CHAPTER 12

THREE THEMES ABOUT DEMOCRATIC ENTERPRISES: CAPITAL STRUCTURE, EDUCATION, AND SPIN-OFFS

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ABSTRACT

Purpose – *The purpose of this paper is to delve into three themes about democratic enterprises.*

Design/methodology/approach – *(1) The first theme is the question of capital structure where labor-managed firms (LMFs) are often pictured as having "horizon problem." Yet this is only a minor technical problem which is solved by the system of internal capital accounts as in the Mondragon cooperatives.*

(2) The second theme concerns the attempt to implement participative management and the related ideas of active learning in educational theory in the workplace. The point is that the democratic firm is the natural setting to implement these ideas, not the conventional firm where the staff have the legal role of "employees" rented by the company.

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(3) The third theme is the old canard the cooperatives are incompatible with entrepreneurship. My rethinking of the issue was inspired by the analysis of the late Jane Jacobs who emphasized that the primary means of growing economic "biomass" is through economic offspring (e.g., spin-offs) – in analogy with the biological principle of plentitude. Yet the conventional form of ownership operates as a fetter on this process since the ownership and management wants to expand its empire and maintain "ownership" of any potential offspring. But that constraint against spin-offs is absent in democratic firms, and the Mondragon complex has indeed illustrated how to catalyze this process of growth through offspring.

Social implications – *A public policy to encourage all companies to grow by affiliated and perhaps democratic spin-offs would create more jobs (through filling extra niches) and more stability (through the agility of separate companies).*

Keywords: Capital accounts; participative management; spin-offs

INTRODUCTION

My topic is a set of themes where I think the experience of the Mondragon cooperatives is particularly relevant. In my opinion, these themes are also not widely understood even by advocates and practitioners of the various forms of worker ownership and cooperative enterprise. The first topic of capital structure is notoriously difficult and controversial, and yet it is an area where the Mondragon cooperatives have in their system of internal capital accounts made a social invention of the first order. But the practice has preceded the theory so this accomplishment is little understood.

Education has always played a leading role in the cooperative movement and particularly in the Mondragon experience. My point here is to mine a broader theme in the philosophy of education which has been the topic of a recent book (Ellerman, 2005a), and to relate that theme to the structure of a democratic firm (e.g., a worker cooperative). Education works best when it is structured not as the pouring of knowledge into learners as passive vessels but as the indirect facilitation of learners taking an active role in constructing and appropriating knowledge. In this sense, education should be the cognitive version of the producers appropriating the fruits of their own labor. That fruits of their labor principle is only implemented in a firm where the members of the firm are the producers, the managers, and workers of the firm. Thus in a democratic firm (as opposed to a conventional employment firm), we have a unique coincidence of structures; the legal structure of the firm respects the autonomy and responsibility of the workers as producers, and this should naturally carry over to their role as active learners or appropriators of knowledge – but this is by no means an "automatic" process. The legal role of the workers as members does not automatically transform people socialized as "employees" to active participants in a democratic process.

And finally this brings me to the third theme. Critics of workplace democracy as well as some sympathetic observers have often raised the question of entrepreneurship. In the conventional economy of employment firms, entrepreneurs play an important innovative role in fact (and an even more important role in the ideology of the system). Hence the advocates of workplace democracy need to take the question of entrepreneurship seriously. Over two decades ago, I tried to approach this question by studying the Empresarial Division of the Caja Laboral Popular (since reorganized as a separate cooperative, LKS). I argued that the Empresarial Division was a "factory factory" that represented the "socialization of entrepreneurship" (Ellerman, 1982, 1984). I now think that this analysis was not well taken. Hence in the third part of the paper, I would like to develop a new approach that still recognizes the role of the Empresarial Division and its successors but which has a different angle on the question of entrepreneurship.

CAPITAL STRUCTURE IN AN EMPLOYMENT FIRM AND A DEMOCRATIC FIRM

The Horizon Problem

Most people who have taken a serious look at the idea of a democratic firm has grasped the idea that membership rights in such a firm cannot be a market commodity that could be purchased by any "shareholder." Whether they use the language or not, they will have grasped the idea that one must qualify for membership in a democratic firm by working there on a long-term basis (in additional to other requirements, one of which may be paying in membership fee). Membership in a democratic firm is a personal right like citizenship in a political democracy, not a property right that can be bought or sold on a stock market.

The controversy arises concerning the issue of what might be loosely called "the value of the firm." The treatment of membership rights as personal rights could be legally implemented using the legal structure of a nonprofit corporation where the members cannot recoup any of the "value of the firm." This structure was typical in many of the traditional worker cooperatives in Europe, in the late Yugoslav self-managed firms, and in the common ownership firms of the United Kingdom. The members of such a firm always face the decision of splitting their net income into a portion currently paid out as wages and salaries, and a portion retained in the firm. They will not be able to recoup their share of the retained earnings if they leave the firm in the near future. If an individual would remain with the firm for the lifetime of the investment, then the inability to recoup the undepreciated retained earnings would not matter since the investment would have been depreciated. But workers have different time horizons with the firm so this created what was called the "horizon problem for labor-managed firms." The problem was treated in much of the literature as some intrinsic and fatal flaw in the very idea of labor management rather than as a merely technical issue that could be readily solved (Ellerman, 1986).

The other nonsolution to the capital structure problem (aside from the nonprofit or social equity nonsolution) was to have membership shares that would also serve the dual purpose of carrying the typical member's portion of the capital value. One needed to own a membership share (in theory) to work in the firm, but one had to buy such a share from a retiring or exiting worker. This retained the connection between working in the firm and being a member, and it was supposed to recognize each member's share of the capital value. This sort of structure was used in some of the older worker cooperatives in the United States (e.g., the plywood cooperatives) and it unfortunately seems to be the model used in many of the Spanish SAL (*Sociedad Anonima Laboral*) firms. The value of a membership share was determined by what the market would bear, but the "market" was restricted to the workers who might replace a retiring worker. There were two tendencies. If the exiting workers insisted on a value comparable to their undepreciated past retained earnings and investment, not whatever entering workers could pay, then soon or later the older members would "broaden the market" by forcing the sale of the whole company as a conventional corporation to any buyers. The other tendency is for the company to browbeat the exiting workers to accept whatever the entering workers can pay in order to preserve the firm as being worker-owned.

It is interesting that for both these nonsolutions, the technical problem was so often transformed into a "moral" problem. With the nonprofit nonsolution, the net earnings of the firm that could have been paid out as personal income were seen as being somehow transformed into "social property" or "common ownership" when they were reinvested in the firm. Then it was seen as a moral impropriety to want to take a share of "social property" upon exit or retirement. Or with the nonsolution of the dual-purpose membership share, the retiring workers who expected back some reasonable value were pictured as being morally derelict. These are two examples of a somewhat broader tendency on the left of "premature moralization" of a technical problem.

In this case, the capital structure problem for democratic firms has a solution which has been discovered at least four times but is still little understood. The solution is to have a system of what are called "internal capital accounts" for the members. Based on a pure rental model for a labor-managed firm (LMF), Jaroslav Vanek arrived at the notion of "external funding" as opposed to "self-financing" for LMFs and suggested that external support agencies might play that role. But then Vanek noted that an internal redeemable savings account would be counted as "external" – all of which amounts to an internal capital account (Vanek, 1975). I personally was involved in working out the internal capital account idea in the context of the work of the Industrial Cooperative Association, whose acronym ICA also coincidentally could stand for "Internal Capital Accounts." The ICA quickly found out that the same idea had already been developed in practice in the Mondragon cooperatives and it was thereafter presented as the "Mondragon solution" to the problem. The fourth and even older solution was in the system of partner capital accounts to be found in law partnerships and other professional partnerships. Sometimes partners have to invest a share of partnership earnings (or out of pocket) to make some capital acquisition (e.g., a new building) and these investments were kept track of in a separate capital account that was eventually paid out. Each partner's share in the profits or vote was independent of the amount in the internal capital account.

Parsing the Corporate Ownership Rights

In the conventional corporation, there is a "bundle of rights" attached to the common equity shares. Our task is to show precisely how these rights are split apart, transformed, and reassigned in a democratic firm. We simplify down to the essentials: the voting rights (to elect the board to select the management and to vote on any other questions put to the stockholders) and the economic value rights which can now be parsed into the net asset value and the (economic) profits rights. The net asset value is for the current time but the voting and profit rights need to be broken down into the current rights and future rights after the current time period. Thus we have the following taxonomy:

Corporate Ownership Rights

A. Voting rights
    A.1 Current voting rights
    B.1 Future voting rights
B. Value rights
    A.1 Profit rights
        B.1(a) Current profit rights
        B.1(a) Future profit rights
    B.1 Net asset value.

In the conventional joint stock company, these corporate ownership rights (voting + value rights) are property rights represented by the common voting shares that may be owned and freely transferred as any other property rights.

In a democratic firm, the corporate ownership rights are not only rebundled but are assigned on a different basis. The rights structure is derived from first principles which have been detailed elsewhere (see Ellerman, 1992). The voting rights are assigned on the basis of democratic principle of self-government. The people working in the firm are the only people under the management of the firm's managers so by the democratic principle, the voting rights to elect those managers (perhaps indirectly through board election) should be assigned to the people working in the firm. Note that this assignment to those people is based on the assumption that those people are playing a certain functional role, that is, working in the firm. They do not "own" the voting rights as property rights to be held or sold independently of their functional role. It is the same with political rights in a democracy. We call rights assigned to a functional role *personal rights* (but one can use whatever label so long as the concept is clear).

The workers in the firm change so the assignment of the voting rights will change with the workforce. The future workers, like the future citizens in a political democracy, do not have to buy their voting rights from the present holders. Hence the separation of the (A) voting rights into the (A.1) current voting rights and (A.2) future voting rights. It is the (A.1) current voting rights that are part of the bundle of *membership rights* attached to the functional role of currently working in the democratic firm. The (A.2) future voting rights would be assigned to the future workers.

The second normative principle (here called the *responsibility principle*) is just the standard jurisprudential norm of assigning to people the legal responsibility for the results of their deliberate and intentional actions. In rather abstract terms, the intentional actions L of the people working in the firm produce the outputs Q by using up the nonlabor inputs K. In vector terms, the product of the human activity L is (Q,−K,0). Since the so-called "capitalist" system hypostatizes this human activity L as a service "owned" by the workers and "used up" in production, we can parse the product of this human activity as:

$$\begin{aligned}\text{Labor Product} &= (Q, -K, 0) = (0, 0, L) + (Q, -K, -L)\\ &= \text{Labor Services} + \text{Whole Product}\end{aligned}$$

Since the workers already "own" their labor (0, 0, L), by imputing labor's product to the workers, the responsibility principle would additionally be imputing the whole product (Q,−K,−L) to the workers. The value of the whole product is the current profit so this is precisely the (B.1(a)) current profit rights. Thus those rights would also be in the bundle of membership rights assigned as personal rights to the functional role of working in the firm (where "working in the firm" in the current time period means producing the current labor product). As one might expect, the (B.1(b)) future profits rights represent the future whole products that would be assigned to the future workers who produce them.

Thus on the basis of the first principles of democracy and responsibility, we have accounted for all the rights except the (B.2) net asset value rights. In terms of the point-in-time versus time-period distinction (e.g., balance sheet vs. income statement), the net asset value is a current value relating to a point in time, while votes are cast and profits are earned in each time period. There is no reason to assume that the net asset value is supplied by or produced by the current workers. Current workers will, to be sure, use up the capital services derived from the capital assets of the company as part of the nonlabor inputs K and that is why they are held legally responsible for the liabilities −K, but we are now concerned with the rights to the net asset value. This value represents property rights accumulated by production and exchange in the past so the claims on the value by past and present members would be determined by the history of past transactions.

The system of internal capital accounts is quite simply the means of keeping track of that history so that the net asset value is in whole or part owed in varying amounts to current and past members. They contributed to that value through any membership fees paid in and through any profits (or losses) retained in the firm rather than being paid out (or assessed in the case of losses). These claims could be thought of as a form of "internal" debt (like a shareholder's loan) subordinate to all other (external) debts. Indeed, the internal capital accounts should be interest bearing. The balance is a property right, not a personal right. One test to distinguish personal and property rights is inheritability. If a member dies, the voting and profit rights (like political voting rights) do not pass to the person's estate, but the internal capital account balance would be a debt of the company to the estate of the deceased member.

Thus we have seen how all the corporate ownership rights are rebundled and assigned in a democratic firm. The current voting and profit rights are bundled together as the *membership rights* attached to the functional role of working in the firm (in practical terms, usually after a certain probationary period) so the future voting and profit rights would go to future members, and the remaining net asset value rights are captured in the system of internal capital accounts held by the current members. The accounts of past members would be closed and elevated into an external debt of the company to the ex-member. The rights structure in the so-called "capitalist corporation" and the democratic firm can now be compared point-by-point (Table 1).

Origins of Internal Capital Accounts

There has been some controversy about how the net asset value should be treated. One widespread socialist belief was that the net asset value must be collectively owned as in the English common ownership firms or the former

Table 1.

Rights Structure	"Capitalist" Corporation	Democratic Corporation
Current membership rights (A.1 + B.1(a))	Owned as property rights by shareholders	Assigned as personal rights to the current workers
Future membership rights (A.2 + B.1(b))	Owned as property rights by shareholders	Assigned as personal rights to the future workers
Net asset value rights (B.2)	Owned as property rights by shareholders	Owned as property rights by the current workers

Yugoslav self-managed firms – a holdover from the mistaken view that "capitalism" was based on the "private ownership of the means of production" rather than on the employment contract. To analyze this view, it must first be recalled that the voting and profit rights have been partitioned away from the rights to the net asset value. The phrase "private ownership of the means of production" usually does include specifically the rights to control and reap the profits from the means of production. But those rights have been restructured as personal rights assigned to labor in the democratic firm. Hence the remaining right to the net asset value does *not* include the control and profit rights traditionally associated with "equity capital" or with the "ownership of the means of production."

Let us suppose that it is still argued that any private claim (e.g., by past workers) on the net asset value of a democratic firm would be "appropriating social property to private uses." Now some net asset value might come from a historical endowment that should not be appropriated by whoever happens to be the current workers. Very well, that endowment could be captured in a separate (bearing interest to reflect its scarcity) "collective account" (as in the Mondragon cooperatives). But what about that portion of the net asset value that comes from retained earnings in the past or from paid-in membership fees?

In a democratic firm, the past workers could, in theory, have used their voting and profit rights to pay out all the net earnings instead of retaining any in the firm, assuming they could cover any financing needs by borrowing (as in the academic model of the "pure rental" LMF). Suppose they retained some earnings to finance a machine. Why should those workers lose their claim on that value – except as they use up the machine? Why should the fruits of their labor suddenly become "social property" simply because they choose to reinvest it in their company?

Consider the following *gedanken* experiment in a "social property" LMF. Instead of retaining the earnings to finance a machine, suppose the workers paid out the earnings as bonuses, deposited them all in one savings bank, and then took out a loan from the bank to finance the machine using the deposits as collateral. Then the workers would not lose the value of those earnings since that value is represented in the balance in their savings accounts in the bank. And the enterprise still gets to finance the machine. Since the finance was raised by a loan, there was no private claim on the social equity capital of the enterprise. The loan capital is capital hired by labor; it gets only interest with no votes and no share of the profits. This hired capital satisfied Jaroslav Vanek's (1975) idea of "external" finance as opposed to self-finance.

Now we come to the point of the thought-experiment. How is it different *in principle* if we simply leave the bank out and move the workers' savings accounts into the firm itself? Instead of going through the whole circuitous loop of paying out the earnings, depositing them in the bank's savings accounts, and then borrowing the money back – suppose the firm directly retains the earnings, credits the workers' savings accounts in the firm, and buys the machine. The capital balance represented in the savings accounts is essentially *loan* capital. It is hired by labor, it receives interest, and it has no votes or profit shares. This was the conceptual route followed by the ICA to develop the idea of internal capital accounts (before learning about the Mondragon accounts), and Jaroslav Vanek seems to have followed a similar route since he explicitly noted that his notion of "external" funding would include such capital accounts.

> Into our concept of external funding we also include redeemable savings deposits of members, bearing a market rate of return paid, as to other creditors, prior to the distribution of labor incomes. To the extent that our analysis comes out in favor of external funding, it also favors this type of individualized funding by members. (Vanek, 1975, p. 445)

Prior to Vanek's and ICA's development of the internal capital account concept, they were developed in the Mondragon cooperatives, and prior to that in the capital accounts of legal and other professional partnerships.

The separate treatment of the membership rights (current voting and profit rights) as personal rights, and net asset rights as property rights recorded in the internal capital accounts solves the so-called "capital structure problem" for democratic firms. Some older forms of employee ownership use one instrument (the membership share) to serve the two different purposes and thus led to problems such as the mule firm tendencies (failure to reproduce as a worker-owned company). As the carrier of the net asset value, the membership shares might obtain such a high value that new workers could not afford a share so would be hired as a nonmember. And then an external market would be sought for the high-priced shares of the founding cohort, so the company would end up converting to a conventional firm in the course of a generation. The Mondragon-style capital structure solves these "mule-firm" problems.

ACTIVE LEARNING IN A WORKPLACE DEMOCRACY

From the Employment Relation to the Membership Relation

Let us now turn from the legal structure of a democratic firm and the principles behind it to the relationship between the managers and workers that would be appropriate for a democratic firm (but could be approximated or simulated in other types of firms). We have approached the questions of legal structure from first principles that treat persons as being inalienably decision-making and responsible beings – in contrast to things. The basic idea is to treat people as persons rather than as things which is essentially the Kantian principle to treat people always as ends in themselves and never solely as a means. This means treating people as being autonomous – as being the source of decisions and responsibility ("*auto-nomos*" or self-law) in contrast to be subjugated or dominated and ruled from the outside.

How does this translate into the internal management of a firm? Some of modern participative management theory in the human relations school has been concerned with the problem of organizing the hierarchy of decision-making and action within a firm so that people's capacity as autonomous beings will not be undercut and they will not just be treated as instruments.

One of the earliest and best management thinkers on the topic was Douglas McGregor who wrote in the middle of the 20th century. He outlined two broad approaches to management which he called "Theory X" and "Theory Y." Theory X was the more usual approach to management, top-down and manipulative with the extrinsic motivation of pay and bonuses being assumed as the primary motivators. Theory Y actually represented a Copernican revolution in management thinking by rebuilding the whole theory of management based on the assumed integrity, intrinsic motivation, and self-control (or autonomy) of the people working in the firm.

McGregor describes Theory Y as being based on the principle of integration and self-control where "integration" refers to the situation where an individual "can achieve his own goals *best* by directing his efforts toward the objectives of the enterprise" (1960, p. 61). Management's task is not to provide incentives; the "task is to provide an appropriate environment – one that will permit and encourage employees to seek intrinsic rewards *at work*" (1967, p. 14). The contrasting Theory X is based on the principle or philosophy of direction and control using the type of incentives that management can provide, that is, extrinsic or external incentives ("*hetero-nomos*" or external-law).

Theory X is based on conventional economics that sees the worker as *homo economicus* motivated by extrinsic considerations that can be engineered by management to bring about the behavior desired by management. In economics, this view of the manager–worker relationship is based on the employer–employee relation and is sometimes called the "principal–agent relationship." Since the natural home of the alternative Theory Y is outside the employment relationship, I will use alternative terminology of manager as "helper" and worker as "doer." The helper–doer terminology will allow us to draw some later analogies between McGregor's Theory Y and the teacher–learner relationship in active learning and constructivist theories of education.

McGregor starts with the common problem where someone in an organization (the doer) is facing a certain problem to better do their job. What is the role of the manager as helper, facilitator, coach, or catalyst? Starting with the doer's problem within the organization and seeing the problem through the doer's eyes, the helper can then offer knowledge and experience to help the doer find the best way to further the doer's own intrinsic ends while addressing the organizational problem. The helper is not to "teach" the doer what the helper considers the best solution.

Ortega y Gasset stated the matter very clearly: "He who wants to teach a truth should place us in the position to discover it ourselves" (1961, p. 67). In McGregor's words: "*A's* [Helper's] objective is to utilize his skill to create a situation in which *B* [doer] can learn, and to make his knowledge available so that *B* may utilize it to augment his own need satisfaction in ways consistent with the achievement of organizational objectives" (1966, p. 163). Or again, "Fundamentally the [helper] … must create a situation in which [the doers] can learn, rather than one in which they are taught" (1966, p. 161).

McGregor's references to the doers' "own goals" and "intrinsic rewards *at work*" goes well beyond the conception of many economists and managers that workers are motivated primarily by extrinsic considerations of pay and benefits. Early in the 20th century, the economist Dennis Robertson expressed a broader vision:

> A high wage will not elicit effective work from those who feel themselves outcasts or slaves, nor a low wage preclude it from those who feel themselves an integral part of a community of free men. Thus the improvement of this element in the supply of labour is an infinitely more complex and arduous task than if it depended upon wage alone, but at the same time a task more possible of fulfillment by an impoverished world. (Quoted in Whyte, 1955, p. 5)

The passage above was quoted by the late William Foote Whyte about the time that the first Mondragon firm of ULGOR was founded – quite early in his long and illustrious career. Bill Whyte throughout his career searched for models of the new vision of work based on the participation, autonomy, and intrinsic motivation of the workers that we have illustrated with McGregor's Theory Y. Later in his life, Bill Whyte learned about the Mondragon experience and spent his remaining years studying it in great depth. Bill Whyte and his wife Kathleen summarized their findings about Mondragon with insight and sensitivity in their 1988 book *Making Mondragon*.

My point here is basically the same; the vision of work based on participation, autonomy, and intrinsic motivation finds it natural home not in employment firms but in the democratic firm as illustrated by the Mondragon cooperatives.

From Passive Instruction to Active Learning in Education

The basic principles we see exemplified in the Mondragon experience have a broader reach than governance, property rights, and management relationships. Just as we juxtaposed the conventional firm and the democratic firm or McGregor's Theory X and his Theory Y, so we find two rather opposite visions or philosophies of education: the one is teacher-centered with the instructed student in a passive role, and the other vision is more learner-centered with the teacher playing a more indirect catalytic role (the teacher–learner version of the helper–doer relationship). John Dewey (1859–1952) as well as Father Arizmendiarrieta could be taken as representatives of the latter tradition.

These two visions or pedagogies might even be traced back to two opposing metaphors for the mind itself as a passive mirror or as an active lamp. With the first pedagogy, the student is described as being essentially passive: a wax tablet on which knowledge is stamped, a mirror or reflector for knowledge (Plato, Locke), a vessel or cistern into which knowledge is poured (Cudworth, Coleridge, Dewey), a phonographic record onto which knowledge is recorded (Dewey, Gramsci, Ryle), and so forth. In this model, the teacher supplies the knowledge that is imprinted into the student, crammed into the student as into a bag (Maritain), forced into the student through a "funnel" (Buber), drilled into the student as into hard and resisting rock (Dewey), or forced into the student using a "grease gun" (McGregor).

The other pedagogy sees the student's mind as taking a more active role represented by metaphors such as lamp, fountain, or projector – or often by organic metaphors of a growing plant. The teacher then has a more subtle indirect role of a guide, coach, or midwife to foster and nurture the student's active search for and appropriation of knowledge. Some of the subtlety of the teacher's indirect role can be expressed using the metaphor of the internal fountain. Impediments can obscure or block the flow of the fountain (like turning off a faucet or hose). External enabling help can then unblock the fountain or open the faucet but the subtle point is that external help cannot directly supply the pressure to make the fountain flow. That pressure has to come from within.

This can't-push-on-a-string asymmetry is reflected in the distinction between extrinsic and intrinsic motivation. Extrinsic motivation can override and crowd out intrinsic motivation to control behavior, but removing the former will not automatically supply the latter. One cannot extrinsically bring about intrinsically-motivated action just as opening a faucet cannot itself supply water pressure. The oft-repeated metaphor for this insight is: "[W]hile we may lead a horse to water we cannot make him drink" (Dewey, 1916, p. 26). While real learning thus cannot be an imposition, neither can it be a gift. Father Arizmendiarrieta contrasted what could be obtained by "paternalist catapults" with what might result from the "need and opportunity to be able to resort to and count on one's own resources or personal abilities" (n.d., p. 116).

The reliance on extrinsic rewards or punishments may yield conforming behavior and a rote learning[1] but has little educative or transformative effect. Indeed, the threat to autonomy may lead to an adverse reactance effect. "His instincts of cunning and slyness may be aroused, so that things henceforth appeal to him on the side of evasion and trickery more than would otherwise be the case" (Dewey, 1916, p. 26). An autonomy-compatible educational program needs to engage the person's more natural and intrinsic motivation.

> When we confuse a physical with an educative result, we always lose the chance of enlisting the person's own participating disposition in getting the result desired, and thereby of developing within him an intrinsic and persisting direction in the right way. (Dewey, 1916, p. 27)

The students' active interest and involvement is a necessary component so one must consider the roots of engagement. Students do not construct knowledge in a void. Learning is contextual; it builds upon the context of previous knowledge, experience, and problems. Hence Father Arizmendiarrieta's pragmatism: "We build the road as we travel" (n.d., p. 158).[2] Hence Dewey's "pragmatic" emphasis was placed on learning in the context of the "social environment," albeit simplified and ordered in a school, so that the student would have a natural or intrinsic incentive to learn. Hence Paulo Freire's (1970) emphasis on dialogue as the prelude to, as well as the means of, learning. By formulating a literacy campaign in terms of the peasants' daily concerns, the peasants are motivated to be involved and take ownership of the process. The cases, examples, and questions can be couched in terms that make sense from the student's viewpoint and are relevant to the student's interests. With this preparation, the student can take responsibility for actively reconstructing and appropriating knowledge with occasional prodding and questioning from the teacher as midwife. Knowledge obtained in this active way is truly the student's own; it is neither an imposition nor a gift.

Here again we see the cooperatives are the natural home for this sort of active learning.

> The cooperative movement is an economic effort that is translated into an educational action, or, it is an educational effort that uses economic action as a vehicle of transformation. (Arizmendiarrieta, n.d., p. 174)

The Mondragon cooperative complex was founded and built on Father Arizmendiarrieta's educational vision, a vision that is very much in line with the philosophy emphasizing the active role of the learner based pragmatically on the type of problems that arise in the business and social environment. This vision has been carried through the Escuela Politecnica to today's Mondragon University.

The overall point is that the democratic firm provides the ideal and natural setting for autonomy-respecting management methods (e.g., McGregor's Theory Y) and active learning (e.g., John Dewey and Paulo Freire). None of this is to suggest that these difficult transformations from "employees" to active participant-members are somehow automatic in a democratic firm. Human relations programs have a more important substantive and positive role in democratic firms since the structure of the firm then supports rather than opposes those transformations. In conventional firms, those programs often boil down to trying to get the staff to "act like owners" when they are not.

ENTREPRENEURSHIP AND DEMOCRATIC FIRMS

Existing Firms as Schools for Business Training

My earlier work on entrepreneurship and Mondragon (1982, 1984) contrasted the "socialization of entrepreneurship" in the Empresarial Division of the Caja Laboral Popular (now the separate second-tier cooperative LKS) with the conventional stories of the heroic individuals starting companies in their garages.[3] But an intensive study of the work of the late Jane Jacobs forced me to rethink the issue of entrepreneurship from scratch.

This, in turn, lead me to appreciate a different connection between entrepreneurship and democratic firms, an aspect that is also illustrated by the Mondragon cooperatives.

Every company has two products: its products and itself. By "itself" is meant the company as an organization of people trained in the systems necessary to run the business and in the technologies necessary to produce the products or services of the company. While some skills are already possessed by people when they join the organization, the company still has to have the training capacity to specialize those skills to the systems and technologies specific to the firm. And as people leave or retire, the company has to recreate those human capabilities within the firm.

While the company's ordinary products may be protected by patents and trademarks, there is generally no such exclusive rights over the human capabilities developed in the company. When those capabilities leave the company, then it is a positive externality. In A. C. Pigou's classic book on normative economics, he noted that the businesses in a country provided the positive externality (meaning their social product exceeded their private product) of training people in business:

> One very important indirect service is rendered by the general economic organisation of a country in so far as, in addition to fulfilling its function as an instrument of production, it also acts, in greater or lesser degree, as a training ground of business capacities. (1960, p. 204)

Modern economics texts seem to have lost sight of this fundamental point that existing businesses are major training grounds for entrepreneurial and managerial capability and major incubators for new businesses. Yet the conventional business sees this social product as no part of its corporate goals. Quite to the contrary, businesses want to grow by expansion rather than by spin-offs and they want to retain their potential future managers rather than lose them to new businesses.

In a vibrant entrepreneurial environment, such as Silicon Valley in California or Silicon Gulch in Taiwan, people routinely leave companies, often together with some colleagues, to start new companies. But these are rather exceptional cases.

The Biological Principle of Plentitude: Growth through Offspring

In biological terms, there are two ways in which the biomass is increased: existing life getting bigger or existing life having offspring. Diminishing returns set in as companies get bigger and the same happens to biological organisms. The limits of increasing biomass by existing creatures getting larger in size are soon reached. Most of the biomass that covers the globe comes from the second strategy of having offspring; that is the biological principle of plentitude. Indeed, biology gives little choice. While organisms can grow larger within certain limits, the organism must eventually die and so the DNA can only survive by having offspring. These ideas have been used in the economic development thinking of Jane Jacobs in *The Economy of Cities* (1969) and in *Cities and the Wealth of Nations: Principles of Economic Life* (1984).[4]

Corporations are subject to various forms of diminishing returns to increased size (e.g., in management's ability to monitor and comprehend events) but they have no natural limitation on lifetime. Hence the first tendency of companies is preserve their "business DNA" by growing bigger and having more layers in the hierarchy rather than fostering offspring. In this sense, the company's "second product" (its trained people) is sterile – particularly in a less-than-vibrant business environment; the company may grow but it does not breed. Indeed, some companies only grow through the "reverse offspring" of acquisitions. Hence there is relatively little increase in the "economic mass" and the business environment stagnates. That is the conundrum faced by conventional companies. Their structure mitigates against the principle of plentitude.

This conundrum pointed out by Pigou gives grounds for some public policy support to schemes that try to improve the social role of existing businesses as spawning new businesses. Pigou also recognized that some organizational forms more than others might lend themselves to this social role. In particular, "associations of workers combined together in small copartnership workshops" would constitute the "first school in which this capacity can be developed" and thus such companies would contribute to the community not just "boots and shoes" but the second product of "well-trained competent" people (Pigou, 1960, pp. 205–206).

The basic point is that in a worker cooperative or a democratic firm, there is no unified "ownership" that has the power to block the second and most potent "off-spring" way of increasing economic biomass. The workers in each part of a company have their own standing as members of the company. This does not mean that the workers in cooperatives are automatically oriented to taking entrepreneurial risks with spinoff cooperatives. The most common attitude in most businesses, cooperative or conventional, is try to stabilize, improve, and perpetuate one's position with the company. The point is that with a cooperative, there is no structural constraint against the economic analogue of the biological principle of plenitude, growth through offspring.

There at least four ways that a company, conventional or cooperative, might accelerate the production of its “second product” (trained people) to foster offspring.

Four Ways to Promote Growth through Spin-offs

1. *Sheltered or associated spin-offs of routine products and services as separate companies.*

Inside any medium to large-sized company, there are routines products or services provided for the company such as printing, graphics design, catering or food services, trucking, and cleaning services. These could be organized first as a separate profit-center and then as a “sheltered spin-off” majority locally or cooperatively owned with a multiyear contract with the mother firm. But as a quasi-separate firm (associated with the original firm or group of firms), it would be free to do business with other companies to expand its market. There is only so much printing that is needed by any one company. That will create job growth to serve the expanded market. Moreover, it will build entrepreneurial and managerial skills on the part of the people leading the spin-off.

This strategy should be differentiated from “outsourcing” where the purpose is to reduce the payroll of the mother company and introduce competition in the supply of those services, not to expand the market and jobs in the business unit. The spin-off could remain associated with the original company perhaps even carrying part of its name, for example, Acme Printing, Acme Food Services, or Acme Trucking as spin-offs from Acme Company. It should have a multiyear sole-source contract to counteract any suspicion that it was just an “outsourcing” scheme.

Eventually a group of companies might form around the original mother company. The group might sponsor a second-tier organization to help spawn more offspring.

A slight variation on this theme occurs when a production company wants to eventually upgrade machinery. Given limited space, they may scrap the old machinery and replace it with the new equipment. But there might be several years of effective operation in the old equipment which could be moved off-site to a more disadvantaged area as a job-creation scheme. Some workers in the factory might take that as an opportunity to start their own production shop with low start-up costs and some guaranteed sales but where they have the possibility to finance other machines and produce parts for other clients. This type of urban-to-rural spin-off helped to fuel the rural industrial development in township-village enterprises in China.

2. *"Light touch" franchising: Seconding entrepreneurs to learn about a business.*

Most entrepreneurs do not start from scratch. They have worked in companies and learned how companies operate first hand before striking out on their own with some colleagues. But in many cases an entrepreneurial individual may not have had that relevant experience so an economic development agency could sponsor secondments in an existing company (e.g., by paying most of the salary of the seconded person). The seconded person would work with the manager and various departments to learn about their functions. Since the existing company would not want to be training new competition, the new company would have to commit to operate in a noncompeting zone, for example, in another city outside the business region of the original company. If the new company develops well, there might be future business partnerships with the original company where the entrepreneurial received the training.

This could be thought of as an "ad hoc" or "light-touch" franchise. A franchise also tries to replicate the business systems and procedures of an existing company and to insure that such clones will be in noncompeting niches. But franchising requires a rather sophisticated legal system to enforce all the intellectual property rights. And franchising is a rather top-heavy system due to the large up-front fees and strict rules since all the franchisees will be advertising under the same name and should be enforcing the same quality standards. Hence this light touch franchising scheme tries to use as a development tool the enterprise multiplication or replication part of the franchise idea without all the other top-heavy parts of the system.

3. *Spin-offs of new products using an existing technology.*

When a company learns or imports into a country the technology or know-how X to produce product A, then often with minor new knowledge, the technology can also be used to produce other products B and C. But those other products may have a different customer base, require different suppliers, and be outside of the original business focus of the company. Hence companies will not pursue those other feasible products in order not to confuse the strategy and dilute the managerial attention span of the company. But a few individuals might very well spin off from the company to produce B or C. This is particularly feasible in the information technology industries where the capital requirements to produce the other products may be minimal. This sort of spin-off is commonplace in the business environment of Silicon Valley in California or in a Silicon Gulch in Taiwan. In Taiwan, there is the saying that the people leading the spin-off would "rather be the head of a chicken than the tail of an ox."

In an ordinary company, there might be some resistance to fostering spin-offs since talented and already-trained people will be leaving the original company. And, more to the point, it reduces the "empire" under the direct control of the management of the mother company.

In the case of the Thermo-Electron group (www.thermo.com), there is a rule that every new product must be produced in a new company. The mother company owns a portion of the "spin-out" to help alleviate the tendencies to resist spin-offs. Now the children have had children on the same principle so the Thermo group has some 80-odd companies. It is doubtful that such creativity and growth could have been released if it had been confined to one company. Yet this is the exception, not the rule, in conventional companies due to the desire to maintain the ownership and control of the "empire" and any hidden profit potential it might have. Think of how many companies there would be in the "MicroSoft Group" if every new product meant a new related spinoff.

Most companies would rather try to exploit such opportunities in a multi-divisional structure. Such a structure could facilitate some growth (e.g., the 3M company – now nicknamed the "Mutation Machine from Minnesota" – is a rare example) but it seems that the growth opportunities would be maximized from the social (job creation) viewpoint if the new products were produced in a new company that was not just a division or controlled subsidiary of the mother company.

4. *Import replacement via spin-offs.*

Often a company may grow by "import replacement," that is, by starting to produce itself what had previously been an input produced by other domestic or foreign companies. Taking the unit of economic activity as a city region, Jane Jacobs has emphasized the process of import replacement as a mechanism for growth and development. Cities can grow through a process of dynamic interaction with each other through direct or indirect rivalry. To play in the "game," a city must produce something which it can export – perhaps based on its natural endowment. The export earnings can then buy imports from other cities that were not produced in the given city. In the rivalry between cities, a manufactured import is like a "slap in the face," an "insult," or a challenge; the city has to buy the import because it cannot produce it itself. If the other exporting cities were not too advanced, then the import will present a plausible challenge to be replaced through learning and improvisation and perhaps improved upon by the importing city. Since the wealth to buy the imports might have been earned productively (not a gift), the city might already have some productive capacity that might begin to improvise and differentiate to produce and replace the import.

In the meantime, the other cities might be replacing the original exports of the city; its temporary advantage might be competed away. Now the domestic and perhaps improved version of the originally imported products can then be reexported perhaps to the original supplier city or more likely to other cities "down the line" that are less developed or have different specializations. The new export earnings will then purchase other more challenging imports, and the process can repeat itself ratcheted up at a higher level. In this matter, a diversified group of innovative and versatile cities can through trade learn from each other and not only grow but *develop* "on one other's shoulders" (Jacobs, 1984, p. 144) – which we might call climbing *Jacobs' Ladder*.

It should be particularly noted that the Jacobs' Ladder mechanism works best between competitors at a roughly comparable level of development.[5] Her theory provides a rationale for regional trading blocs between countries at roughly the same level of development, not for free importing from the most advanced countries. "Science fiction" imports from advanced countries (largely to feed the conspicuous consumption habits of the elites[6]) would stop the rivalrous process in the same way that allowing a heavyweight to box in a lightweight class would stop the rivalry and stop the associated process of learning and improvement through competition – leaving aside any other damages. Enforcing "level playing field" competition between "heavyweights" and "lightweights" – that is, between advanced and underdeveloped countries – would be tantamount to "kicking away the ladder" (Chang, 2002) that the developing countries could climb.

Our point here is that import replacement is not done by firms that appear out of nowhere; it is usually done by the firms that purchased the imports and that have the option of organizing the new production as a related spin-off. Often some of the technological knowledge needed in the offspring is already present in the mother firm which also supplies the initial market for the off-spring's products.

Workplace Democracy and Job Creation

All of these schemes could be promoted by companies themselves or by local development agencies or ministries with appropriate financial incentives. One theme running through these examples is that economics should imitate biology in the sense that existing businesses are the best sources and incubators for new businesses. Biomass expands primarily by old life spawning new life, not by old life getting bigger. The ideas broached above are ways to similarly increase the economic diversification and biomass in a country by getting old firms to spawn new firms.

The enemies of diversification are not just one-sided economic theories that denigrate "import substitution" and emphasize the deepening of old work (e.g., Adam Smith's division of labor) rather than the creation of new work (to put it in Jacobs' terms). Empire-building proclivities also thwart diversity, and those tendencies are evident both politically and economically. But the political grip of those proclivities will depend on the form of government. In an autocracy where power comes from above, the sovereign will seek to maintain and perhaps even expand the realm.[7] But if power comes from below as in a political democracy (leaving aside the half-free and half-slave antebellum America), there are few grounds to deny the expressed wish of the bulk of the population in a part of a country to become autonomous or to secede. Jacobs cites the early twentieth century peaceful secession of Norway from Sweden as an example (the separation of Singapore from Malaysia might also be mentioned), and she viewed the possible secession of Quebec with equanimity if not support (Jacobs, 1980).

The same dynamics of power and legitimacy are at work in an economic organization. In a conventional company, where power comes from above, management has little reason to sponsor spin-offs and would have little cause to accede to any expressed desires coming from below to use the firm's technological and business capabilities for new enterprise creation through spin-offs and breakaways. When the preconditions of a Silicon Valley are present or in labor-intensive service sectors, then it may happen anyway – not because of the form of business but in spite of it.

In a democratic company (e.g., an industrial cooperative) where power comes from below, then management has less of a leg to stand on to oppose new enterprise creation through spin-offs and breakaways.[8] That has certainly been the experience of today's best example of cooperative development, the Mondragon group of cooperatives in the Basque region of Spain. The Mondragon companies produce a rather full variety of high value-added consumer products, intermediate goods, and capital goods including the first robots and computer numerically controlled machinery designed and built in Spain. Since the firms are all cooperatives, it was all done with no foreign ownership. The group started with a single company in the mid-1950s producing a kerosene heater. Then it systematically implemented the economic principle of plenitude by filling out the backward linkages through import replacement, producing the machines to make the heaters and then the machines to make those machines. Through multiproduct diversification (new products using existing technologies), it started producing other consumer durables (stoves, refrigerators, and washing machines) and all the things to produce those things. Each bottleneck called forth new energies to solve problems, for example, a bank to help finance new enterprises, an applied technological research institute to systematically learn new technologies and turn them into new products, a consulting company to help catalyze the process of spinoffs, an insurance company for members, and a polytechnic university.

Since the firms were cooperatives and had as a group the express goal of developing good jobs in the Basque country, the positive externality of having spin-offs and break-aways was fostered rather than opposed. The original company did not have the option of "owning" a spin-off or preventing the spin-off if the mother company could not capture all the benefits. The new company would also be a cooperative that would have to "rest on its own bottom" or "walk on its own two feet" – within the group.[9] Thus the headquarters of the whole group encouraged groups within existing firms to coalesce around ideas to produce adjacent products in a spin-off. The managers and workers might be from a village or small region without much industrial development so by doing the spin-off near their homes they satisfied both economic and social goals.

In a similar context, Jacobs noted that such "division would be a normal, untraumatic accompaniment of economic development itself, and of the increasing complexity of economic and social life" (1984, p. 215). Since the spin-off process was carried out in an organized and socially approved way, precautions could be taken so that it did not disrupt the original mother firm. It became part of how the group evolved.

The focus of economic policy for job creation should not be expecting jobless individuals to create jobs or expecting existing companies to expand their current businesses to create jobs. The focus should be to get existing companies to indirectly create jobs by fostering spin-offs of routine segments, as-if franchises, spin-offs putting existing technologies to new uses, or spin-offs to replace imports. Each company's second product, its production of a staff trained in doing business, has potentially significant positive externalities for the local economy so there are grounds for governments to create incentives to increase those positive spillover effects.

It is in light of these potential dynamics that I would now reevaluate the work of the Empresarial Division of the CLP or its successor cooperative LKS. It was not "socializing" the entrepreneurial function which was otherwise "individualized." It was working with the natural school for training in business capacity, namely existing firms, and it was following the biological principle of plenitude by catalyzing the process of increasing economic biomass (e.g., job creation) through the various types of spin-offs. It is a process that would tend to be blocked by the managers and owners in conventional companies, but which fits naturally into cooperatives and democratic firms.

CONCLUDING REMARKS

Elsewhere (Ellerman, 1992) I have argued for democratic firms based on the first principles of inalienable rights to self-determination and to the fruits of one's labor. In this paper, I wanted to touch on three "side arguments" or themes about democratic firms. In the first part, I considered the idea that LMFs have an inherent flaw called the "horizon problem." My point was that while the horizon problem is actually only a technical problem that has a simple solution in internal capital accounts. The solution has been rediscovered several times but the best known implementation is in the capital accounts of the Mondragon cooperatives. There is no excuse for the proponents or critics to continue the obsolete "debate" which assumes that democratic firms must be structured either as nonprofits (where members have no recoupable claim on retained earnings) or as employee-owned companies that conflate the personal rights to membership based on labor and the property rights to retained earnings (which leads to "mule-firm" problems).

In the second part of the paper, I considered the modern human relations school of participative management (taking Douglas McGregor as the primary example). This school tries to implement in the workplace the ideas stemming from the educational theory of activist and constructivist learning which emphasizes the internal motivation and autonomy of the learners. While these ideas can to some extent be implemented in conventional companies, my point was that this was in spite of (rather than because of) the employment relation that characterizes those companies. The natural setting for participative management schemes and for the workplace as a site of active learning is the democratic company where the workers are full-fledged members of the company rather than rented "employees." Participative and empowering human relations programs then have the substantive role of enabling people socialized as "employees" to become active participants in a democratic work community (often with attendant spillover effects in the external political community). Here again, these educational ideas can be found in the writings of Father Arizmendiarrieta and they supplied part of the original rationale for structuring the firms in the Mondragon group as cooperatives.

And finally, I revisited the old canard that cooperatives are inconsistent with entrepreneurship. This view is the result of the conventional mythology that sees entrepreneurs as heroic individuals who appear out of nowhere and who are primarily motivated by the possibility of "owning" any company that they single-handedly create.[10] Following the remarkable work on Jane Jacobs, I tried to reconceptualize this issue by starting with the fact that the main school for training in business and technological capacity is existing firms – particularly in that "nursery of firms," the small and medium-sized firm sector. While the possibility of "owning" a new company may indeed provide an incentive for some potential entrepreneurs, that conventional notion of ownership is what typically in the first place prevents companies from implementing the principle of plentitude by spinning off new firms.

While entrepreneurial people have many motivations other than "ownership," there seems to be no way to systematically overcome conventional ownership as a fetter on the principle of plentitude. There are exceptional examples such as the Thermo-Electron group, and there are exceptional circumstances such as Silicon Valley where growth through spin-offs is the main means of increasing economic biomass. But they are the exceptions that prove the rule.

Far from being a fetter on entrepreneurship, a cooperative structure is the natural setting to economically implement the principle of plenitude of growth through offspring. Here again, we see the Mondragon complex as illustrating this possibility by developing second-tier cooperatives to foster and catalyze the entrepreneurial process of growth through spin-offs in niche-filling small and medium-sized firms.

NOTES

1. If repeating a truth was a real appropriation of the truth, then Father Arizmendiarrieta quipped that "it could be said that also a recorded tape can be Christian" (n.d., p. 75).

2. This phrase has even been taken as the title of a book on Mondragon (Morrison, 1991). A similar pragmatic philosophy for education and social change is expressed in a book with a similar name: "We make the road by walking" (Horton & Freire, 1990).

3. See Ruef (2010) for an authoritative recent study exploding that myth.

4. For more of this background, see Ellerman (2004, 2005b).

5. See Chapter 10 "Why Backward Cities Need One Another" in Jacobs (1984).

6. Even imported "factories" such as the BMW and Mercedes assembly plants in South Africa will largely serve only the purpose of gratifying the elites. Moreover by soaking up much of the local demand for cars by those who can afford them, such plants will crowd out and foreclose on the possibility of there being a genuinely African car with all the technological ramifications that would follow from it.

7. Jacobs has noted the connection between top-down power and empire-building: "The biggest and most thoroughly centralized governments have always, finally, required the special environment of oppression to continue to maintain themselves. And some could never have attained their great size at all had they not grown in that environment" (Jacobs, 1980, p. 77).

8. In biological terms, the more that power is bottom-up in a firm, the more it is like an organism with reproductive cells under decentralized control throughout the organism rather than under central control in one specialized part.

9. In a democratic firm, where "corporate governance" is more than an oxymoronic phrase, the quality of the self-governance deteriorates as the firm gets larger so firms will tend to naturally subdivide anyway to keep the membership at workable levels. The upper limit might be between several hundred and a thousand members depending on the technologies involved.

10. The political analogy is that the leader of a revolution should become the new monarch (or its modern equivalent of the "lifetime maximum leader" such as Fidel Castro and many other communist revolutionaries) rather than a "George Washington" or a "Nelson Mandela" who could lead a revolution without trying to "own" the new entity.

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