contradictions which are found in American society. The evidence for this and the other generalizations will be developed subsequently. Presumably the goals are similarly shared although the expression of some goals is geared to the occupation of farming.

¹¹Williams, *op. cit.*, p. 386.

¹²Murray A. Straus, *A Technique for Measuring Values in Rural Life*, Washington Agr. Exp. Sta. Tech. Bul. 29, August, 1959.

¹³The author attempted to indicate the development of the major values held by American farmers in Olaf F. Larson, *How Does Our Cultural Heritage Aid or Hinder Solutions to Rural Life Problems*, *Proceedings of the American Country Life Association*. 1957. Pp. 11-19. The work of John M. Brewster, including his paper for this conference, is especially relevant.

Second, while some differences remain, farmers as an occupational group appear on the whole to be moving closer to, rather than further from, the central value orientations of American society.

Third, among farmers, just as among other occupational groups, there is a wide diversity in the extent of adherence and intensity of adherence to some of the most dominant value orientations, and probably even more diversity with respect to lesser values. There is diversity in the values stated or inferred and in the expression of values.

Fourth, the evidence of diversity increases as one examines value orientations more locally, more situationally, and in relation to specific variables. This diversity among farm people carries over into goals and means. Part of this diversity is associated with social organization and with cultural factors — for example, regional differences, differences among groups with given religious and cultural characteristics, etc. Other parts of the diversity may be due to the values which are “permitted” or “tolerated” by an individual’s definition of the situation — a hill farm, middle age, a low educational level, and limited capital are not necessarily conducive to intense adherence to conventional expressions of personal achievement. Still other diversity may result from the set of circumstances whereby an individual is bypassed by the main currents of American life which transmit the major values and goals.

Fifth, while goals held by farm people are generally consistent with their values, the goals are not usually specifically or completely verbalized, nor is the means-end relation among goals clearly indicated. Unless they have thought in terms of goals, farmers are likely to express their ends in specific, short-run, predominantly farm-business-oriented terms. However, more specific attention given to goals results in the expression of more general, long-run ends with comparatively more emphasis given to noneconomic personal and family goals.

SOME EVIDENCE ON VALUES AND GOALS OF FARM PEOPLE

In American society one would expect farmers to share in large measure in the value orientations of the larger society because of the pattern of historical development of the nation and because of the many factors which have favored a large and unhindered interchange of people and ideas between farm and non-farm sectors. At the same time, there are reasons rooted in the

economic and social organization of rural life and in social history for expecting that between farmers and others there would be some differences in value orientations and more differences in the expression of specific goals and means in relation to values.

FARMER CONFORMITY WITH AND DEVIATION FROM SOCIETAL VALUE ORIENTATIONS

At one time or another nearly every conceivable value or trait has been imputed to American culture by observers.¹⁴ Contemporary lists overlap but are not in complete agreement as to the elements which constitute the core of American values, or even as to the number of major values — 3, 7, 11, 15, 17, or some other number.¹⁵ Williams discusses 14 major value orientations and one major countercurrent, all of which he is careful to say represent tendencies only. A listing is a completely inadequate way of presenting these orientations but will suffice to convey the significance of some of them in relation to adjustment alternatives for farmers. For example, it seems reasonable to expect support for economically rational measures from the values of: (1) the stress upon personal achievement, especially secular occupational achievement, (2) efficiency and practicality, (3) a belief in progress which involves acceptance of change and the idea that changes are in a definite direction and the direction is good, (4) faith in science and the rational approach to problems, and (5) approval of and seeking of a high level of material comfort.¹⁶

Adherence to these values would suggest a willingness to set goals and adopt means suitable for movement toward agricultural adjustment. Four other major values are in conflict among themselves as applied to agricultural adjustment; they are (1) approval of the principle of equality of rights and opportunity, (2) freedom, (3) democracy, and (4) a high value on the development of the individual personality. The value of external conformity and of the stress on activity, work and being busy appear to be more

¹⁴Lee Coleman, *What Is American? A Study of Alleged American Traits*, *Social Forces*, 19 (4, May, 1941): 492-99.

¹⁵Three lists of 7, 11 and 15 items are given in Alvin L. Bertrand and associates, *Rural Sociology: An Analysis of Contemporary Rural Life*. McGraw-Hill Book Company, Inc., New York. 1958. Pp. 35-47. Another list of 17 values is given in J. Gillin, *National and Regional Cultural Values in the United States*. *Social Forces*, 34 (2, December, 1955): 107-13. Also three major focal values for middle class Americans are postulated by Cora DuBois, *The Dominant Value Profile of American Culture*. *American Anthropologist*, 57 (6, December, 1955): Part 1, 1232-39.

¹⁶The relation of these to programs for low-income farmers is discussed in Olaf F. Larson, *Sociological Aspects of the Low-Income Farm Problem*. *Jour. of Farm Econ.*, Proceedings Number, 37 (5, December, 1955): 1417-27.

secondary and situational in their relevance to the central problem, while the other values identified by Williams are even more restricted in relevance.¹⁷

As far as is known to the writer, only one research study has attempted to provide direct evidence on farmer adherence to this set of generalized major value orientations. This is Ramsey's study of a 10 per cent probability sample of dairy farmers in a New York county in 1956, the county purposively selected because census data indicated the presence of a relatively large percentage and number of lower-income farmers.¹⁸ Carefully developed and pretested scales were used to measure the five value orientations listed as of special significance for moving toward agricultural adjustment, plus conformity and individualism. Scales were developed for five other values believed to be significant for the purposes of the study. "Traditionalism" is the antithesis of progress. "Familism" is opposed to individualism. "Farming as a way of life," "belief in hard work," and "security" were also included. Values were inferred from scaled responses given in interviews to forced-choice questions which involved ranking items.

Insofar as values were measured by the techniques used, it is clear that these farmers ranged over the whole possible continuum with respect to their value orientations. A few were at the extremes, representing strongly held values, but most were somewhere in the middle of the range. They tended to be highest on individualism and progress; they tended to be low on belief in hard work, on farming as a way of life rather than as a means, and somewhat low on achievement orientation as defined (choosing alternatives which result in a high status position, striving for profit, etc.). On all other values, a middle range position is most descriptive of the majority. (See Table 7.1)

Further, the correlations among the values were not high, even where statistically significant (Table 7.2). Either the available instruments were not measuring values or the population sampled does not hold highly consistent values when expressed in a generalized and nonsituational context. Some relationships were of the expected type, as the negative relation between traditionalism and farming as a way of life and achievement and efficiency.

¹⁷These are: (1) a tendency to "see the world in moral terms," by which conduct is judged, (2) humanitarianism, (3) nationalism and patriotism, and (4) the counter-current, racism and group superiority.

¹⁸For a description of research procedures - including the development of value scales and scores - and operating definitions of the values used, see Ramsey, Polson, and Spencer, op. cit.

Table 7.1. Farmers Classified by Scale Scores for 12 Value-Orientations:
Cattaraugus County, New York, 1956

Scale scores	Value					
	Achievement	Efficiency and practicality	Progress	Faith in science	Material comfort	External conformity
	(per cent)					
0	3.7	0.0	0.0	0.0	2.6	0.5
1	16.8	1.1	0.0	2.1	7.9	3.2
2	20.5	4.2	2.1	8.4	13.2	14.7
3	24.2	21.6	6.3	17.4	19.5	19.9
4	18.9	26.3	20.0	16.3	19.6	15.8
5	3.7	16.8	20.5	18.0	16.8	19.5
6	1.1	12.1	20.6	12.1	8.9	10.0
7	0.0	4.7	15.8	8.9	2.1	5.8
8	---	1.1	4.7	2.6	0.5	1.1
9	---	---	1.1	0.5	---	0.0
10	---	---	---	0.0	---	0.0
No score	11.1	12.1	8.9	13.7	8.9	9.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 7.1. Continued

Scale scores	Value					
	Traditionalism	Farming as way of life	Belief in hard work	Individualism	Familism	Security
	(per cent)					
0	0.5	2.6	2.6	1.1	0.5	0.0
1	7.9	5.8	20.5	7.4	4.7	2.1
2	17.9	17.4	18.4	20.0	14.2	6.8
3	24.8	25.8	19.5	25.3	15.8	15.8
4	22.6	19.5	15.3	25.7	20.6	11.6
5	8.9	7.9	9.5	12.1	15.8	23.8
6	3.2	6.3	0.0	---	9.5	18.9
7	0.0	2.6	---	---	4.7	8.4
8	0.0	1.6	---	---	1.6	3.2
9	---	0.0	---	---	0.0	0.5
10	---	---	---	---	---	---
No score	14.2	10.5	14.2	8.4	12.6	8.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: 1. All percentages based upon 190 cases.

2. The higher the score, the more frequent the expression of adherence to the value.

3. The possible maximum scale scores range from 5 for individualism to 10 for faith in science and external conformity.

Table 7.2. Product-Moment Correlation Among Selected Value-Orientation Scales: Cattaraugus County, New York, 1956

	Achievement	Efficiency	Progress	Faith in science	Material comfort	Traditionalism	Farming as way of life
Achievement	---	.12	.07	.19	.004	-.18	-.15
Efficiency	.12	---	.11	.09	.08	-.21	-.18
Progress	.07	.11	---	.06	-.16	.03	-.13
Faith in science	.19	.09	.06	---	-.03	-.58	.02
Material comfort	.004	.08	-.16	-.03	---	-.05	-.50
Traditionalism	-.18	-.21	.03	-.58	-.05	---	.005
Farming as way of life	-.15	-.18	-.13	.02	-.50	.005	---

Note: .12 or above significant at 5 per cent level.

In another New York study, a somewhat similar test was given to 240 junior and senior high school students in four rural areas in 1958.¹⁹ Among the 12 value orientations measured were 7 comparable with the Ramsey study of farmers. These rural youth, a minority of them farm residents, also ranged over the whole continuum of scale scores. The boys tended to be highest on comfort and security, middle to high on achievement, low on familism, split high-low on both hard work and individualism, and divided about evenly on the continuum for conformity. On values measured because of their assumed significance for educational and occupational choice, the rural boys were low on service to society, work with people, and friendship; they were medium to high on creative work and evenly distributed on mental work.²⁰

Information with value inferences on a national level is offered in a study made by Beers.²¹ He took 47 national public opinion polls made between 1946 and 1950 for which results had been tabulated by occupational categories (including farmers). These were polls deliberately selected in the hope they would provide some evidence on comparative values of farmers and other occupational groups. Polls were grouped into five classifications such as "economic action by government," "labor issues," etc.

This analysis clearly indicated that the general pattern of farmer opinion on nearly all questions was exactly like that of the

¹⁹For a description of procedures and definitions see Harry K. Schwarzweller, Value Orientations in Educational and Occupational Choices. *Rural Sociology*, 24 (3, September, 1959): 246-56. The results presented here are based on unpublished data obtained in connection with Schwarzweller's Ph.D. thesis, Value Orientations, Social Structure and Occupational Choice, Cornell University, 1958.

²⁰Some of the twelve value-orientations were significantly related to sex. Boys tended to value achievement, security, material comfort, and creative work more than girls. Girls tended to value work with people and service to society more than boys.

²¹Howard W. Beers, Rural-Urban Differences: Some Evidences from Public Opinion Polls. *Rural Sociology*, 18 (1, March, 1953): 1-11

total population; in fact, the pro-percentages on four questions were identical for farmers and others and for eight questions farmers did not vary by more than 5 per cent from the total. On most of the issues, the bulk of the farmers and the general public were under overlapping distribution curves. At the same time, diversity remains. On 35 of the 47 polls, farmers were the occupational group representing the highest or lowest percentage of approval. Farmers were at one extreme or the other on six of the seven topics on economic action by government, on nine of the ten topics on labor issues, on seven of the eleven on international — especially U.S.-Russian — relations, on all eight of the topics on a variety of public questions (social legislation, universal military training, control of communism, special taxes, race relations, daylight saving time), and on five of the eleven topics of personal concern (importance of education, preferred types of employment, satisfaction with "lot in life"). Farmer differences with the general public were by far the greatest on three issues of self-interest (keeping price guarantees on farm crops, removal of taxes on oleomargarine, and daylight saving time). A followup of Beers' work, sorting by such variables as region, income, etc., and an up-dating would be of interest.

Behavioral evidence indicating that farmers tend to be guided in considerable degree by the same values and goals as their fellow Americans is provided by the net migration of an estimated 7,245,000 persons from farms in the nine years 1950-1959, by the decline in number of farms, by the increased percentage of the remaining farm operators employed at nonfarm jobs, and by the growing proportion of farm women in the labor force. Granting the importance of the "push" factors, these trends indicate that many farm people have values and goals conducive to economic adjustment.

Farmers Becoming More Like Other Americans in Values

With the overlap already existing between farmers and others, there is reason to believe that the gap is narrowing in ways reflective of values and important for goals. The farm family's gains in living facilities, the growing similarity of farm and non-farm family living consumption patterns and homemaking practices,²² the increased percentage in different age groups of farm

²²Farm Family Spending in the United States: Some Changes as Indicated by Recent U. S. Department of Agriculture Expenditure Surveys. U.S.D.A., Agr. Info. Bul. No. 192, Washington, D.C. June, 1958.

children attending school, and the gains in school achievement by children of farm families are illustrations. Also, it is significant that regional differences among farm families are tending to even out some of these indicators.

Diversity Among Farmers Continues

On issues and programs with value aspects, it is certain that farmers are far from unanimous. On none of the 47 national polls analyzed by Beers were farmers unanimous; they approached unanimity on only four of the 47 — on items on which the general public was also quite one-sided (two questions involved labor and two U.S.-Russian relations).

Further light on diversity is provided by a study of the opinions of New York farmers on agricultural policies and programs which was made in 1951.²³ This was limited to operators deriving half or more of their income from farm operation. The study included 1500 farmers selected through an area probability sample. A high degree of approval was expressed for certain programs (research, extension, and technical assistance on conservation); a majority favored other programs (such as marketing orders for milk, surplus removal, and crop insurance). Opinions were strongly divided on three programs for which reaction was sought: production controls, price supports, and conservation payments. Cummings found that the responses for these three controversial programs could be scaled and four categories of farmers established:²⁴

1. Disapproved all three programs — designated as “independence oriented” — 20.5 per cent of sample
2. Disapproved two but approved one program — 30 per cent of sample
3. Approved two but disapproved one program — 22.1 per cent of sample
4. Approved all three programs — designated as “security oriented” — 27.4 per cent of sample.

²³The general findings are given in Edward O. Moe, *New York Farmers' Opinions on Agricultural Programs*. Cornell Ext. Bul. 864. November, 1952.

²⁴Gordon J. Cummings, *Values of Farmers with References to the Role of Government in Agriculture*, paper presented at 1954 annual meeting of Rural Sociological Society; adapted from Ph.D. thesis, *The Major Value Orientations of New York State Farmers with Reference to the Role of the Federal Government in Agriculture*. Cornell University. 1954.

These opinion patterns were reflective of a fairly well integrated cluster of opinions related to the role of government and agriculture. For example: "By contrasting percentages in the two polar patterns, it was found that farmers who were said to be predominantly security oriented were much more likely to endorse other agricultural programs and the expansion of agencies than those said to be independence oriented. . . . Those in the security oriented pattern were also much more likely to say that the government was not spending enough money on farmers while the independence oriented on the other hand were inclined to feel that too much money was being spent on farmers. As to farmers' share in the cost of farm programs, only 5 per cent in the security pattern said farmers themselves should pay more of the cost compared to one-fourth of those with an independence orientation. Again, nearly one-fourth of the independents volunteered the opinion that the (then) Production and Marketing Administration should be eliminated, while less than one-half of 1 per cent in the security pattern expressed a similar opinion." However, no significant relationship was found between these opinion patterns and receipt of conservation payments or participation in price support programs.

Such evidence is in general accord with Paul Miller's contention that "The modern value orientation of rural people in the United States is a condition of ambiguity." ²⁵

Situational and Local Aspects of Diversity in Values and Goals

Examples of the variations in the value hierarchy and in goals which one finds from community to community are familiar and numerous; variations within communities associated with variables sometimes unique to the community are also well established. Cases such as the Old Order Amish of Lancaster County, Pennsylvania,²⁶ contrasted with the Spanish-Americans of El Cerrito, New Mexico, may seem exceptions. However, the importance of value differences in the adjustment of nearby communities to similar problems has been stressed by the Harvard study of the value systems of five groups in New Mexico. In one of these — a small, dry-land, bean farming community — a strong

²⁵Paul A. Miller, *Social, Economic, and Political Values of Farm People, in Problems and Policies of American Agriculture*. Iowa State University Press, Ames. 1960. Pp. 80-96.

²⁶The values of this and five other communities are summarized in Carl C. Taylor and others, *Rural Life in the United States*. Alfred A. Knopf, New York. 1949. Pp. 504-7.

stress upon individualism appeared outstanding as the clue to understanding behavior, in contrast to stress upon cooperative community action in a second.²⁷ A recent study of an arid Great Plains community shows the chief community values to be endurance, ruggedness, independence, and success by hard work.²⁸ However, marked differences were found by three major farming types: cattle-cream, diversified, and cash wheat. For the cattle-cream group, this way of farming is something of a way of life. There was reported to be a contrast between the feeling of dignity of these farmers as independent proprietors and the meniality and subordination felt at other types of work. The "independence" theme persists in many of the local studies, as does evidence of a strong attachment to rural living.

Statement of Goals

From the viewpoint of adjustment to economic change, we can classify farmers into some major categories which are likely to persist. We might designate these as (1) adjustment oriented (*gesellschaft* oriented in sociological terms), (2) a group which is nonadjustment oriented because of traditional values (*gemeinschaft* oriented), and (3) a group which is nonadjustment oriented because self-definitions of the situation lead to a perception of being "stuck" in their situation.

Goals, goal priorities, and means appear to vary among these types. For all, the interrelationship of farm and family is typically important in goal setting.²⁹ Because of this, the goals expressed are strongly correlated with the stage of the family cycle.³⁰ At any stage, the statement of goals varies with the technique used to discover the goals held. Security and self-respect as goals show up directly or indirectly in many of the studies. Farm ownership as a goal or as a means ranks high. The studies give many indications that the occupation of farming is for many a goal in itself. Beyond these generalized conclusions, diversity appears.

²⁷See Evon Z. Vogt and Thomas O'Dea, *A Comparative Study of the Role of Values in Social Action in Two Southwestern Communities*. *American Sociological Review*, 18 (6, December, 1953): 645-64; also Vogt's *Modern Homesteaders*.

²⁸Based on preliminary and unpublished reports of the U.S. Public Health Service.

²⁹This point has been developed in Earl O. Heady, W. B. Back, and G. A. Peterson, *Interdependence Between the Farm Business and the Farm Household With Implications on Economic Efficiency*, Res. Bul. 398. Agr. Exp. Sta., Iowa State University, Ames, Iowa. June, 1953.

³⁰See, for example, Heady, Back, and Peterson, *op. cit.*; also Cleo Fitzsimmons and Emma G. Holmes, *Factors Affecting Farm Family Goals*, Res. Bul. No. 663. Purdue University Agr. Exp. Sta., Lafayette, Ind. July, 1958.

For example, a study of 70 farm families in an Indiana county found all wanting farm ownership and a high school education for the children. Variation, associated with stage in the family cycle, was found with respect to goals for the farm, family finance, indebtedness, health, housing, community participation, and recreation.³¹ These families had some long-time goals but seemed to think principally in terms of short-time goals. Goals relating to debt, farm improvement, housing, and equipment were usually definite; other goals were less well defined.

In a New York county, when the county agricultural agent started to work with a group of farm families participating in the Farm and Home Management program, the goals stated were few, chiefly short-term and predominantly about the farm business.³² Two years later the goals had increased in range, were more long-term and were stated predominantly about the family, the individual, and the community rather than about the farm business. The shift was toward the farm business as a means to achieving such goals as education for the children, leisure, comforts and conveniences of living, and good retirement.

The importance of the context in which an effort is made to determine farmer goals is brought out by two Wisconsin studies. In one, in which the focus was on values believed related to practice adoption, owning the farm free of debt, and providing a good education were ranked about equally high over three other alternatives given — having the farm well equipped, having modern conveniences in the home, and providing an opportunity for travel and recreation.³³ In the second study, where the focus was on decision making about several types of farming changes, “monetary returns” was given most frequently as a consideration in deciding whether to make a change (primary in two-fifths of all responses and secondary in one-fourth).³⁴ Here monetary returns was selected from four other alternatives including ease and convenience, care and quality, prestige, and relations with others.

³¹ Fitzsimmons and Holmes, *ibid.*

³² Ernest J. Cole, Determination and Clarification of Goals of Tompkins County, New York, Farm Families Through the Farm and Home Management Program. Master's thesis. Cornell University. September, 1959.

³³ Eugene A. Wilkening, Adoption of Improved Farm Practices as Related to Family Factors, Res. Bul. 183. University of Wisconsin Agr. Exp. Sta., Madison, Wisconsin. December, 1953.

³⁴ Eugene A. Wilkening and Donald Johnson, A Case Study in Decision-Making Among a Farm Owner Sample in Wisconsin, in The Research Clinic on Decision Making, Papers Read Before the Rural Sociological Society, August 25, 1958. State College of Washington, Pullman, Washington. January, 1959. Pp. 1-20.

CONCLUSION

In many respects, the evidence indicates diversity in values and goals held by farmers of the United States. Some of their values and goals are changing, as for example those concerned with work, comfort and leisure³⁵ and the means of achieving security. Further changes are in prospect. The New York study of independence- and security-oriented farmers found higher levels of education positively associated with an independence orientation toward the role of government in agriculture. It found professional agricultural workers — agricultural extension agents and vocational agricultural teachers — much more independence oriented than farmers as a group. These would appear to be forces operating in the direction of more independence in the future. At the same time, young farmers, regardless of education, tended to be security-oriented; thus we have a counterforce operating.

Diversity in values and goals is likely to persist, with the implication that there will continue to be conflicts among farmers with respect to agricultural policies and programs, just as there are conflicts among the major value orientations of American society.

Among farmers, some reduction in conflict might result from educational efforts consciously directed at assisting farmers in thinking through and identifying their values and goals. Such an effort would clearly aid individual farmers in arriving at a decision about their adjustment problems, as indicated by experience in the Farm and Home Management Program. However, only a part of the farm policy conflict is a matter of value conflict. Also involved is a matter of self-interest among competing groups and interests within agriculture (unless one wishes to define self-interest, in contrast with group interest, as a value conflict). These conflicts of interest among farmers are likely to be submerged only in times of overriding national crisis (assuming a continuation of the present pattern of social organization and relative importance of the several social systems).

³⁵See M. E. John, *The Impact of Technology on Rural Values*, Jour. of Farm Econ., 15 (5, Proceedings Number, December, 1958): pp. 1636-42. Heady, Back, and Peterson (op. cit.) report that two-thirds of one group of 144 Iowa farmers studied had made investments in farm machinery and equipment in the past five years for reasons other than primarily to increase income.

THE UNDERLYING THEME of Professor Larson's chapter suggests the presence of a deep-seated cultural lag in agriculture. There is a widely diffused and traditional orientation toward farming as an elemental feature of the society; a belief that people who work at food and fiber production are not only engaged in an economic enterprise but also are responding to a profound calling. The scientific and technological development of the last century has been unleashed upon agriculture in this value setting. The outcome has been a tremendous increase in productivity. Because of the sentiment and tradition associated with agriculture, not only on the part of farmers but by the nonfarm population as well, the agricultural industry has been slow to adjust in an economic sense to the means of increased production.

Professor Larson has said that there is an excess productive capacity and too many workers in agriculture. As he was quick to observe, this statement can very well be purely academic. For who is to take the risk of programming for the long run? War, drouth, population increases, and many other specters are held up in the face of those who say too many people are producing too much for the welfare of the industry. It is held that there is a greater uncertainty which needs to be covered. This is the uncertainty of the "very" long run.

On the other hand, it could well be that those who resist rather rigorous economic analyses of the farm problem are rationalizing vested interests, ego involvements, and commitments to a belief system which is so firmly entrenched that they are helpless in trying to understand an alternative position.

While Professor Larson does not explicitly suggest measures for solving the dilemma of the cultural lag suggested, he does point out that the value pattern of American society is of such variegated hue that there may be enough momentum gathered for a direct approach to a rational solution of the problem. It would seem that the basic conflict is between two equally cherished American values: the first is the belief in breaking production records and the second is the belief that America because of its heritage must maintain, practically at all costs, a significant share of its population on the land.

Professor Larson also points to another important dilemma, the family farm. He suggests that it may be wise in our educational and service efforts to separate agriculture as an industry

from the family for analytic and policy development. In some quarters this would be heresy. There is no need to review why this is true. While the writer must side with the idea that the separation of the agricultural industry from the farm family would no doubt generate many new avenues of thought, he is, as he believes Professor Larson was, a little at a loss as to knowing what the wisest strategy would be for initiating such a change in thinking. Here again we are faced with the inertia of tradition.

It would be incorrect to conclude that cultural lag defines the whole problem with which Professor Larson is dealing. The evidence he cites from the review of research on farmers' attitudes, values, and goals suggests that there is ambiguity, diversity, and perhaps a kind of rootlessness. One can find support in the agricultural community for almost any value position. If one were to drop the problem at this point, there is little to conclude other than the farmer is fulfilling the image of the mid-twentieth century model of the common man. He seems to have his mind fixed so he can change it. Or perhaps more accurately, there seems to be no one value or goal motif which adequately describes the position of the American farmer.

While it was not Professor Larson's explicit responsibility to go beyond a factual presentation of what we know about farmers' goals and values, the writer wishes that he would have recognized the significant role that agricultural and rural organizations play in fixing the various points of view regarding agriculture and rural life. One of the most significant changes that has taken place in agriculture in the last 75 years has been the tremendous increase in number and variety of organizations serving and speaking for the agricultural industry. One can see at least two levels at which the value problem can be studied. Professor Larson has summarized what we know at the level of the individual farmer and his family. To date, we do not have an adequate summary of the value positions taken by the various groups and agencies affiliated with agriculture and rural life. In a sense this second level may be more significant in that these groupings contribute a great deal to formulating the image of American rural life to the general public.

Professor Larson points out a useful methodological suggestion near the end of his paper. He proposes that the group of farmers who are nonadjustment oriented fall into two categories: those who choose not to adjust and those who perceive themselves as being stuck with no choice in the matter. We have been prone to lump together those who appear to be holding back with regard to practices and principles which lead to bettering economic and social conditions. This suggestion of his would lead to many new

insights about change if research hypotheses were developed to pursue the idea. On the other hand, the writer believes that his adjustment oriented category could be broken down into at least two classes: those who adjust and don't worry about it and those who adjust in a context of anxiety. The underlying theme which seems to help in explaining what is behind Larson's classification is the concept of risk. The writer would like to make several general observations about risk as it would seem to be related to the problem of the agricultural industry and to the problem of goals and values among farm people.

Academically, risk has been the subject of economic and statistical interest. There are, however, other dimensions of the concept which would seem to have significance to the problem of farmers' goals and values. It is probably not an overstatement to assert that risk is one of the major problems shaping the value and belief systems of farmers. By risk is meant an awareness of uncertainty with regard to the outcome of a decision or system of decisions. Risk, as it relates to decision, functions within a larger context of uncertainty growing out of an inherent unknowability or less than perfect knowledge. The farmer and all of us, face life and life situations in uncertainty. A variety of alternative lines of action are open as possible answers to problem situations. Each one carries a specific uncertainty of outcome. Risk, then, is a property of the human situation. Man's problem is one of choosing among alternative lines of action in a situation of uncertainty wherein the maximum expected utility of the decision will be realized.¹

Farmers and spokesmen for farmers have been diligent in educating the public, as well as each other, about the risk in the farming industry. One could very well develop at length an analysis and evaluation of ways in which risk has been defined and faced. Only an introduction to the problem will be attempted here.

Two knowledge themes have grown up around which people cluster and between which they vacillate in attempting to reduce risk. One emphasizes fate, divine revelation, magic, and tradition. Here farming is viewed as a "venture of faith" and that without divine intervention, luck, and continuation of the agricultural practices of "the fathers," the harvest is very likely to be skimpy. The other theme emphasizes reason, rationality, and science. Risk is a problem to be handled in the context of probability rather than faith. The history of the agricultural industry

¹For an excellent discussion of uncertainty and risk, see Frank P. Knight, *Risk, Uncertainty, and Profit*. Houghton Mifflin and Company, New York. 1921.

would appear to be a study in the interaction between these two points of view. On occasion a "balance sheet" is drawn up and the conclusion is likely to be reached that the second emphasis is gaining in use as a referent for decision. This is the cause of worry in many quarters of society.

As Professor Larson noted, Robin Williams drew up such a summary recently in a discussion of American values. He developed the following propositions:

1. American culture is organized around the attempt at active mastery rather than passive acceptance.
2. American culture tends to be interested in the external world of things and events, rather than in the inner experience of meaning and affect. Its genius is manipulative rather than contemplative.
3. The world view of American culture tends to be open. It emphasizes change, flux, movement; its central personality types are adaptive, accessible, outgoing, and assimilative.
4. American culture places its primary faith in rationalism as opposed to traditionalism.
5. There is an emphasis on orderliness rather than unsystematic acceptance of transitory experience.
6. With conspicuous deviation, a main theme is universalistic rather than a particularistic ethic.
7. In interpersonal relations, the weight of the value system is on the side of "horizontal" rather than "vertical" emphases: equality rather than hierarchy.
8. Individual personality is emphasized rather than group identity and responsibility.²

Williams points out that adequate supporting evidence is not available for documenting all of these points. However, there would appear to be enough face validity in them to provide a useful basis for discussion of the problem before us in this session. The Williams summary suggests that the American value system is essentially secular in practice. There is diminishing evidence of the sacred theme embodying the motifs of revelation, mysticism, and tradition in the day-to-day life of American society.

If farmers' values are changing, there must be an intellectual point of origin and similarly an intellectual point of destination. The idea of a sacred-secular motif may be of some use in considering the nature of the change and its accompanying problems of adjustment. Let us see if the problem of risk in the

² Robin M. Williams, *American Society*. Alfred A. Knopf, New York. Pp. 441-42, and 372-441.

agricultural enterprise lends itself to an analysis in the context of sacred-secular scheme.

Because agriculture was traditionally defined as a "venture of faith" where the forces of nature worked relatively unmolested to yield abundance or scarcity, there grew up over the years a very real as well as imagined dependence upon nature on the part of the farmer. The early solution to the problem was one of accepting a passive relationship with natural phenomena and to try to accommodate to them. Reducing risk was by and large limited to searching for means of tuning oneself to the rhythm of nature and the imputed whims of the Almighty. Risk was inextricably tied to fate. The human approach to reduce the negative consequences was to indirectly tackle the problem through the use of religious ceremony, magical rites, and folk knowledge.

Until the fairly recent historical period, improved farming practices were not likely to be direct attacks on the natural and human phenomena giving rise to problems of production and the market. An early example of the indirect attack was the incident in which Israel was worshipping the golden calf. Here was an early attempt at a grassland field day. More recently we experienced the rather active use of astrology as summarized in the almanac in the decision making regarding planting, harvesting, and livestock breeding.

As civilization advanced, new and better answers to the problem of risk were sought. The Protestant Reformation, together with the Age of Enlightenment, gave birth to a new interpretation of man's relationship with the ultimate. The worldly creation was no longer seen as finished. Man was defined as a partner of the Almighty in a continuing creative process. This new status gave man a wholly new concept of his rights and obligations.

The invention of the scientific method and its accompanying technology opened many lines of action leading to new approaches to the reduction of risk in agriculture. The farmer's concept of himself as an active partner in a continuing creative process invaded the old idea of wrenching a living from what was believed to be a finished and unalterable creation. With regard to the physiological man, the new emphasis set the stage for the practice of preventive medicine. Socially, man was freed from the bonds of family and the neighborhood to develop organizations for pursuing special interests. Moral relativism began to replace a strict and narrow code of rights and wrongs.

Society began to see the "practical value" of the scientific method and its corollaries in other avenues of human endeavor. Private and public resources were allocated for furthering the search for truth in the empirical world. Educational philosophy

shifted to a pragmatic emphasis in which the motif was aggressive and problem solving rather than reflective and spiritual. The educated man knew how to get things done. A great faith was placed in the answer-giving power of science.

The land-grant college and the agricultural extension service are two examples among a host of secular means developed to help the farmer with his problems. Agencies such as these eat away at the sacred knowledge theme. We see evidences of the rational, calculating personality cropping up in agriculture here and there, and we become uneasy about what we are doing. We wonder if in the technological and scientific revolution in agriculture there has been erosion of beliefs, values, and perhaps even practices that ought not to have happened. In our anxiety we ask, "What hath man wrought?" Could it be that we want to "eat our cake and have it too?" Indeed, the various agricultural agencies and organizations offer a rich area for studying the value problem in agriculture.

What kind of a personality do we want in the American farmer? How do we want him to relate himself to the problem of uncertainty? Is it possible to have active sacred and secular value orientations in the same skin without developing schizophrenic tendencies? When the farmer sees his alfalfa attacked by spittle bug we want him to move quickly with the sprayer and possibly check with the county agent for the latest insecticides. Is it necessary for him to cover the sacred lines of action too? It is fairly well documented that the probability of reducing the bug menace with spray or dust is greater than with any sacred line of action.

Because of the eclectic and pluralistic qualities of our culture the question is one of the possibility of meaningful relationship between the sacred and the secular in a time of increasing areas of uncertainty carrying with them known probabilities or reasonable estimates. Man needs a set of guiding principles to help him in this time of decreasing worldly ignorance. He needs a value and belief system which will encompass the full meaning of partial knowledge. A new value theme needs to be developed which will enjoin the sacred and the secular. The Protestant era prepared the climate for such a theme. The free enterprise system and the every-man-a-king motifs have served us well over the centuries, but they never came to terms with the story of man's inevitable insufficiency and the need to mend the estrangement with the Almighty. While the Protestant position freed man to go ahead, it never clearly stipulated that going ahead did not mean returning to the "old" law of God. Man's intellectual energies have been divided between the search for the divine equilibrium and the establishment of a worldly equilibrium.

Somehow there needs to be developed a point of view that what now appears to be secular can also have a profound sacred emphasis. A mythological statement portraying man as a partner in the continuing process of creation would indeed serve a useful purpose in these times.

In summary, then, we have attempted to sketch out a point of view regarding farmers' values and goals which choose risk as the central concept. We suggested that risk lends itself to analysis in the context of the sacred and the secular. It was pointed out that in this polarity there is the possibility of causing frustrations and inefficiencies both at the level of personality as well as in organizations. Finally, it was proposed that there needs to be a new mythological statement emphasizing the role of man as an extension of the Almighty in a continuing creation. While scientists and educators cannot deliberately create myths, they are efficient destroyers and reinforcers of them. We need to proceed with intelligence in our relationships with the agricultural labor force and its network of organized interests. We have value problems too!

GEOFFREY SHEPHERD

Iowa State University

Discussion

I AM DISCUSSING Mr. Larson's chapter under the slight handicap of not having seen it yet. Mr. Larson was not able to get his material in much ahead of time, for reasons beyond his control, and I had to leave town before it was presented. According to the title, however, Mr. Larson is to discuss the basic goals and values of farm people. On the rather hazardous assumption that any author ever discusses the subject assigned to him, I might proceed to discuss my projection of what Mr. Larson is going to say.

But rather than pile hazard upon hazard in this way, I shall perforce do with a clear conscience what some discussants do with no conscience at all — that is, pay no attention to the author's work, but instead write one of their own. Any relevance which my discussion bears to Mr. Larson's chapter, then, will indeed be purely accidental. But it does have direct relevance to the subject: basic goals and values in agricultural policy.

First, many scientists maintain that goals and values are not a proper subject for any scientific discussion. Science, they believe, can say nothing about values, and shouldn't, even if it could.

Economists, they say, can show on an objective basis, using marginal analysis, what is the optimum allocation of productive resources — that is, the allocation that will maximize the production of the goods and services demanded by consumers, with a given distribution of income. They can show the same thing concerning the distribution of an individual's income, given his wants for the different goods and services. But economists generally take the position that they cannot show on an objective basis what is the optimum distribution of income among the individuals in a society, nor what is the best structure of wants for any individual.

The reasons given for this position are two in number:

(1) Appraising the distribution of income among individuals requires interpersonal comparisons of utility, which cannot be made objectively. (2) The structure of wants for any individual depends upon his value judgments, which lie outside the field of economics.

Here perhaps are the clearest and strongest statements of this position:

Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses.¹

The economist is not concerned with ends as such. He is concerned with the way in which the attainment of ends is limited. The ends may be noble or they may be base.²

Economics cannot pronounce on the validity of ultimate judgments of value.³

Economics deals with ascertainable facts; ethics with valuations and obligations. The two fields of inquiry are not on the same plane of discourse.⁴

Many scientists in other fields hold similar views. "Scientific positivists" express their views somewhat as follows:

Scientific method reports what is, not what ought to be; it can discover social pressures, but not moral obligations; it verifies statements about the desired, and the most efficient means for securing it, not about the desirable in any further sense.⁵

¹ Lionel Robbins, *The Nature and Significance of Economic Science*. Macmillan, New York. 1940. P. 16.

² *Ibid.*, p. 25.

³ *Ibid.*, p. 147.

⁴ *Ibid.*, p. 148.

⁵ Arthur E. Murphy, *The Uses of Reason*. Macmillan, New York. 1943. P. 145.

Another view, of a similar general nature, is put in these terms:

Reason . . . can tell us whether our estimates of value are logically consistent, and inform us concerning the causal means best suited to further the ends we have in view. The means are properly judged as good, however, only if the ends are good, and on this point "reason" has no jurisdiction, for "ultimate ends recommend themselves solely to the affections," or, as a more modern version of the same doctrine would say, to the primary "drives" which determine what the organism desires and on what conditions it can be satisfied. And since the means derive their goodness only from the end they serve, we can see why Hume should conclude that, in the field of morals, "reason is and ought to be the slave of the passions."⁶

Another statement agrees with this:

Though knowledge is undeniably power, the moral ends for which that power is used cannot be determined by the science of human relations any more than they can be by natural science.⁷

And still another:

The sense of value that is the basis of choice and freedom lies in a realm that science does not touch . . . freedom in its most essential sense is something of the spirit, and . . . this something of the spirit is beyond the realm of science.⁸

That is to say, according to the orthodox view: Science can appraise means, but not ends. It cannot make value judgments. For instance, it cannot objectively put a higher value on freedom than on security, or vice versa; that is up to the individual. Science cannot help us to make ethical judgments. Science can tell us how to get to where we want to go, but it cannot tell us whether we ought to want to go there in the first place. It cannot say: this is good, and that is bad. Science says: if you don't like spinach, that's all there is to it. De gustibus non disputandum est.

I think that this is a misconception, which arises from a faulty idea about what science can say about anything. With respect to means — and most scientists agree that scientists properly can appraise means — science can say that this means will be more

⁶ Arthur E. Murphy, *The Uses of Reason*. Macmillan, New York. 1943. Pp. 97-98.

⁷ Louis Ridenour, *The Natural Sciences and Human Relations*, Proceedings of the American Philosophical Society, 92(5): 354-55. Nov. 1948.

⁸ A. H. Compton, *Science and Human Freedom*, Symposium on Human Freedoms. Coe College, Cedar Rapids, Iowa, 1952. Pp. 5, 10.

efficient than that one, but science properly cannot say that this means is better than that one. It may cost more, and the voters who are voting on the means may prefer to choose the means that costs the least rather than the means that is most efficient, because they value low cost more highly than they value efficiency.

Thus even in the case of means, science properly can only appraise in the sense that it can show the consequences of alternative means, not appraise in the sense that it can say that one means is better than another.

My point now is that science properly can appraise ends as well as means, in the same sense as it properly can appraise means. It can appraise ends and values in the sense of showing the consequences of alternative ends, the same as it can appraise means by showing the consequences of alternative means, leaving people free to choose among ends as among means, but free also from any attempt by scientists to say that they ought to choose one end rather than another, or that one end is better than another.

Thus if voters place a high value on security rather than progress, science cannot say that they should or should not do so, but only show the consequences of these values, leaving voters to alter their values or not as they wish, just as it leaves them free to alter their means. This conclusion is based on the anthropologists' conclusion that values and systems of ethics are not imposed upon us from on high but are built up from the ground up by men themselves.

MEANS AND ENDS

But now I come to my second main point, which is a very difficult one. This discussion, like most others in this field, runs in terms of means and ends and values which determine the ends we seek, and many of us refer to Dewey's formulation of the concepts in this field.

So it is a little disconcerting to find that Dewey himself urges us not to consider means as one thing and ends as another, but to consider them as correlative. The means cannot be appraised in abstraction from the end it seeks to attain.

The belief in fixed values has bred a division of ends into intrinsic and instrumental (or in current terminology, into ends and means) of those that are really worth while in themselves and those that are of importance only as means to intrinsic goods. Indeed, it is often thought to be the very beginning of wisdom, of moral discrimination, to make this distinction. Dialectically, the distinction is interesting and seems harmless. But

carried into practice it has an import that is tragic No one can possibly estimate how much of the obnoxious materialism and brutality of our economic life is due to the fact that economic ends have been regarded as merely instrumental. When they are recognized to be as intrinsic and final in their place as any others, then it will be seen that they are capable of idealization, and that if life is to be worth while, they must acquire ideal and intrinsic value. Esthetic, religious and other "ideal" ends are now thin and meager or else idle and luxurious because of the separation from "instrumental" or economic ends. Only in connection with the latter can they be woven into the texture of daily life and made substantial and pervasive. The vanity and irresponsibility of values that are merely final and not also, in turn, means to the enrichment of other occupations of life ought to be obvious

The other generic change lies in doing away once and for all with the traditional distinction between moral goods, like the virtues, and natural goods like health, economic security, and the like Inquiry and discovery take the same place in morals that they have come to occupy in sciences of nature. Validation and demonstration became experimental, a matter of consequences.⁹

Another comment is also illuminating:

The soundness of the principle that moral condemnation and approbation should be excluded from the operations of obtaining and weighing material data and from the operations by which conceptions for dealing with the data are instituted, is, however, often converted into the notion that all evaluations should be excluded. This conversion is, however, effected only through the intermediary of a thoroughly fallacious notion; the notion, namely, that the moral blames and approvals in question are evaluative and that they exhaust the field of evaluation. For they are not evaluative in any logical sense of evaluation. They are not even judgments in the logical sense of judgment. For they rest upon some preconception of ends that should or ought to be attained. This preconception excludes ends (consequences) from the field of inquiry and reduces inquiry at its very best to the truncated and distorted business of finding out means for realizing objectives already settled upon. Judgment which is actually judgment (that satisfies the logical conditions of judgment) institutes means — consequences (ends in strict conjugate relation to each other). Ends have to be adjudged (evaluated) on the basis of the available means by which they can be attained just as much as existential materials have to be adjudged (evaluated) with respect to their function as material means of effecting a resolved situation. For an end-in-view is itself a means, namely, a procedural means.¹⁰

It seems to me that these observations confirm my original point — that science can appraise ends as well as means. This point is further confirmed by the following observations of Dewey's:

⁹ John Dewey, *Reconstruction in Philosophy*. Holt, New York. 1920. Pp. 166, 170, 171, 172, 174.

¹⁰ John Dewey, *The Theory of Inquiry*. Holt & Company, New York. 1938. P. 496.

The "end" is merely a series of acts viewed at a remote stage; and a means is merely the series viewed at an earlier one.¹¹

Means and ends are two names for the same reality.¹²

Men do not shoot because targets exist, but they set up targets in order that throwing and shooting may be more effective and significant.¹³

It seems to the writer that we have been muddling about in our thinking with reference to means and ends. Or it may be that what we need is merely a clarification of terms. In any case the need is urgent, and I hope that those who are competent in the fields of philosophy and ethics will perform this service for us. We need clear thinking about means and ends more than almost anything I know of in the field of philosophy, the more so because these concepts are used so much by economists who are trying to put their research on a solid philosophical basis.

SUMMARY

If the distinction between means and ends has any validity, there is nothing that is any more sacred or untouchable-by-science about ends than there is about means, nor about values than about any other preferences. In neither case can scientists properly say which ends or means are good or bad or ought to be accepted or rejected. In both cases, however, scientists can properly say what the consequences of alternative ends or means will be.

If scientists can show that the ends or means or values are harmless to the individual and to society — if for example an individual likes yellow better than blue — society does not need to say that they are good or bad for the individual or for society. But if scientists can show that the means or ends or values have harmful effects on the individual (such as opium) or on society (such as going through stop-lights) then society can say that they are bad, and enact legislation to curb them, and preachers can denounce them from their pulpits. But scientists as scientists cannot do this.

If, however, the distinction between means and ends is invalid, as Dewey says in the quotation above — and he ought to know; most people who talk about means and ends and values go back to Dewey — then the matter reduces to an identity, where whatever can be done about the one obviously can be done about the other, since they are the same thing.

¹¹ John Dewey, *Human Nature and Conduct*. The Modern Library, New York. 1930. P. 34.

¹² *Ibid.*, p. 36.

¹³ *Ibid.*, p. 226.