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Membership Structural Design**

by

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Toward an Organizational Theory of Membership Structural Design

Thomas W. Gray and Gillian Butler

Various events have led to the development of highly complex cooperative operations and to concepts for understanding operations. However, development of membership structures and concepts for understanding these structures has lagged. This paper imports organizational design and contingency theory into the member control literature. Membership structure is understood as organization-like, producing a service (i.e., member control). Member control structure is understood as having three aspects (representation, policy making, and oversight) and two environments (the members themselves, and management and operations). Building from cooperative principles and following the development of cooperatives from simple to complex organizations, this paper develops a series of axiomatic propositions for understanding and designing membership structure. Only some of the propositions are testable, and still others are meant only to give continuity and relevance to the propositions as a group (as a theory). Such work should help develop a language for understanding and furthering discussion and research of membership structure and member control in agricultural cooperatives.

This paper seeks to broaden understanding of member control in agricultural cooperatives with large memberships. Our major purpose is to suggest the outlines of a theory of membership structural design in axiom form. Axiomatic approaches help define and explain central concepts and assumptions. They bring coherence with their conciseness and can help provide direction to ongoing and anticipated work and research (Frankfort-Nachmias and Nachmias 1992). They are frequently useful for introducing language and new levels of analysis.

Specifically we: 1) import concepts from organizational design and contingency theory into the member control literature, 2) suggest their continuity with concepts of democratic organization, 3) explore their application to membership structure (understanding cooperatives abstractly and historically as moving from simple to complex organizations), and 4) derive a set of internally consistent organizational propositions. At most, we seek to apply concepts of bureaucracy to concepts of democracy for the purpose of regulating and controlling bureaucracy. At a minimum, we seek to

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introduce, on an epistemological plane, new language and new concepts for future analyses. Such axiomatic theory work is consistent with the sociological and classic writings of Zetterberg (1963), Hage (1965), and Collins (1975).

Introduction and Previous Studies on Member Control

Most modern cooperatives try to adhere to a set of principles and practices first systematically laid down during the British consumer cooperative and German credit union movements of 1840 to the 1860s (i.e., the Rochdale, Raiffeisen, and Schulze-Delitzsch principles). Various reformulations have occurred, though all tend to be organized around common themes. Briscoe et al. (1982, 40) suggest five different aspects:

1. Open and voluntary membership confined [*sic*] to all persons using the cooperative, with no discrimination on the basis of race, sex, politics, religion, or family background.
2. Ownership of the cooperative by member-users only.
3. Control of the cooperative vested with members. Organization of the cooperative should encourage member participation in decision making and balloting on a one member, one vote basis.
4. Benefits received by members in proportion to their use of the cooperative.
5. Return on investment set at a limited rate of interest [*sic*, e.g., return].

Dunn (1988, 85) reports just three:

1. The User-Owner Principle: People who own and finance the cooperative are those who use the cooperative.
2. The User-Control Principle: People who control the cooperative are those who use the cooperative.
3. The User-Benefits Principle: The cooperative's sole purpose is to provide and distribute benefits to its users on the basis of their use.

Democratic governance (control) is seen by some as central to these principles and to various definitions (Schomisch and Mirowsky [Butler] 1981, 4).

A cooperative is a business voluntarily owned and controlled by its member patrons and operated by them on a nonprofit or cost basis (Schaars 1980, 77).

Cooperative societies are democratic organizations. Their affairs should be administered by persons elected or appointed in a manner agreed by the members and accountable to them. Members of primary societies should enjoy equal rights of voting (one member, one vote) and participation in decisions affecting their societies (International Cooperative Alliance 1967, 36).

Historically, research on member control has focused at the social-psychological level and with such questions as how to get members to meetings, involved in office holding, and voting. Singer characterizes this body of work as the "member relations paradigm." It is a sub-set of the larger participation research area and is represented by various authors including Anderson and Sanderson (1943), Beal et al. (1951), John (1953), Folkman (1955), Brown and Bealer (1957), Copp (1964), Torgerson et al.

(1972), Rogers (1971), Heffernan (1967), Warner (1966), Warner and Rogers (1971), and others. Most of these papers focused specifically on participation with an implicit assumption that member control and member democracy are, in part, realized with member involvement.

Boynton and Elitzak (1982, 4) shifted away from participation research and addressed member control directly, defining control as "the ability of an individual or group to affect an organization's objectives and the strategies used in the pursuit of those objectives." They suggested control may be "active," and involve such acts as voting, serving on committees, and holding office, or "passive," implying an amount of control members have passively but could exercise if dissatisfied with the cooperative. However, their focus remained at the social-psychological level, asking individual members how much control they *perceived* they had and how much they *perceived* they should have.

With its focus on the individual, this paradigm is found incomplete. Cooperatives have made dramatic increases in size over the last forty years (Kraenzle et al. 1993). Most agricultural cooperatives began as relatively small, single-product organizations. As such they were highly accessible to and easily understood by their members. However, many have since grown into large, multi-product businesses using sophisticated technologies and serving large geographic territories.

In the small cooperative, those that can accommodate their total membership in town-meeting type decision making, member control (influence and equality) does not present compromising problems. Membership tends to be homogeneous across several characteristics. Elected representatives tend to be representative, i.e. embodying many of the wants, needs, and opinions typical of the general membership. As cooperatives grow into thousands of members, the shape that democratic decision making must take in pursuit of member control changes. Members can seldom be assembled at one place and at one time. If they could be assembled, getting member input organized, articulated, and discussed would become extremely awkward and difficult (Gray 1988, Butler 1988).

This context caused a crisis in the participation paradigm and drove cooperative size into analyses. Studies emerged to isolate the affect of cooperative size on participation/control (Warner and Hilander 1964, Lasley 1981, Van Ravensway 1982, Boynton and Elitzak 1982, and Als 1982.) Lasley introduced formal organizational concepts into the member relations research, relating participation to various organizational measures (formalization, centralization) of cooperative operations. Butler (1988) and Gray (1988) followed by beginning conceptual work on membership structure as organization. The earlier approach tends to focus on the individual and on determinants of individual behavior. New approaches need to integrate organization.

The Concept of Organization

The study of organization has not yielded one unified, agreed upon theory. Rather, several different perspectives have emerged—sometimes categorized as organizational development, organizational theory, and/or organizational design (Hage and Finsterbusch 1987). We follow Mintzberg

(1979) and Van de Ven and Ferry (1980) for rudimentary definitions of organization, and we use the concept of organizational contingency introduced by Burns and Stalker (1961) and Lawrence and Lorsch (1967). We will explain this terminology as we proceed.

Following Mintzberg (1979), we see organizations developing out of two dynamics—specialization and coordination—both central and inter-related within an organization. People come together, or are brought together, to pursue certain goals and objectives. Behaviors and activities are sometimes specified narrowly, sometimes broadly. Several people may do the same jobs in different locations; a few people, or a lot of people, may do narrowly defined jobs independently or together. A specialization occurs.

Coordination occurs with specialization. Specialization allows some tasks to be completed more efficiently; coordination brings tasks together in an overall pursuit of organizational goals. The interplay of these two tendencies defines organizational structure. "The structure of an organization can be defined simply as the sum total of the ways in which it specializes its labor into distinct tasks and achieves coordination among them" (Mintzberg 1979, 3).

"Contingency theory argues that different organizational structures are required for different organizational contexts" (Hage and Finsterbusch 1987, 87). Specializations and coordinations must be accommodated in different arrangements according to pressures from an organization's environment. These arrangements—or organizational design options—mediate the tension between specialization/coordination and environmental stressors. Stressors create uncertainty; design options rationalize and manage the stress such that goals and objectives can be approximated. These relationships are presented in table 1.

Bureaucratic/Democratic Organization and Design Options

Bureaucracy and democracy are frequently viewed as opposing ways of organizing. There are distinct differences. Personnel selection procedures and criteria differ: In a bureaucracy an individual is hired for a position on the basis of ability to do a certain job; in a democracy an individual

Table 1.—Structural Design Strategies

Sources of Uncertainty	Structural Design Options
<ul style="list-style-type: none"> ● Quantitative complexity and/or diversity 	<ul style="list-style-type: none"> ● Departmentalization, horizontal differentiation ● Delegation of authority ● Vertical differentiation
<ul style="list-style-type: none"> ● Technical complexity 	<ul style="list-style-type: none"> ● Job specialization ● Delegation of authority
<ul style="list-style-type: none"> ● Stability/instability 	<ul style="list-style-type: none"> ● Standardization of information flows ● Ad hoc and formal communication alternatives

Note: Adapted from Butler 1988, 8; Gray 1991, 2.

is elected to fill an office to represent constituent interests. Dismissal procedures vary: In a bureaucracy a few, pre-specified officials have authority to dismiss an employee; in a democracy a body of representatives or qualified electors make dismissal decisions (impeachment or recall) through pre-specified voting rules.

Both, however, are rational-legal mechanisms, based on formally defined rules and procedures. Authority in both is embedded in the position rather than in a person. And both can be understood as having centrally important specialization and coordination dynamics. Structural forms of each take shape as accommodations that account for and process stressors from their respective environments.

Structural Design Options and Use. Design options are the structural choices that realize specialization and coordination. Democratic and bureaucratic organizations solve this dynamic in similar ways.

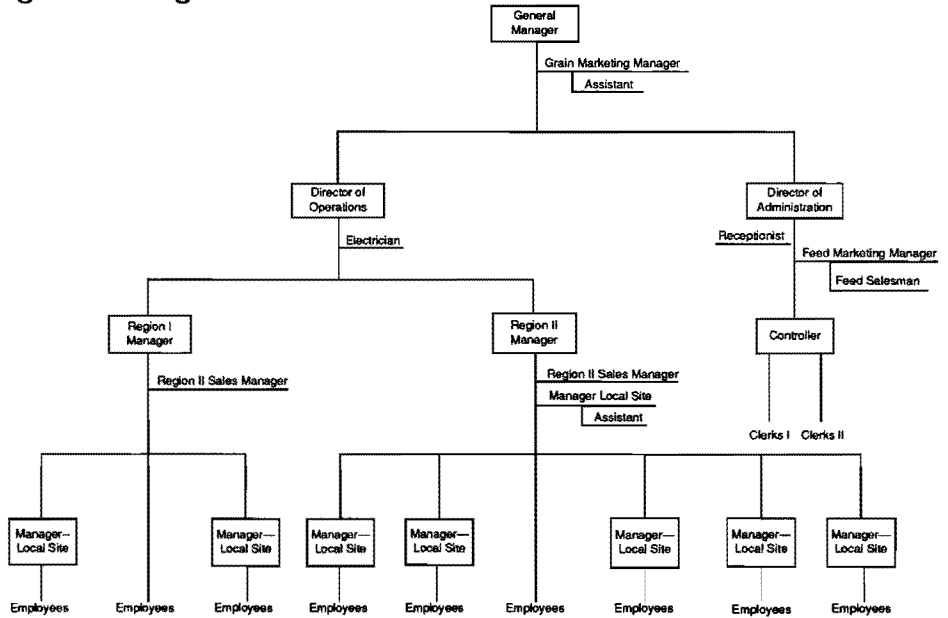
1. Horizontal divisions: Organizations have a variety of demands placed on them. To help sort out and homogenize demands, an organization can split into departments. These departments specialize in handling a narrower range of problems than those faced by the entire organization. At the most basic level, departmentalization may be defined by identifying a direction and goal function and an operations and methods function. These are organizational departments with separate tasks, located in separate places within the structure. Various logics can be used. The split between members/directors and management/employees is by function. Further splits could be made by product, market, geography, or client group. Some examples are illustrated in figures 1, 2, 3, and 4.

Figure 1 depicts operations of a cooperative departmentalized predominantly by geographic location and function. Functions are split into operations and administration. The operations function is divided by geographic function (Region I and Region II). Each region is further departmentalized by local geographic site. Figure 2 illustrates cooperative operations predominantly departmentalized by product. Departments include fertilizer, lumber, feed, eggs, oil, hardware, and auto sales. Figure 3 presents the operations structure of a cooperative departmentalized by product (petroleum, feed, and crops) with geographic location used within product lines.

Similarly, a democracy may divide tasks into departments. Figure 4 depicts a membership structure departmentalized by function (young couples committee and young couples groups, resolutions/districting committee, and delegate body and alternates) and by geographic district and region.¹ There are three regions and eleven districts. Each department is separated from the others and has separate duties and delegated authorities (though departments can be created without delegated authorities.) The structural task of departments is specialization.

When several departments are created, the organization is strung out horizontally (termed *horizontal differentiation*).

2. Vertical levels: Horizontal departments must be coordinated for their end results to contribute to overall objectives of the organization. Without this, the organization will fall apart. Overhead departments must be created to bring cohesion and organizational purpose. For example, figure 1 shows the plant superintendent integrating activities for the three plant

Figure 1.—Organizational Structure¹

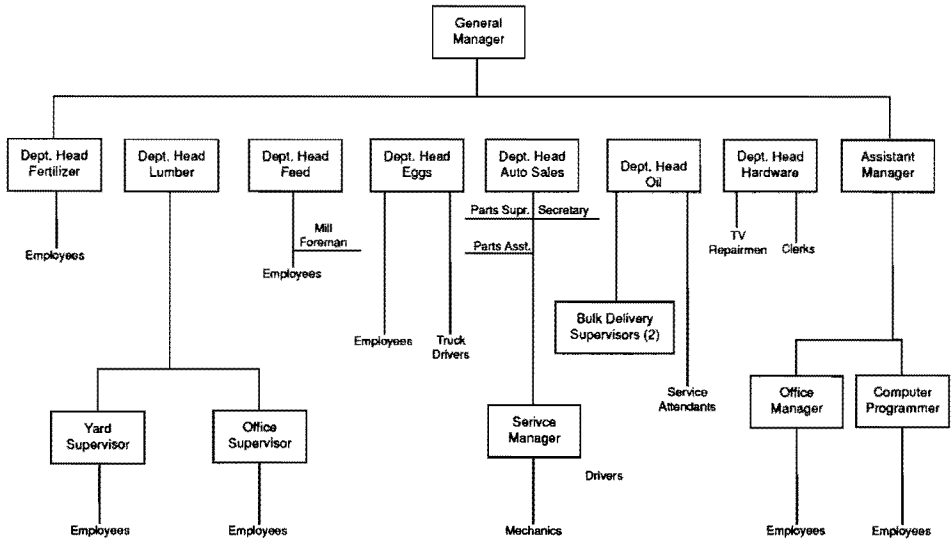
¹(Butler 1988, 22)

supervisor locations. One of the plant supervisors brings activities together from the beans, grain, and maintenance areas. The general manager brings overall coordination to the organization. In figure 4, the young couples committee coordinates the various young couples groups. The board of directors coordinates the resolutions/district committee, the delegate body, and the various committees shown. Each level has authority over levels under it.

In a bureaucracy employees may report to supervisors, who report to department heads, who report to a general manager. A democracy may have local districts, regional boards, delegates, and a board of directors. The sources of authority are reversed. In a bureaucracy the source of authority may lie in the general manager, who may delegate down, where in a democracy the source of authority lies with the members, who may delegate up. These departments add height to organizational charts and are termed *vertical differentiations*.

3. Job or Task Specialization: "Individuals are generalists when their jobs involve a large number of broadly defined tasks, problems, or issues; whereas they are specialists when a small number of rather narrow tasks and problems occupy most of their working time" (Van de Ven and Ferry 1980, 210). Job specializations generally are developed within departments, focusing on departmental duties within the confines of delegated authorities. These authorities are assigned to particular positions filled by individuals. (Authority to make final decisions may or may not be delegated to individual positions.) A bureaucracy may have production

Figure 2.—Organizational Structure¹



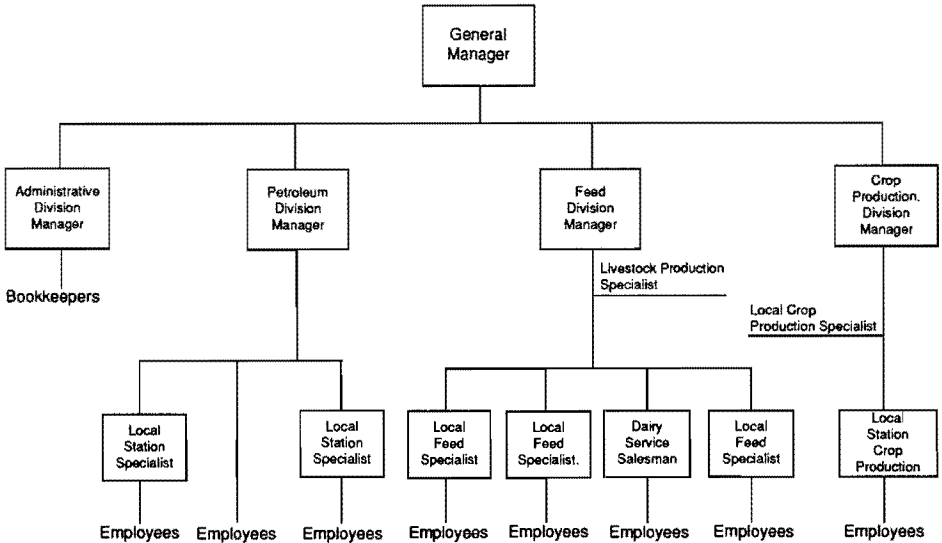
¹(Butler 1988, 25)

managers, clerks, and mechanics. A democracy may have board officers, advisory committee members, resolution committee members, and a president of the young leaders group.

4. Delegation of Authority: In both bureaucracies and democracies, some decisions are delegated to specific organizational departments and/or positions. For instance, a bureaucracy may delegate decisions about which applicants shall be granted credit to the finance department. A democracy may delegate responsibility for oversight of these credit decisions to its finance committee. Decision making is highly centralized whenever a few people at the top of the organization have the authority to make most decisions. Conversely, decision making is decentralized when the authority to make decisions is widely dispersed among members. The structural task of delegations can be both coordination and/or specialization.

In a cooperative, where member control and influence over decision making is central to definitions of cooperative organization, delegation to the board of directors or to hired management are both examples of centralization. Authority is removed (or delegated) to fewer members. When delegated to management, it is removed from direct member decision making entirely. It is centralized out of the realm of direct member decision making and into a member environment (i.e., management and operations).

5. Standardization or Ad Hoc Communications: "Standardization is the extent to which organizational activities are routinized. Standard pro-

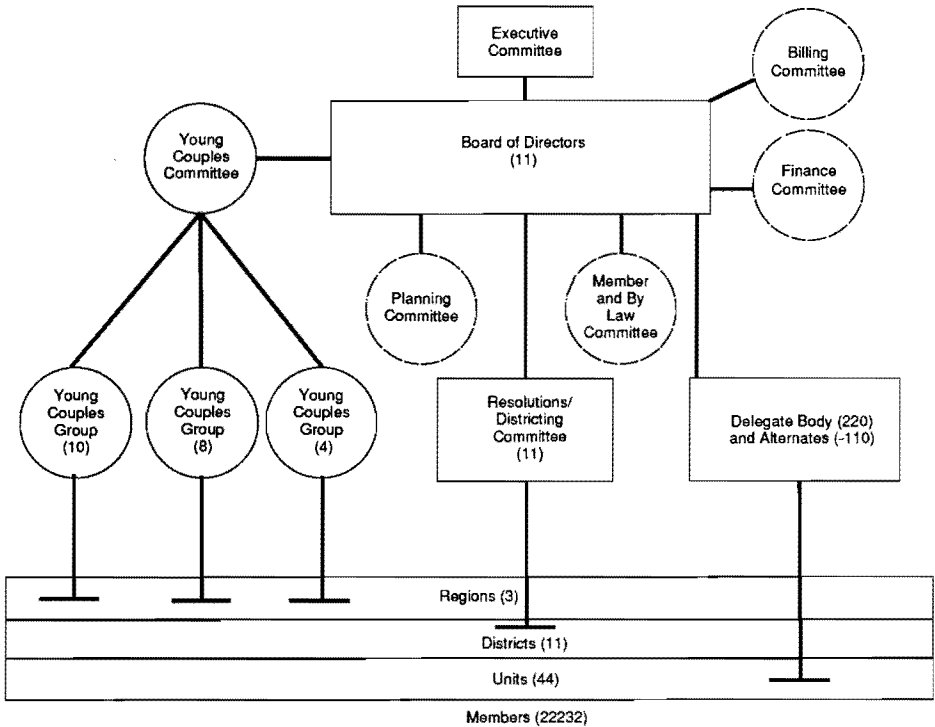
Figure 3.—Organizational Structure¹¹(Butler 1988, 13)

cedures include official arrangements, which are either formal (documented in writing), regular, or customary (repeated behavior occurring at prescribed time intervals)" (Butler 1988, 36). Examples are strict rules, formal meetings at prescribed times, and standard operating procedures. Both bureaucracy and democracy use formally defined procedures. For example, bureaucracies have credit policies, cash discount policies, and sick leave policies. Democracies have established procedures like those for nominating candidates, making resolutions, and notifying members of meetings. The higher the number of formally defined procedures, the higher the level of standardization in the organization.

Examples of ad hoc structural options include temporary committees to handle specific one-time problems or survey instruments to assess members' views on specific issues. Formal communication alternatives could include permanent committees and positions that bypass other substructures within the organization. The structural task of these options is coordination.

Complex organization and democratic organization share many similarities and lend themselves to similar conceptual treatment. As kinds of organizations, it is fundamental that both must resolve the specialization/coordination dynamic and do so using various structural options. What specific options are exercised, what shape the structure takes, depends on environmental conditions. The following section will again present the structural options, but from an environmental context.

Figure 4.—Membership Structure



(Butler 1988)

A Contingency Approach To Membership Structure

From a contingency theory approach, structural design choices must mesh environmental contingencies with specialization/coordination in a way that accounts for member control. Four environmental contingencies will be addressed in this paper: quantitative complexity, (closely related) diversity, qualitative complexity, and stability/instability.

Complexity/Diversity (Van de Ven and Ferry 1980, 94–95) refers to the manageability of problems facing an organization. Can problems be handled in a straight-forward manner, or do they need to be subdivided? Are demands so great in number that they overburden an organization so nothing can be done? Are they so complicated that technical training is required to resolve them? The first set of problems is termed *quantitative complexity*, the second, *technical complexity*. Diversity is similar to quantitative complexity in that a number of demands are placed on an organization, though the demands come from several different kinds of sources.

Stability/instability refers to the speed with which change in an organization's environment occurs. When a cooperative works in a stable environment, the time and nature of demands are known or are roughly predictable in character and occurrence. In an unstable environment, events occur rapidly and tend not to be predictable.

Original Cooperative Structuring: Empirically, when farmers pool their marketing and purchasing needs in forming cooperatives, they typically encounter quantitative complexity problems. While many farmers' needs will overlap, all will not—some will contradict, others will be unique to individual farmers. Farmers must establish procedures to serve collective as opposed to individual interests. Coordination must occur.

"Authority is the power to decide what is to be done, by whom, and to what standard" (Kenny et al. 1986, 49). Members delegate authority to a board of directors through an election process. By this, an organizational form takes shape, and diversity (quantitative complexity) among the several members is resolved from an organizational viewpoint. The board, as a body, assumes authority and responsibility for managing the cooperative, bringing coordination to the different member interests.

Members may further delegate to hired management. Historically, agricultural cooperatives have been small organizations, providing few and easily understood services for local farmers in local markets. The operations component in such organizations may only involve weekly, monthly, or even seasonal management. Under these circumstances, a board of directors member might serve as both director and hired manager. However, many cooperatives have since grown into large, complicated organizations. Most environments are no longer simple. Products and services are many and varied. It is likely management requires specialized knowledge and full-time attention to operations. Delegating authority to a *hired*, full-time, professionally trained manager may be necessary to coordinate and interpret a technically complex, difficult-to-manage environment.

Delegation by members to management may also be due to a quantitatively complex environment. Board members are farmers with their own farm businesses to run. They generally cannot be available to perform the range of tasks associated with daily operations of the cooperative. Further, board members hold authority as a group. To require committee decision-making for countless operational details would severely hamper effectiveness. Delegation to management quantitatively simplifies the farmers' environment.

These delegations put in place, from the standpoint of initial organizing and structuring, a membership structure with two environments, the *members themselves* and *management and operations*.

These original structurings suggest the following propositions:

1. The greater the complexity of the farmer environment, the greater the delegation of authority to a board.
2. The greater the complexity of the farmer/board environment, the greater the delegation of authority to management and operations.
3. The greater the delegation of authority to management, the greater the loss of direct control by members.

Delegations represent in some sense a loss of control. Members give their authority to make decisions to someone else. Generally, operational decisions are delegated to management. Policy making and oversight provisions are retained within the membership, but are delegated to elected representatives. Member control becomes differentiated within the structure depending on whether the goal is *representation*, *policy making*, and/or *oversight*—representation tending to be most responsive to the member environment, policy making and oversight to the management environment.

The Member Environment—Quantitative Complexity and Diversity: Contingency theory suggests an organization facing a diverse environment can improve its performance if it identifies like segments of its environment and establishes separate structural departments to accommodate each. The like segments of the organization's environment become the basis for dividing the organization into horizontal sections. A marketing cooperative may increase operational efficiency by establishing functional departments for retail sales, institutional sales, and international sales.

Large-membership cooperatives may have similar members in diverse locations. Departmentalization can simplify this by horizontally dividing the membership on the basis of geography. Officers elected from these divisions can then focus their attention on articulating concerns of respective segments of the membership, as they assist in a synthesis for the entire organization. These departments then string the structure out horizontally into a series of geographic member districts and divisions. Other bases of representation are possible. Members might be divided by type or size of farming operation, or by membership tenure. These divisions account for member diversity.

The following propositions derive from the above relationships:

4. The greater the diversity in membership (large clusters of dissimilar characteristics), the greater the need for horizontal divisions into departments.
5. The larger the membership quantitatively (large numbers with similar characteristics), the greater the need for horizontal divisions into departments.
6. The greater the number of horizontal departments, the greater the possibilities for member representation.

Management and Operations Environment—Technical Complexity: The technical complexity of an environment increases as the variety and technical sophistication of activities pursued within it increases. As cooperative operations add new products, services, commodities, technologies, and market areas, members are confronted with an increasingly complex management environment. Member control at the board level (i.e., oversight and policy making) is challenged. Loss of member control may occur as board members are unable to process increasingly more complex information. Contingency theory suggests this complex environment may be simplified with job and/or task specializations. Oversight and policy making can be enhanced by using specialized committees that deal with single

commodities, markets, or single aspects of operations (e.g., finance, member relations, marketing).

A contingency approach suggests the following propositions:

7. The greater the complexity of management and operations, the greater the relative delegation of authority to management, the greater the loss of direct control by members.
8. The greater the delegation of authority to management and operations, the greater the use of specialization within the board, the greater the oversight and policy making possibilities.

Member and Management Environments: Stable/Unstable Environments. Some organizations operate in relatively unchanging conditions, selling the same products to the same members year after year. Other organizations face rapidly changing circumstances. In a stable environment, an organization can standardize many of its activities to achieve coordination and predictability. In an unstable environment, it is less appropriate to standardize since new situations constantly occur that do not conform to the rules. The organization must remain flexible so it can adapt quickly to new circumstances. Many different influences may make a cooperative's environments unstable. Examples are irregular price movements, rapid member turnover, high rates of urbanization, unpredictable demand in international markets, or changing government policies.

Member control ultimately concerns communication channels. If communication cannot occur during critical periods, member input cannot occur. Ad hoc communications, such as temporary committees, surveys, or farm visits, can allow access and coordination.

A contingency approach suggests the following propositions:

9. The greater the stability in a member structure environment, the greater the use of standardization options and the greater the certainty of member control possibilities.
10. The greater the instability in a member structure environment, the greater the use of ad hoc communications options and the greater the member control possibilities.

The Internal Environment: Size. As size and diversity of membership increase, need for greater horizontal differentiation occurs. However, large numbers of horizontal departments within a membership structure themselves present quantitative complexity problems. Such departments need to be coordinated. Coordination can occur by designing over-arching vertical departments (vertical differentiations). Contingency theory suggests:

11. The greater the number of horizontal departments created, the greater the need for coordinating vertical departments.
12. The greater the horizontal and vertical departmentalization within a membership structure, the greater the possibilities for representation.

Adding levels of representation to a membership structure creates mechanisms for coordinating, giving increased focus to members' disparate interests.

However, the greater horizontal and vertical differentiations in a structure, the more complex it is. The structure itself may block contact between individual members and oversight and policy making centers. Creating alternative paths from members to the board can mediate some of this complexity. Separate functional hierarchies, such as a resolutions path, a delegate path, and a young-member program path, can increase alternatives and facilitate access. These specializations become separate departmental hierarchies.

This approach suggests the following propositions:

13. The greater the complexity of the membership structure, the greater the need for specialization of department hierarchies.
14. The greater the specialization of department hierarchies, the greater the possibilities for member representation.

Eventually bureaucracy captures democracy. Ultimately the structure itself must act as a limit on itself, generating the following proposition:

15. Internal structural complexity (both quantitative and qualitative) imposes limits on horizontal and vertical differentiations and departmentalizations and specializations.

The forgoing set of fifteen statements outlines conceptual space for a theoretical language and focus for organizational analyses of member control structures. Complex membership structures can be understood in terms of organizational concepts. Our axioms suggest that when membership structure is designed to coincide with its environments, (i.e., member, and management and operations environments) structure can improve potential for member control. Obviously, empirical and further conceptual work needs to be done. Our purposes have been to initiate organizational language and to surface some of the promise of these theoretical constructs when applied to membership structure.

Conclusion

Most agricultural cooperatives began as relatively small, local, single-product organizations. As such they were highly accessible to and easily understood by their members. Many of these small agricultural cooperatives have grown into large multi-product businesses using sophisticated technologies and servicing large geographical territories. These large cooperatives use bureaucratic structures and procedures to coordinate and control their complex operations: They divide their work among various departments and levels of the organization, hire professionals and specialists to make specific decisions, and use standardized reports and procedures.

Though these bureaucratic structures and procedures make cooperative operations more efficient, they present a challenge to the ideal of democratic member control. If information demands are so large that members cannot process them (quantitative complexity), or so technical that members lack skill or time to figure them out (technical complexity), or if demands change so rapidly a timely response is impossible (instability), the organization may fail. Failure from a membership structure perspec-

tive is failure in member control, representation, oversight, and policy making.

An earlier paradigm of member control research focused at the social-psychological level of individual farmers and sought answers to such issues as getting farmers to meetings, voting, patronizing, and involvement in office-holding. A newer paradigm looks at organization of membership itself. While earlier questions and answers remain important, the organizational level needs to be understood so new strategies can be developed to help answer old and new questions. New answers may include, not only social-psychological answers, but also strategies that include creating departments to handle quantitative complexity, job specializations to handle technical complexity, delegations of authority to handle both aspects of complexity, and various standardization and ad hoc communication alternatives to handle stability/instability. Empirical work lies ahead. Perhaps most promising may be research on the performance of alternative member control structures. Participation and participation research remain important. Structure provides context. There is no control when structures are empty.

This paper contributes to an organizational orientation to membership by developing a series of axioms to help ground and articulate central concepts and assumptions. It also provides a basis for developing empirically oriented research hypotheses. Ultimately, we seek to bring coherence to the puzzle of member governance in large, complex, and diverse cooperatives.

Note

1. Membership structures require a charting methodology different from those used for management and operations. See Gray and Butler (1991).

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