THE "DISAPPEARING MIDDLE": A SOCIOLOGICAL PERSPECTIVE*

by

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INTRODUCTION

There are two dubious aspects of our speaking on behalf of the notion that there is today a "disappearing middle" in American agriculture. First, both of us have the dubious distinction of being among the few persons to have his or her name on publications arguing both for and against such an assessment (e.g., Buttel, 1983; Ehrensaft et al., 1984). We should hasten, however, to admit openly to our true colors: We do believe that full-time "family farms"--those for which the household owns the bulk of the assets, provides the bulk of the labor, and derives most of its livelihood from farm income--are tending toward both absolute and relative decline in the U.S., North America generally, and probably in many other parts of the globe. As we will stress later, however, these trends were particularly strong in the U.S. in the 1970s, while there are some reasons to suspect that the trend might be attenuated during this decade.

Second, we have always taken the concept of the "disappearing middle" to be quite dubious or imprecise. We have both used the notion because it helps to convey rapidly an imagery about what kinds of dynamics are taking place and, as well, because it is more descriptively and intuitively accurate than the concept of "increasingly bimodal distribution of farms" [1]. To the best of our knowledge, when we have used the concept of "disappearing middle" inverted commas have been used in the first (and sometimes subsequent) usage in a given paper to indicate that we take it to be an imprecise--if not essentially colloquial--concept. We prefer the notion of "dualism" to depict the changing nature of family farming (see Buttel, 1983, 1984), though we recognize that this concept, because of its

having been used in many different ways, has some imprecision about it as well.

THE "DISAPPEARING MIDDLE": QUALMS, QUALIFICATIONS, AND SOME ILLUSTRATIVE DATA

The notion of disappearing middle is imprecise because of both words. When we say that some phenomenon or entity, such as a type of farm or form of production, is disappearing, it says little about how much, how fast, or how rapidly relative to other phenomena. Also, the notion of "middle" is merely a (vague) statistical abstraction. Or, put somewhat differently, statistically speaking there is always a "middle" if one defines a distribution solely in terms of percentiles.

Our most fundamental objection to using the notion of disappearing middle (reluctantly) is that it conveys little sense of the social relationships involved. We would far rather say--assuming it is true in the U.S., as it is now appearing to be in Canada--that traditional or classic family forms of production, such as depicted in the opening paragraphs of this paper, are tending to decline because in an advanced industrial-capitalist economy they are losing their competitiveness vis-a-vis other forms. The "nonclassic" forms with reference to which classical family forms are becoming less viable are principally part-time, "subfamily" farms on one hand, and larger-than-family farms (including large family proprietorships and industrial-capitalist farms) on the other. Such a trend, assuming for the moment it is true, should not be regarded as constituting any inherent path of transition of agriculture in an advanced industrial economy. Rather, this seems to be the prevailing pattern because of a complex combination of factors internal and external to agriculture, as will be expanded upon below.

The truth of the matter is, however, that save for some illustrative Canadian data, we cannot make such a statement on solid empirical grounds. The unfortunate reason, of course, is the ridiculous posture on the part of federal Census officials to not make farm-household-level data available to researchers, as has been done in Canada (see Ehrensaft et al., 1984; Stéeves, 1979; Ehrensaft, 1983; Bollman, 1983). If so, these notions could be assessed more directly in terms of the social relations of agriculture--not merely farm size, its immediate but imprecise proxy (Rodefeld, 1980, is probably the most comprehensive such attempt with U.S. census data). Even so, however, we would need a broader research program (i.e., one linking forms of agricultural production to dynamics of the larger economy and society) and some parsimonious theoretical reasoning to make such an assessment maximally credible.

Put somewhat differently, we would be reluctant to rely on inferences about the absolute and relative viability of classic family or household forms of production from county-level case studies as many otherwise skilled, insightful researchers (e.g., Barlett, 1984, 1987; Rogers, 1987; Salamon, 1987) have done. We are prepared to accept the notion, for example, that in some ethnically-specific areas cultural-ideological factors--perhaps in combination with aspects of the regional economy--may yield statistical outcomes different from that we have depicted above as dualism or a "disappearing middle." Nonetheless, we see the overall national and comparative evidence quite differently, though we agree that because our data in support of the notion are inferential--that is, based primarily on size of farm in acres and, to a lesser degree, according to net farm and total family income--the evidence is not as firm as one would like.

The U.S. evidence, such as it is, appears in Tables 1 and 2. Table 1, which reports changes in farm numbers by farm acreage, indicates that the numbers of "small farms" (50 acres or less) and "large farms" (1,000 acres or more) have increased relative to "the middle" (farms with 50-999 acres, especially those with 50-499 acres). Second, Table 2 shows that the net and total family income position of "medium-sized farms" (those with gross sales in 1982 dollars of $20,000-$99,999) has declined from 1978 to 1982.

These are, admittedly, flimsy data. Table 2, for example, is taken from a larger publication (OTA, 1986:95) in which data presented on preceding pages show that there has not been a demonstrable decline in the percent of total U.S. farms in the $20,000-$99,999 (constant 1982 dollars) "sales class" from 1969 to 1982; in fact, the numbers of such farms have increased from 13.6 percent of the total in 1969 to 26.0 percent in 1982. It should be noted, however, that these farms, while increasing in relative numbers, declined in their contribution to aggregate gross farm sales (e.g., from 24.3 percent of sales in 1974 to 21.9 percent in 1982; OTA, 1985:93) [2].

Table 3 reports data for a comparable time period (1971-1981) for Canada in a form that, for theoretical reasons touched on below, we greatly prefer--that is, data compiled according to categories of the social relations or forms of production. These data include the number and percent of farms by 10 categories of production relationships for the two years, along with percent changes for each category. There are two broad categories of farms in the table. One is that of "classic forms" of production, which includes full-time family farmers, two categories of part-time farmers, "traditional small farmers" (that is, category 1.4--full-time farmers on part-time farms), plus retirement farms and

"Hutterites and other." The second broad category is that of "nonclassic forms" of production. The four nonclassic forms of production include two categories of farms on which two or more person-years of hired labor are employed annually and two categories of farms owned by nonfamily corporations.

The data in Table 3 demonstrate the sharply divergent trends between classic and non-classic forms of agricultural production, with the former declining substantially (-14.2 percent) and the latter increasing fairly sharply (39.9 percent). Moreover, the changes were not uniform within the two categories. Within the classic category, the three forms of production that experienced the sharpest declines were: (1) full-time farmers on part-time farms (a category representing "traditional" small farms, i.e., small farmers with no off-farm employment), (2) retirement farms (retirement age operators with gross sales below the median), and (3) full-time family farmers. Part-time family farmers (full-time farms on which the operator worked >96 days off the farm) declined slightly--but below the average rate of decline of all farms, so that in relative terms this category of farms increased. The only classic form of production to experience an absolute and relative increase from 1971-1981 was that of "part-time farmers on part-time farms " (i.e., small, subfamily farms [gross sales below the median] with >96 days of off-farm work). These trends in the classic forms of production suggest two changes consistent with the dualism hypothesis: (1) small-scale, subfamily, part-time farms increased in prevalence, and (2) classic full-time family farms decreased in prevalence from 1971-1981.

By contrast, the Canadian data in Table 3 suggest fairly dramatic growth in the numbers of two particular types of nonclassic farms: (1)

semi-managerial farms (proprietorships or family corporations with sales above the median and 2-5 person-years of hired labor), and (2) independent managerial farms (proprietorships or nonfamily corporations with >5 person-years of hired labor). These two categories together essentially constitute that of Rodefeld's (1980) category of "larger-than-family" farms. The two categories of farms owned by nonfamily corporations (integrated managerial farms and holdings by nonfamily corporations, the first of which essentially corresponds with Rodefeld's [1980] category of industrial farms) increased as well, though at a rate far less than the two categories of family proprietorships employing two or more person-years of agricultural wage labor. Nonetheless, these data clearly support the third leg of the dualism thesis as we have presented it--that large, nonfamily farms are increasing in prevalence.

At the heart of any reasonable definition of the "middle"--that is, of the classic family or household form of production--would be the criterion of person-years of hired labor employed on a farm. Canadian farm-level Census data have been reaggregated to permit an assessment of trends in farm numbers, gross sales, land operated, value of capital, and days of off-farm work by person-years of labor hired. These data, reported in LaRamee (1987), suggest the following conclusions. Farms employing >0<2 person-years of hired labor annually--what we take to be "the middle"--have from 1966 to 1981 (slowly) represented declining numbers of farms, declining shares of gross sales, declining shares of land operated, declining shares of capital, and declining shares of days of off-farm work [3]. Farms employing 2 or more person-years of hired labor have experienced increased shares with respect to all five indicators, particularly sales, land operated, and capital.

With the reporting of these data, which are admittedly thin for the U.S., behind us, let us now turn to a more theoretical examination of the so-called "disappearing middle" thesis. In so doing we will stress the importance of social relations of the farm enterprise and between farm household members and nonfarmers.

THE SOCIAL BASES OF THE RISE AND DEMISE OF FAMILY FARMING [4]

The American family farm has long been said to be under assault and its future very much in doubt. Accordingly, there is a strong tendency for American observers to be preoccupied with understanding why the family farm is disappearing and with how its demise can be attenuated or reversed. This is an important issue, about which more below. Nonetheless, it can be argued that this conceptualization begins by asking the wrong question; the most crucial prior question, it could be said, is why the family farm exists at all. Why, for example, do we still have thousands of family farms--for example, 700,000 or nearly 2 million in the U.S., depending upon one's definition--when the family grocery store or pharmacy--let alone family steel mills, automobile manufacturers, or farm equipment manufacturers or agrochemical concerns--have long ceased to exist, never existed at all, or are very unimportant in the larger economy?

It is useful to begin our answer to this question by noting that family-farming-dominated agricultural systems such as those of North America were only one of two major routes of transition to modern agriculture (see, for example, de Janvry, 1983; Goodman and Redclift, 1982). Of particular importance in parts of Western Europe was the "Junker road" (e.g., as in Prussia) by which feudal estates became transformed into large-scale capitalist farms, with serfs becoming wage laborers. Curiously, as noted by Friedmann (1978), such farms in Prussia, England,

and elsewhere underwent a demise in the nineteenth century, primarily because of the opening up of a world market in grains. When subjected to the competition of family farmers in the white settler colonies of the New World, these large-scale farms generally ceased to exist. Most importantly for our purposes is that these areas had no real ideological or subjective tradition of family farming as has been the case in North America. Yet family farming ultimately emerged there as well (and still remains, particularly in Germany). There must, then, be some enduring, structural reasons for the establishment and persistence of family forms of production in agriculture. In particular, the near-universal prevalence of family farming suggests that it cannot be accounted for by cultural or ideological explanations.

Indeed, it can be said that there are several tendencies inherent in agriculture that cause household production to be the "normal" form, even in advanced economies where highly concentrated, oligopolistic production sectors are pervasive in virtually every other branch of industry. These characteristics of agriculture that lead to a tendency toward family farming include: (1) the nature of land as agriculture's principal input, (2) the biological exigencies of agricultural production, such that the cycle of reproduction of capital cannot be shortened because it is linked to the seasonality of crops or the reproductive cycle of livestock, (3) the riskiness of agricultural production due to natural and economic vagaries, (4) the limited scale economies of agriculture, (5) the nature of the commodities produced by agriculturalists, (6) the difficulties associated with securing access to a dependable labor force to do tasks that are highly seasonal, (7) the lack of necessity for family farms to achieve the average rate of profit or to return a profit (that is, returns over and

above those to family labor necessary to reproduce the enterprise over time) at all (Buttel, 1983; Mann and Dickinson, 1978; Friedmann, 1980), and (8) the tendency for the sphere of food raising or direct production to be progressively reduced such that these less profitable activities with relatively modest scale economies remain relegated to household producers.

Perhaps the most central factor in the persistence of family farming is the nature of land as agriculture's principal input (see, for example, Goodman and Redclift, 1982). The overriding characteristic of land relative to the productive inputs of other industries is that land is essentially fixed in quantity and cannot be manufactured. That is, for an individual farmer to expand her or his operation, it is necessary (in general) to acquire more land; but land, because it is fixed in supply, cannot be manufactured as machine tools for automobile production can. A would-be expansionist farmer must wait for another farmer to sell or rent her or his land. The fixed quantity of land tends to result in a formidable barrier to the centralization of farm assets into large estates or "corporate farms." In addition, the tie of agriculture to the land causes agricultural production operations to be highly dispersed spatially. This spatial dispersion renders highly concentrated and centralized production very difficult, especially given the difficulties of supervising employees over vast expanses.

The incorporation of agriculture within large-scale production enterprises is also limited by the biological cycles of crop and livestock production. While other sectors have been able to rationalize the production cycle of commodities (e.g., through assembly line and continuous process techniques), crop and livestock producers cannot readily circumvent the annual cycles of crop production and of the gestation and maturation

cycles of livestock. The result is that capital equipment necessary for one phase of these cycles (e.g., a corn planter, combine) must remain idle during the bulk of the year. While agricultural research has enabled some commodities to be produced under conditions that minimize the seasonality of annual production cycles (e.g., modern poultry production), for most commodities these cycles remain important and cause large, nonfarm entrepreneurs to be unwilling to invest in expensive capital equipment that will be used only a few weeks of the year. And, as stressed by Pfeffer (1983), the seasonality of agricultural production creates major problems in recruiting and maintaining the hired farm labor force necessary for highly seasonal work in large-scale, industrial-type farm enterprises.

Agricultural production is also characterized by a higher degree of risk than that of most other nonfarm industries. This high level of risk is largely rooted in the biology of agriculture. Farming is highly subject to the risks of crop and livestock diseases and pests, of producing perishable commodities, and of producing commodities for which markets and prices are typically unstable (see below). Again, agricultural research has led to major inroads in reducing the risks of farming. Indeed, where these risks have been substantially reduced--e.g., as in California, where there have been developed refrigerated storage and transportation, agronomic research on controlling pests and diseases, marketing orders to stabilize commodity prices, and favorable immigration laws to enable recruitment of a low-wage labor force for highly seasonal work--corporate-industrial agriculture has been able to take root (Pfeffer, 1983). But for most commodities production risk remains high, and large-scale capital tends to be unwilling to assume these risks.

It should be stressed that the range of activities conducted within the sphere of "farming," "food raising," or direct agricultural production is historically specific and variable (see, for example, Goodman et al., 1987). As a general proposition, it can be noted that there has been a tendency for activities that are relatively profitable and permit substantial scale economies--particularly the manufacture of farm implements and of plant protection and nutrient chemicals, plant and animal breeding, and food processing and marketing--to be differentiated away from farming and to be appropriated by nonfarm enterprises. Accordingly, the less profitable activities that do not lend themselves well to large-scale production with significant scale economies tend to be relegated to household producers and other small capitals.

Finally, the commodities that agriculturalists generally produce tend to be ones that are subject to low and unstable prices because of the nature of these commodities in the sphere of circulation. That is, most agricultural commodities tend to have low price and income elasticities of demand, leading to rapid market saturation (and hence to low prices) and to product price instability. Agriculture tends to have recurrent overproduction problems because of these low elasticities and because of the fact that for an individual farmer facing low prices and income the rational response is to hold onto one's land (to avoid capital losses), increase efficiency, and produce more. Collectively, however, individual production increases exacerbate the very problems of overproduction and low commodity prices they were intended to deal with. These problems tend to make agricultural production relatively unprofitable, which discourages large-scale investment and causes agriculture to be relegated to family or household production units.

As Johnson (1986) has stressed, U.S. agriculture has for many decades (even including the otherwise prosperous 1970s) exhibited low levels of return to equity capital. The prosperity of the 1970s was largely accounted by land asset appreciation, rather than by cash returns on investments. In a sense, then, the low returns to agriculture in the otherwise farm-crisis-ridden 1980s are, historically speaking, more normal than the situation of the preceding decade. The fact that American farmers for five decades at least have not come close to returning the average rate of profit for the economy as a whole indicates the structural flexibility--the lack of structural necessity for profit when the bulk of the farm labor is provided by the household--of this form of production and a major reason for its emergence and survival.

The foregoing comments thus suggest two interrelated arguments for the persistence of household forms of agricultural production. Following Friedmann (1980), it can be said that there exists a set of factors--e.g., the lack of structural need to return the average rate of profit--that enable family farmers to compete with--and often outcompete--large-scale, labor-employing farms. Following Mann and Dickinson (1978), on the other hand, there is a set of factors that tend to make agricultural production relatively unprofitable, and hence not of interest to large-scale nonfarm capital. It should thus be recognized that there is an objective structural basis for the existing of family farming.

THE TRANSFORMATION OF FAMILY FARMING AND THE EMERGENCE OF AGRICULTURAL DUALISM

If the forces that lead agricultural production to be relegated to family producers are so many and presumably so formidable, why is it that classic household forms of production--the full-time family farm in which

the household owns most of the assets, provides most of the labor, and derives its livelihood principally from farm returns--are undergoing an absolute and relative demise in North America? That is, why should these classic forms of production undergo differentiation into small-scale, sub-family, part-time and large-scale, labor-employing units?

This assessment should begin by restating a point made earlier; the "disappearing middle," or agricultural dualism as we prefer to call it, should not be viewed as an inherent, inexorable trend. Its emergence in North America, particularly in the 1970s, was, at least in part, situational and dynamic vis-a-vis some major forces internal and external to the farm economy. Put somewhat differently, the 1980s farm crisis might even create some of the conditions that could lead to a partial renaissance of classic household forms of production, about which we will have more to say later.

In this section we will not pretend to offer a comprehensive analysis of the forces underlying recent structural changes in North American agriculture. Instead, we will provide some brief arguments that are illustrative of how we view the dualism question.

First, as alluded to above, there are several general factors that have tended to obviate some of the barriers to large-scale production in agriculture. These would include agricultural research that reduces biological-perishability risks and reduces the seasonality of agricultural production, state immigration policies that reduce the difficulties of obtaining a dependable labor force for highly-seasonal work, state commodity programs that put a floor under prices and reduce economic risk, and "treadmill"-inducing technologies that, in conjunction with market forces, lead to differential benefits and costs to various "size classes"

of farmers and which have the effect of increasing the level of scale economies. Further, there have long been significant rural-urban wage disparities that have had the effect of attracting people from farms to urban areas. General urban-led income growth can also have the effect of causing farmers to "need" to increase the size of their enterprises so that their imputed "farm wage" can be comparable--or not fall substantially in relation--to the median urban family income. Each of these factors, and perhaps several others, can arguably be seen as forces obviating the barriers to concentration and centralization in agriculture.

Another general factor concerns the widely-recognized increased prevalence of part-time farming. Part-time farming, insofar as it involves the farm household moving away from primary dependence on farm returns for family livelihood, can be seen as a second dimension of dualism. We argue that part-time farming has become more prevalent [5].

The first general reason for the growing importance of part-time farming is itself inherent in the nature of agriculture; because of the tendency to low returns from farm investments, farmers and their other household members will be understandably drawn into off-farm work to supplement their meager family incomes, should off-farm work be readily available. Accordingly, part-time farming has long been associated with small farm sizes and low net farm incomes, though probably less so now than 15 years ago. Small, part-time farms also tend to operate their farms less intensively than their larger, full-time counterparts because of the time demands of off-farm work (Buttel and Gertler, 1982; Gladwin and Zabawa, 1984).

Second, in the U.S. and virtually all other advanced industrial economies rural regions have experienced economic diversification such that

agriculture often is no longer the major industry. To take an extreme example, agriculture is a trivial component in the Northeast nonmetro economy; there are only 30 counties (out of over 100 nonmetro counties) in the region in which agriculture's share of labor-proprietor income is as large as five percent, and only one county where it exceeds 20 percent. Nonetheless, the diversification of rural economies has made a wide variety of employment opportunities available to farm households.

Thus, there have developed a general set of forces--those that, if you will, convey "advantages of bigness," and others that represent "advantages of smallness"--that have created the conditions for agricultural dualism. But it is arguably the case that dualism in North American agriculture did not clearly emerge until the 1970s. Why not? It was probably that the "treadmill-cannibalism" (Cochrane, 1979) process of the post-war period--in which there were strong differential benefits of technological change by size of farm, resulting in a rapid exodus of very small, especially tenant, farms--overwhelmed the advantages of smallness until 1970.

There were probably also some distinctive aspects of the 1970s that hastened the emergence of dualism. These include: (1) land price inflation, which increased barriers to entry and led to much larger investments in farming in search of asset appreciation benefits, (2) a continued narrowing of rural-urban wage disparities, further economic diversification of rural areas, and greater availability of higher-paying jobs in nonmetro regions, which stimulated part-time farming, (3) some amount of "reverse migration" in which nonfarmers entered agriculture at small scales of production, and (4) the general truncation of hitherto rapid advances in the size of machinery, which had the effect of causing expanding farmers to hire far more labor than they had in the past. Smith

and Coltrane (1981), for example, document the massive surge in the hired labor component of the U.S. farm work force during the 1970s. This increase, from roughly 28 percent of the work force in 1970 to 37 percent in 1980, was unprecedented. From the turn of the century to 1970 the hired labor component of the farm work force had been virtually stable at about 28 percent. This additional hired labor appears to have been largely concentrated on big farms. Thus, the 1970s probably witnessed a decisive shift toward "larger-than-family" forms of production in which the production process is principally based on wage labor.

If the 1970s were an era of agricultural dualism--we say <u>if</u> because adequate data for assessing the proposition do not exist--what of the farm-crisis-ridden 1980s? For the 1980s we see four factors that may in retrospect be reasons why there may no longer be such a strong trend toward dualism. First, 1980s economic stagnation has hurt rural regions disproportionately, presumably because of their industrial base being dominated by the "mature," "sunset" industries that have fared worst, and also because of the fact that Reagan Administration budget cuts have gutted federal investments in rural economic development and service delivery. Accordingly, the viability of part-time farming may have become substantially diminished. Second, the farm crisis has been characterized by massive deflation in land prices and decapitalization of agriculture, which have caused large-scale investments in farming to be less attractive. Third, commodity program support levels have generally declined, so that price floors are barely--if at all--above average cost of production levels. Fourth, the incidence of severe debt loads is greatest for large farms, while the vast bulk of small farms have little or no debt. This would presumably mitigate the impact of the deteriorating nonmetropolitan

economy on the viability of small-scale, part-time farming (at least relative to that of the substantially more highly leveraged medium-sized, classic family-type farms).

We are not necessarily predicting that the 1980s will be a period in which the trend toward dualism was attenuated or reversed. Rather, we suggest that the socioeconomic environment of agriculture has changed a great deal over the past decade. Some of these changes would seem to reduce some of the relative advantages of subfamily and larger-than-family farms.

DISCUSSION

We believe that the 1970s were a period of increased dualism in North American agriculture. The position of small, sub-family, part-time farms was reinforced (in terms of farm numbers and total family income), as was that of large, nonfamily, labor-employing farms (in terms of farm numbers, share of output, and family income). Classic family-type farms, on the other hand, were typically not in a position to enjoy either the advantages of bigness or of smallness. They have apparently declined in absolute and relative terms over the past 15 or so years, albeit relatively slowly.

Our empirical resources for evaluating this hypothesis one way or the other are, nonetheless, weak because of the lack of availability of farm-level U.S. census data to the rank-and-file of researchers outside of U.S.D.A. in which suitable indicators of the relations of agricultural production can be operationalized. There are indications of this trend in the U.S. in terms of farm size distributions by acreage, and to a lesser extent in terms of total family income data. The evidence is stronger for Canada, and there are reasons for suspecting that dualism might be more apparent in 1980s Canadian agricultural census data than in 1970s data [6].

Nonetheless, we believe the following observations to be an accurate portrayal of North American farm structural change as it relates to the disappearing middle or dualism thesis. First, regardless of one's view on the dualism question, it must be recognized that the pace of farm structural change--in particular, rapid declines in farm numbers and in average farm size--has slowed from that which prevailed in the two to three decades after World War II. The pace of (net) change as revealed in available census data is, by any standard, slow [7]. Second, one aspect of this slow overall pace of structural change is a "disappearing middle," a bimodal distribution of farms, or dualism, depending upon one's preferred terminology. This, for example, is one of the major conclusions of Edwards et al. (1985), probably the most sophisticated and comprehensive statistical analysis of U.S. farm structural change (which was made possible because of their access to longitudinal, farm-level census data of the sort discussed for Canada in Ehrensaft et al. [1984]). Edwards et al. (1984:9, 13) concluded that "the trend toward bimodality was somewhat more pronounced in 1978-82 than in 1974-78. . . . [T]endencies toward a bimodal distribution of farms are evident, but long-run projections suggest they are moderate." The "moderate" nature of the dualistic transition of North American agriculture in recent years is also apparent in the data we have reported above.

We would argue that analyses of dualism have tended to give too much attention to its "disappearing middle" component and too little attention to changes in the "nonfamily" forms of production that are also integral to a dualistic configuration. Perhaps the most dramatic--and, in historical retrospect, unexpected--aspect of dualism was the increasing number of small, subfamily farms (which is also revealed by Edwards et al. [1985] in

their Markov analysis). For example, the number of farms with less than 50 acres is now approximately that of 1959. Also, as emphasized by OTA (1986), there has been a fairly substantial increase in the degree to which sales, assets, and (perhaps importantly for the long term) profits have become concentrated among the 25,000 or so largest farms, virtually all of which are "larger-than-family" farms in Rodefeld's (1980) terminology. Of the three trends that constitute a full-blown dualistic trajectory, the "disappearing middle" has arguably been the least dramatic. Yet, for ideological reasons, it has been given the greatest attention, which, on the basis of the data available to us, is unwarranted.

It is, in our view, misleading--or, at least, limiting--to conceptualize the disappearing middle or dualism notion in terms of farm size (as, for example, Edwards et al. [1985] have done in their otherwise important study of U.S. farm structural change). Farm size should be seen as being merely a proxy for a set of social relations that have some theoretical basis in understanding the organization of agricultural production. Further, at a descriptive statistical level there is, by definition, always a middle (just as Chrysler Corporation is at the middle of the size distribution of U.S. automobile manufacturers).

Although some of the general features of agricultural development in the advanced countries point to a dualistic trajectory for the future, this is by no means inherent. Just as the conditions leading to dualism in the 1970s were situational and dynamic, so too those of the 1980s suggest that the dualism trend might be slowed or reversed.

FOOTNOTES

1. The notion of a bimodal distribution of farm sizes carries the erroneous impression that the two "modes" ("small" and "large" farms) are in some way comparable (i.e., in terms of farm numbers and sales).

2. Note that OTA (1986) refers to farms with gross annual sales between $20,000 and $99,999 as "part-time" farms, and farms with $100,000 to $199,999 as "moderate"-size farms. We would disagree with both of these labels. In particular, a good many farms in the "moderate" category would depend heavily on nonfamily labor. OTA reports that during the 1970s the relative proportions of groups of farms increased.

3. See Ehrensaft et al. (1984, 1985) for discussions of the relevance of the Canadian data to the U.S. context. In particular, it has been found that Canadian farm structural patterns and changes have closely mirrored those of the northern tier of U.S. states for several decades.

4. Portions of this section are based on Buttel (1988).

5. Part-time farming has, in fact, existed for some time, while its prevalence has slowly but steadily increased over the past several decades. For example, about six percent of U.S. farm operators worked full-time off the farm just prior to World War II.

6. We have found that the Canadian farm structure of a particular decade has tended to be very similar to that of the U.S. farm structure of the preceding decade (Ehrensaft et al., 1984, 1985). Thus, based on past historical trends, we would expect Canadian farm structure in the 1980s to be fairly similar to that of the U.S. in the 1970s.

7. It should be stressed, however, as we (Ehrensaft et al., 1984) and others (e.g., Edwards et al., 1985; Gladwin and Zabawa, 1984; Barlett, 1984) have, that assessments of structural change from cross-sectional

census data tend to conceal the dynamics of structural change. These cross-sectional census data, which in recent years have revealed a very slow pace of overall structural change, mask a briskly dynamic pattern of rapid entry of new farmers and slightly more rapid exit of existing farm units, along with differentiation among continuing farmers. For example, one of the major factors influencing the increased concentration of sales and assets among larger-than-family farms is the increasing tendency for farmers to enter agriculture at relatively large scales of production (LaRamee, 1987).

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Table 1. Numbers of Farms by Size in Acres 1974-1982, and Percent Change, U.S.

Number of Farms by Size in Acres	1974	1982	Percent Change, 1974-82
< 10 acres	128,254	187,699	46.3
10-49	379,543	449,301	18.3
50-179	827,884	711,701	-14.0
180-499	616,098	526,566	-14.5
500-999	207,297	203,936	-1.6
1,000-1,999	92,712	97,396	5.1
2,000 or more	62,225	64,525	3.7

SOURCES: 1974 data: 1978 Census of Agriculture: Preliminary Report (Washington, DC: Bureau of the Census, U.S. Department of Commerce, 1980); 1982 data: 1982 Census of Agriculture: Preliminary Report (Washington, DC: Bureau of the Census, U.S. Department of Commerce, 1983)

Table 2. Average Gross Farm Income, Net Farm Income, Off-Farm Income, and Total Income of Farms, By Sales Class (1982 Constant Dollars), 1969 and 1982, U.S.

Sales Class (Gross Sales)	Year 1969	1982
Average Gross Farm Income		
<$20,000	$9,830	$5,357
20,000-99,999	75,468	49,493
100,000-199,999	227,568	138,917
200,000-499,999	480,846	294,816
500,000 or more	2,741,737	1,538,280
Average Net Farm Income		
<$20,000	1,710	(625)
20,000-99,999	24,319	2,040
100,000-199,999	63,099	17,810
200,000-499,999	134,535	48,095
500,000 or more	957,313	504,832
Average Off-Farm Income		
<20,000	17,113	20,499
20,000-99,999	7,809	13,216
100,000-199,999	14,820	11,428
200,000-499,999	19,729	12,834
500,000 or more	20,679	24,317
Average Total Family Income		
<20,000	18,823	19,874
20,000-99,999	32,128	15,256
100,000-199,999	77,919	29,238
200,000-499,999	154,264	60,929
500,000 or more	977,992	529,149

SOURCE: OTA (1986:95). Numbers in parentheses are negative.

Table 3. Number and Percent of Total Farms and Percent Change, By Type of Farm, Canada, 1971, 1981 [1].

Typology of Farms	1971 Number of Farms	1971 Percent of Total	1981 Number of Farms	1981 Percent of Total	Percent Change 1971-81
1. Classic forms	359,920	98.2	308,760	97.1	-14.2
1.1 Full-time family farmers[2]	158,910	43.4	132,040	41.5	-16.9
1.2 Part-time family farmers [3]	18.990	5.2	17,985	5.7	-5.2
1.3 Part-time farmers on part-time farms[4]	63,285	17.3	68,215	21.5	+7.8
1.4 Full-time farmers on part-time farms[5]	91,215	24.9	68,970	21.7	-24.4
1.5 Retirement farms [6]	27,365	7.5	21,080	6.6	-23.0
1.6 Hutterites and "other" [7]	155	0.04	470	0.1	+203.2
2. Nonclassic forms	6,495	1.8	9,085	2.9	+39.9
2.1 Semi-managerial farms [8]	4,370	1.2	6,210	2.0	+42.1
2.2 Independent managerial farms [9]	1,150	0.3	1,810	0.6	+57.4
2.3 Integrated managerial farms [10]	540	0.2	665	0.2	+23.1
2.4 Holdings by nonfamily corporations [11]	370	0.1	400	0.1	+8.1
3. Total	366,410	100.0	317,850	100.0	-13.3

SOURCE: Statistics Canada, Agriculture-Population Linkage, 1971 and 1981.

[1] Institutional farms and community pastures are excluded.
[2] Proprietorships, partnerships, or family corporations with gross sales above the median (1971: $5,560; 1981: $21,085), with under 2 person-years of paid labor and the operator works 0-96 days off-farm.
[3] As full-time family farms, except the operator works >96 days off-farm.
[4] Farms with sales less than the median and the operator works >96 days off-farm and is <65 years of age.
[5] Farms with sales less than the median and the operator works 0-96 days off-farm and is <65 years of age.

[6] Farms with sales less than the median and the operator is 65 years of age or older.
[7] Includes Hutterites, trusts, estates, cooperative farms, etc.
[8] Proprietorships, partnerships, or family corporations with gross sales above the median and 2-5 person-years of paid labor.
[9] As semi-managerial farms except with >5 person-years of paid labor.
[10] Nonfamily corporations with gross sales above the 75th percentile (1971: $12,060; 1981: $56,000).
[11] Census farms that are nonfamily corporations with gross sales below the 75th percentile.