Editors' Corner

Davydd James Greenwood*

Completing the Cycle in Entrepreneurial Research: Action Research to Link Entrepreneurs and Researchers and Reform the University

DOI 10.1515/erj-2015-0043

Published online September 15, 2015

Abstract: Chandra and Zachary's recent major book, *The Theory of Entrepreneurship: Creating and Sustaining Entrepreneurial Value* (2014), offers a comprehensive, multidisciplinary, organizational, psychological, and economic synthesis of entrepreneurial studies. A tour de force, the book seeks a unified perspective on the subject, over against the fragmented and incomplete views found across the diverse literature on this subject. Besides commenting on elements on the book, I encourage the authors and their colleagues take the next step and build a collaborative, interactive research/action process to support their framework. This process would enhance the research understandings already being gained and directly benefit the entrepreneurs and investors who can become better researchers of their own situations and more effective in meeting their own aims. I argue this can be done only by directly challenging current Tayloristic organizational and operational practices in universities. I propose using the principles and practices of action research as a way to accomplish the needed changes.

Keywords: action research, entrepreneurship, multidisciplinary, universities

In their book, *The Theory of Entrepreneurship: Creating and Sustaining Entrepreneurial Value*, Chandra Mishra and Ramona Zachary bring together an impressive array of different strands of academic work on entrepreneurship, gathering them in their own synthetic perspective called "Entrepreneurial Value Creation Theory" (Mishra and Zachary 2014). They rightly insist that single discipline perspectives are inadequate to understanding complex systems phenomena like entrepreneurship and argue the necessity of a synthesis of

---

*Corresponding author: Davydd James Greenwood, Cornell University, Ithaca, NY, USA,
E-mail: djg6@cornell.edu

perspectives. They recognize that the current organization of academic inquiry is counterproductive when the dynamics of entrepreneurial success and failure are the subject of research and action.

The authors also emphasize that an entrepreneur is not a category or a thing but a person or team undertaking a series of actions in an already structured context. While the individual matters, entrepreneurs are not the solitary heroes of history they are often portrayed to be in the popular literature. To study entrepreneurship in context and in motion requires a systems view, multiple sources of expert knowledge, and detailed familiarity with the contexts and actions of the entrepreneurs. This requires stepping outside the boundaries of the neoliberal, neo-Taylorist knowledge regimes that dominate academic inquiry and reward systems. Thus, meeting the challenges Mishra and Zachary propose requires fundamental university reorganization and not merely more effort within the constraints of the existing academic system.

They have done a great deal to unify and integrate much of what is known about entrepreneurship academically and have synthesized this into a theory of entrepreneurial value creation. They have set high academic standards for such a theoretical effort. They insist that theories be realistically complex and multidimensional and focus on the interplay between structure and action. They are not obsessed with issues of quantification or with theoretical elegance at the expense of theoretical realism. This work is a significant contribution.

Critique of the Book

Internal Market Diversity

Mishra and Zachary have offered a multidimensional and sophisticated economic analysis of entrepreneurship including value proposition, perverse incentives, risk, and the like. This is an invaluable discussion but I would also emphasize certain dimensions more. A more detailed discussion of the markets entrepreneurs face is in order. Following the analysis of Berger and Piore (1979), I think it is essential to distinguish segments of the market for particular goods and/or services. Within the overall market for a particular product, there often is a large, relatively safe middle area of supply and demand. Large-scale producers aim for this part of the market because, although the profit ratios might not be as high as at the tail of the distribution, the volumes are high and stability of demand is relatively well established.

What Berger and Piore point out is that profits are still to be made in the more peripheral parts of these markets where smaller product runs for relatively more specialized or focused buyers obtain or where proximity or labor costs lower the production costs for the smaller firm. Knowing whether entrepreneurs are aiming for the large central areas of the market where they will compete head to head with larger firms, whether their product is a variant of a range of products of a large company that employed them, or whether they are targeting a particular demand crowd with specific characteristics that they are tailoring their offering to match matters. Their strategies in these contexts can be quite different and affect the way the process works.

Family Economies

Because many of the examples are drawn from family firms, I also miss references to the work on the family economy, work pioneered by the brilliant Russian economist, Chayanov (1966). Chayanov pointed out, and subsequent work (Sahlins 1974) and many economic anthropologists supported his contention, that the total economic structure of family systems is key. It is possible for self-exploitation of family members combined with possible low opportunity costs for allocating underutilized labor in family enterprises to make family firms competitive in markets that larger firms cannot inhabit, given their less flexible and more fully monetized structures.

The combination of perspectives from Berger and Piore and Chayanov suggest further ways to extend the economic analysis of entrepreneurial enterprises that help us understand how small entrepreneurial companies can compete effectively with much bigger players and provide other perspectives on why they may be good bets for venture capital in some sectors.

Dimensions to Add to Mishra and Zacharay's Synthesis

Any effort of this scope is bound to fall short for readers specialized in particular frameworks that may not be fully represented in the synthesis. An appropriate and collegial response to their effort is to suggest additional dimensions for their framework. While doing so is not the major focus of this essay, I will mention a few of the lacunae I noticed, because they prepare the way for a link between their framework and the practice of action research that I will advocate at the end.

The Social Production of the Person

One approach to the analysis of organizational behavior and organizational culture that does not get its due is what is called the “social production of the person.” Elements of this perspective are present in their work but a more robust presence would be valuable. In this framework, researchers examine the way organizational structures call forth, punish, and reward particular kinds of behavior among people, literally producing particular kinds of “persons.” Meritocracy is one example, a system that rewards radical individualism, selfishness, and competitiveness. The relevance of this perspective to entrepreneurship here lies in thinking about the social and cultural ways different organizational structures call forth, channel, or suppress entrepreneurial activity. I miss this emphasis in the work and I am certain that it would be consistent with their overall perspective and effort.

A particular way this could be helpful is in dealing with trust, a concept they make a good deal of. While Mishra and Zachary emphasize trust as a concept, I think it is important to emphasize that trust is produced by structures that consistently call for and reward solidary and collaborative behavior. Thus trust is not a concept or a personality trait alone but a product of organizational designs that create and reinforce it. This is another dimension of the social production of the person.

Socio-technical Systems Design

The major missing element I find in the synthetic framework is what is called “socio-technical systems design” or STSD (van Eijnatten and van Beinum 1993; Herbst 2012). Pioneered in Norway by Einar Thorsrud and developed systematically at the Tavistock Institute in London, this approach to organizations sees them as systems capable of being organized in a variety of ways within the constraints of an existing technology and markets. The focus of STSD was and is to design systems that call forth creative, solidary, and cooperative behavior for the joint benefit of all the stakeholders while meeting stringent market tests. These market tests are particularly relevant in countries like Norway with very high costs for the factors of production and high taxes to support the welfare state.

This framework has been extensively developed in Norway, Sweden, and Finland and has been a central focus of work research at organizations such as the Norwegian University of Science and Technology in Trondheim and the Work Research Institute of Oslo. It was a key element in the Norwegian

“industrial democracy” movement. The strategies and programs are produced and reinforced by annual agreements between the employers’ federation, the labor unions, and the governments. The agreements aim to increase competitiveness, work safety, efficiency, and fairness. Some of the programs developed under this framework have been huge starting with the Norwegian industrial democracy movement itself and morphing into various programs such as the Enterprise Development 2000 (Ennals and Gustavsen 1999; Levin 2002; and others). In Sweden, the LOM program was a major example (Gustavsen et al. 1996; Gustavsen et al. 1998). These initiatives involve hundreds of firms and thousands of workers, employers, and governmental authorities. Writing about these developmental networks and their links to the promotion of entrepreneurial activity and networks abounds.

The “Possible and the Actual”

Though it is not systematically articulated, the underlying epistemological and ontological position that supports the socio-technical approach can be summarized by dealing with the tension between what is possible in a system versus what is actualized. The French biologist, François Jacob, in a wonderful book on evolution, *The Possible and the Actual* (Jacob 1994) lays out the argument elegantly. He points out that in the physico-chemical universe, we know that not all physical phenomena and chemical compounds that are possible actually have come into existence. The proof is the artificial synthesis of new base elements, at least 20 so far, that do not occur in natural settings spontaneously but that are obviously chemically and physically possible.

From here, Jacob goes on to present the concept of evolution, both physico-chemical and biological, as a dialogue between what happens in a particular context at a particular moment in history and what was possible in that context. He believes that understanding evolution requires us to recognize that not all possibilities are ever actualized. What we see in the world is an historical product. It is what was actualized but not all that was possible given the materials at hand.

This framework is relevant to the social sciences in general and particularly to the critique of the weakness of the academically dominant “positivist” and “objectivist” models. These models claim to get at the causes of social phenomena without understanding that the observational data do not exhaust the possibilities of the social processes they reveal. When such positivists find cases that fall outside their statistical norms, they define them as exceptions or deviant cases and dismiss them, thereby preserving their models and preferences against the

evidence. This is anti-scientific since, in real science, any exception to a general law tells us the law is either wrong or incorrectly formulated and needs to be altered. Such dismissal of exceptions is widely used to discredit all kinds of alternative social arrangements. In my own experience, the reaction of the conventional social scientists to the enormously successful industrial cooperatives of Mondragón in Spain is to dismiss them as an exception (Greenwood, González Santos, et al. 1992). They prefer their own social vision of individualistic, competitive capitalism over one that produces efficient and market successful products without exploiting the workers or ruining the environment.

I take this up because I see a direct relevance of this possibilist framework to entrepreneurial studies and to an action-oriented social science. Rather than taking the pseudo-objectivist spectator position and judging what is normative according to a personal value system, the kind of social science I advocate is based on studying cases that deviate from conventional social science norms in positive ways. The challenges then shift to understanding the dynamics that made the positive alternatives possible and promoting those dynamics in the future. Doing this, to paraphrase the action scientist Chris Argyris, is an attempt to increase the likelihood of unlikely but liberating outcomes. Among such outcomes are labor-managed cooperatives and successful entrepreneurial ventures.

What I miss in Mishra and Zachary's framing is a statement of a more explicit goal to produce more and more successful entrepreneurial ventures while researching the causes of those successful examples. This is implicit in their appreciation of entrepreneurs but is not consolidated in their model. The difficulty is that this approach cannot be taken from a spectator position. Just as synthetic base elements do not naturally occur but have to be intentionally created, a broad array of successful entrepreneurial ventures are not simply a list of cases but can and should be a significant social goal. This means explicitly promoting economic development and greater equity within the current economic system. I do not believe that studying cases retrospectively from the outside, though valuable as knowledge and background, can get us to that position. As the founder of Action Research, Kurt Lewin, said there is nothing as practical as a good theory and the only way to understand something is to try to change it (Bargal 2006, 2008).

While Mishra and Zachary do attend to the difference between entrepreneurial developments in solo or family operations and as elements within the product development areas of larger, multiproduct firms, I would emphasize this even more. We know there are large firms that utterly stifle creativity and experimentation and others that promote it as a central business strategy. Being an entrepreneur in these different contexts has a different social and economic logic. These situations contrast sharply with the development of products

de novo in a small entrepreneurial start-up company. The social and economic contexts are radically different and the value creation effort, attracting investment for product development, and the like all differ quite fundamentally in these contexts.

Multidisciplinarity in Tayloristic Universities

I certainly accept the authors' call for multidisciplinary integration of perspectives, but this entirely reasonable call has been sounded for generations. It is certainly the case that multidisciplinary work can help us to understand larger-scale problems far better than any discipline by itself. But the creation of the academic disciplines, their monopolization by disciplinary cartels, and the bunkering of academic knowledge has not only continued but has intensified. Universities have grown in scale and complexity, balkanizing knowledge, and setting off territorial wars having nothing to do with understanding society and everything to do with exercising territorial control of academic turfs. Calling on people to operate in a multidisciplinary way is an empty gesture without the requisite analysis of the reasons for this disciplinary balkanization, of the reward structures that intensify this balkanization, and of the degree of social irrelevance of most of the social sciences these organizational practices guarantee.

Therefore, for this multidisciplinary call to have teeth, it must be accompanied by an analysis and action strategy that confronts the Tayloristic organization of academia. Otherwise, Mishra and Zachary are right but what they call for will not occur on its own. This analysis brings me to the combination of action research and university reform required for academic institutions to become meaningful participants in socially relevant research and action, including the study of entrepreneurship.

The Relevance of Action Research to Entrepreneurship

What Is Action Research?

Action research is not a particular theory or method. It is not positivist, anti-positivist, constructivist or anti-constructivist, and neo-Marxist or neo-Weberian. Action research is a systems-based orchestration of research theories, methods, and practices opportunistically organized for the purpose of bringing about

improved, fairer, or more liberating outcomes than would be afforded by conventional means. It involves all the relevant categories of stakeholders, academic and nonacademic, into collaborating teams. It uses whatever theories, methods, and practices will prove helpful in addressing complex problems in dynamic, real world situations, including combining quantitative and qualitative methods whenever necessary. Action research is not a research orthodoxy but a systems approach to orchestrating social research to produce positive social change for the collaborators (Greenwood and Levin 2006).

Validity in Action Research

Validity in action research is measured by the degree to which the actions arrived at through the process produce the desired outcomes to the satisfaction of both the professional researchers and the other stakeholders. The credibility of the work rests on the full sharing of the “local knowledges” of both the research professionals and stakeholders who together research and analyze their situations and then design actions aimed at producing better outcomes. The actions are taken and the collaborators evaluate whether or not the outcomes met their expectations. If not, new cycles of analysis take place, actions are redesigned, and the process continues until satisfactory outcomes are to be had.

Warrants for Action

Action research issues “warrants for action,” a term coined by John Dewey to emphasize that the participants believe sufficiently in the quality of their work together to take the risks (mainly to the local stakeholders) of applying them in context. Action research is, in fact, a systematic application of the scientific method because it involves hypothesis formulation, data gathering of all the kinds of relevant data, analysis and action design built on the analysis, and testing the validity of the designs in action.

Action Research Is Scientific

In this regard, the main academic social sciences clearly fail to meet even minimum standards of the scientific method. They are theory or method driven, disciplinarily circumscribed, and tested either by the logical fit of the theories

with the arrays of pre-selected data or by statistical means. In my view, without the test of action, this is speculation, not science. It restricts knowledge to that of socially disengaged academic professionals, privileges their theoretical and methodological training and preferences, and treats stakeholders as informants whose own conceptions and evaluations of the work are largely irrelevant.

This enables conventional social research to be conveniently isolated from the consequences of actions based on their theorizations. Conventional researchers consider their work done when they publish for each other. Application, the poor relative of academic social research, is supposedly for others of lesser talent or who do not share the academic social science phobia toward social engagement in the messy realities of the nonacademic world.

Pro-social Goals

Action research is driven by goals of meaningful social problem solving through research, analysis, and action. It is not a spectator sport because its goals are improved understanding of the phenomena for the professional researchers and improved real outcomes in the world of the local collaborators. Action research generally involves achieving challenging but positive outcomes and is built on collaborative relationships between the professional researchers, the local stakeholders, and among the local stakeholders themselves. It is a democratically inspired research process aimed at deepening understanding and achieving positive social change. Kurt Lewin (1890–1947) created the term Action Research and popularized it over a brilliant career foreshortened by ill health (Bargal 2006, 2008). As mentioned earlier, Lewin is famous for linking theory and practice and for requiring research to be done in an action context.

Co-generative Learning Arenas

In action research, we create “co-generative learning arenas” in which all participants are encouraged to play an active role. Action research enables professional researchers and local stakeholders to share and critique their knowledge and action ideas in a collaborative environment in which everyone present is assumed to have relevant knowledge. The knowledge of the social researchers is crucial because they have to be aware of a wide variety of theories and methods, but also to be well informed about the existing information on comparable or at least relevant cases. They also have to be skilled in creating learning

arenas, maintaining a good flow of communication among stakeholders not used to this kind of collaborative knowledge construction, and they must maintain vigilance to prevent any of the stakeholder categories from dominating or being marginalized in the learning community. They must also be honest and humble about what they know and do not know and ready to go back to the social science literature to bring relevant materials to bear on the discussions when needed.

Local Knowledge

The local stakeholders are understood to have crucial knowledge and experience to contribute to this process. They are, after all, the experts in their own life situations and often understand dimensions of their own realities that external researchers cannot easily imagine or access. Further, each stakeholder has their own personal knowledge and experience and often, when a serious puzzle faces the community, it may be only one or two of the local stakeholders who have relevant experiences or ideas to share that can move the group forward.

Unless the collaborative dynamic is well managed, it is quite difficult to access this kind of local knowledge but it is often crucial to the success of social change processes. So action research is not merely a gesture toward democracy because it is based on the belief that complex problems require the effective utilization of the knowledge of all the stakeholders. The professional researchers or the local leaders are not the only “brains” in the group.

Action + Research

It is called action research because it operates on the premise that without action, there can be no real research and without research, intelligently guided action is impossible. The scientific method precisely requires cycles of action and research as its hallmark. Thus action research is genuine social “science,” operating consistently with the methodological requirements of research, action-testing, and revision. A fundamental sense of the term “science”.

Authentic Participation as a Core Goal

The “ladder of participation” formulated by Sherry Arnstein moves from nonparticipation via manipulation and therapy to tokenism via informing, consultation, and placation to citizen power through partnership, delegated power, and citizen control (Arnstein 1969). Action research revolves around citizen power, including

partnership, delegated power, and citizen control. Conventional social research emphasizes unilateral theorization and manipulation of the research subjects. Conventional applied research involves informing, consulting, and placation, all forms of tokenism. Authentic participation cannot be had by reserving theory, method, analysis, and action to professional social researchers, no matter how well intentioned the work is. The depth of the collaboration and mutual respect achieved is a key factor in action research.

Action Research versus University Organizational Models

Action research is not mainstream in academia and won't be until academic institutions change in fundamental ways. Action research is based on a systems view of the world that requires the simultaneous mobilization of a wide variety of knowledge and perspectives to address complex, dynamic systems problems. Bringing these materials together in an analyzed, dynamic, and operational framework is central. Except in special projects funded generally by outside donors, this is the exact opposite of the organization of knowledge practices in universities.

Academic Taylorism

From the presidents to the provosts to the deans to the department chairs to the disciplines to the subdisciplines, universities are organized into Tayloristic hierarchies with command-and-control management in which key decisions are made at a significant distance from the contexts in which relevant action must be taken. This is a recipe for factually wrong and counterproductive decisions.

The Tayloristic approach to knowledge is to take the world, divide it into disciplinary turfs, divide these into subdisciplinary turfs, and study complex phenomena by depriving them of their contexts and multidimensionality. Isolating the elements in what is a systems problem means that researchers fail to understand systems problems and end up suggesting analytical approaches that either have no relevance to the real world or are actually dangerous.

The professional reward structures follow this Tayloristic model. Academics are hired into subdisciplines, judged by their local and cosmopolitan peers on how well they perform in their niche, how many publications in the "A" journals in their niche they have, research funding in their niche, etc. Disciplinary departments are peer reviewed by similar standards. Ultimate decision making

is vested in deans, provosts, presidents, and boards of trustees who have no substantive knowledge of the areas of work they are evaluating. Just as it was a recipe for disaster in US manufacturing, this version of Taylorism is a recipe for poor and irrelevant research, perverse incentives for all players, and ultimately the failure to understand the large system problems of our world such as recessions, global warming, persistent inequality, cyber-terrorism, etc.

This is how the academic social sciences proceed, balkanized into anthropology, sociology, psychology, economics, planning, education, labor relations, etc. Assuming that university will produce universal knowledge by assembling all these disciplinary silos into universal understanding of the world is either foolish or cynical.

Universities Are “Nonlearning Organizations”

While the concept of the “learning organization” is in great vogue, I have argued elsewhere that universities have none of the characteristics of “learning organizations” (Greenwood 2009). The exceptions are multidisciplinary centers, often heavily subsidized by funds from outside the university’s Tayloristic budget system, led by visionaries, focused on complex systems problems, and counting on addressing issues of sufficient importance to attract the external funding that sustains them. They are commonplace in the physical and biological sciences where sustained streams of defense and private sector funding keep them alive. Such multidisciplinary organizations are less frequent and less durable in the social sciences and the humanities. Programs like science and technology studies, gender studies, sustainability studies have fought against the grain for decades and always are on the verge of collapse.

Action Research as a Challenge to University Taylorism

Action research is obviously a significant challenge to university business as usual. Thus, it can count on the enmity of most administrators, faculty, and the other guardians of the disciplinary bunkers.

University Political Correctness versus Genuine Social Relevance

It is no surprise that action research rarely prospers in a university environment despite the rhetorical flourishes of presidential “white papers” on the

university's commitment to environmental sustainability, community engagement, the promotion of diversity, and whatever else is the currently politically correct hot topic.

These gestures in the direction of social relevance are just that, gestures because they are rarely accompanied by the sustained resource and power reallocations that would be necessary to address them. To achieve changes like this would mean breaking down the boundaries among silos, rewarding border crossings, privileging relevant research on large systems problems, and committing the university to a fluid collaborative relationship between academic personnel and external constituencies.

Academic Organization as Anti-entrepreneurial

I now link this presentation of action research back to studies of entrepreneurship. One way to do this is to look at the kinds of academic entrepreneurs universities favor. Among the faculty, there are professors who certainly are campus entrepreneurs. They set up programs of their own, attract external funding and attention, and promote their work with the administration and their colleagues. In recent years, genomics has seen the rise of many such enterprises. These are professors who show initiative and vision but who are very cautious about confronting apical institutional leaders and who are skillful in hiding any blurring the boundaries between units and authorities mainly by offering resources to soften the impact on business as usual.

These efforts that are usually limited to creating a program with new resources, a program that improves the ranking of the institution and that does not threaten larger power structures directly. Such boundary crossing initiatives are almost always subsidized from outside of the institution and, when that subsidy disappears, they vanish, leaving the Tayloristic structures largely untouched (Boden et al. 2015).

Students too can be institutional entrepreneurs. Creating clubs and service organizations, becoming effective student political leaders, joining and managing sororities and fraternities, and engaging in new student recruitment and orientation are frequent student activities. Students are often effective in these roles but only some kinds of student entrepreneurs are acceptable to university administration. Those who would attempt to change university investment policy, university purchasing from sweatshops, university environmental footprints, and the like can count on the animosity of most administrators and board members. So the ideal student entrepreneur is a budding meritocratic

actor using his/her university experience to build both an experience base and a *resumé* that will stand her in good stead in the post-university job market and gather good recommendations from administrators and faculty members.

Administration is a dynamic and growing entrepreneurial field as well. With the nearly universal move to professionalize administration and to hire senior administrators through executive search services rather than through the appointment of locally experienced faculty to engage in university administrative service, university administration has been converted into a race to the top for individual administrators at the expense of meaningful academic commitments. There are relatively few books on university administrative careers at this point but those that exist are fascinating. Gaye Tuchman's *Wannabe U* (2009) and Robert Birnbaum's *Management Fads in Higher Education* (2000) show how this administrative takeover has occurred. Another book, Ben Ginsberg's *The Fall of the Faculty* (2011), tells this story from a disgruntled faculty perspective and is filled with interesting examples. It is so anti-administration and pro-faculty in its orientation that it ultimately undercuts its own credibility as a recipe for change.

Neoliberal University Administration

The story has at least two parts. The first is the “professionalization” of administration and the removal of faculty from any significant decision-making role in institutional matters (Newfield 2003). Paralleling the reorganization of medicine and hospitals to remove doctors from key administrative positions universities have seen a vast increase in the numbers and salaries of administrators relative to growth in numbers of faculty or students. It has also been accompanied by the systematic destruction of tenure in most parts of the university world.

The typical administrative career, as portrayed by Tuchman, is a sequence of jobs at increasingly prestigious institutions. At each stop, the administrator must present herself as an innovator, bringing new methods, vision, and energy to an issue that has not been dealt with effectively enough. Often after a relatively short run, this administrator will be offered either a higher position in the institution or a position at a more prestigious institution. And so it goes: up and up, short stays, claimed innovations without significant follow-through and increased salaries.

Organizationally this system is both authoritarian and hierarchical. Administrators serve at the pleasure of their seniors who themselves serve at the pleasure of the Board of Trustees and who eventually seek to be seen as

players on the national scene. Connections downward are systemically weak. The succession of “new brooms” sweep away the reforms of their predecessors and often sow disorganization and job dissatisfaction among the lower level staff who have to serve these revolving door leaders.

Put another way, these administrative entrepreneurs are their own “firms.” Their allegiance is to themselves and their careers, rather than to their universities. Like the bosses of the Wall Street financial firms, they don’t sweat the details. They seek salaries, signing bonuses, and prestigious memberships. Their knowledge and capacity to manage the complexities of the university they are in is notably limited, and university operations suffer from increasing and massive inefficiencies.

I should point out here that this whole approach overlooks the key role in lower level administrative staff play in keeping universities from collapsing from these dynamics. Often these are long-term employees and quite dedicated to the institution. Working between complying with their bosses’ orders and limiting the impact of some of the new “brooms” excesses, they work to keep the institution functioning. And a great deal of voluntary and uncompensated service by faculty members also serves to keep the new “brooms” from creating even greater dysfunction on their way up and out of the institution.

This set of practices has been misnamed “corporatization” by many critics. No one doubts its existence and most decry it as the worst thing to happen to universities in the past 30 years. But I reject calling this “corporatization” because doing so is based on ignorance about currently successful corporate behavior in both manufacturing and service industries. In those settings, lowering administrative costs and flattening hierarchies are now key practices. They move decisions about product development, design, and manufacturing processes to the level at which the skilled work takes place. They organize the business in some kind of matrix model of multiunit teams with team leaders coordinated by a small senior staff. These are current corporate “best practices.”

These best practices bear no resemblance to the simulacrum of corporate behavior that dominates American universities. Bloated administrations with high salaries, multiplication of units and subunits, authoritarian hierarchical decision making about budget, construction, programming, and public relations are commonplace. Along with this goes the vast, unjustifiable increases in tuition and fees to pay for this army of administrators, increasing reliance on term contract faculty, and increasing and unmanageable student debt. The faculty are recast as contract employees to be managed and the students as customers to be satisfied. These pathologies are widely reported (Canaan and Shumar 2008; Newfield 2003, 2008; Schrecker 2010; Slaughter and Leslie 1999; Slaughter and Rhodes 2004; Strathern 2000; Washburn 2005; and many more).

These universities do not look like successful corporations. Rather they look like Lehman Brothers and the big banks that failed in the most recent collapse of the global economic system: they have a disconnected and ignorant senior management with high salaries and unlimited authority leading the organizations and the stakeholders over a cliff, while being sure they have a good “golden parachute” ready for themselves.

Action Research in Matrix Organizations as a Possible Response to These Problems

My answer to these organizational challenges is action research. Under the right circumstances, it is possible to set up a purposely interactive research/practice link engaging the full range of academic and practitioner stakeholders and including the external stakeholders in setting research agendas. These agendas and initiatives can satisfy significant intellectual curiosities, shed light on issues of urgent interest to nonuniversity stakeholders, and deepen the reflexivity and both research and business contributions of the practitioners.

Action research argues, following Kurt Lewin, that there is nothing as practical as a good theory. Programs in entrepreneurship are well situated to demonstrate the truth of this slogan and to advance both theory and practice together by using the socio-technical systems team designs created already generations ago at Tavistock and in Norway in their own operations. It seems to me possible to achieve research and business breakthroughs simultaneously but only when all the stakeholders operate as teams in a matrix organization.

The Challenge for Mishra and Zachary

What I have written above presents a challenge to the promotion of entrepreneurial research in universities as currently strategized by Mishra and Zachary. I believe that their multidisciplinary systems perspective on entrepreneurship and the conditions they show that must be met to promote entrepreneurial development are at odds with the structures of the academic institutions they are in. Being in a conventional business school or a specialized unit focused on entrepreneurial studies is not a sustainable solution for the promotion of this work. For the approach to be sustainable, the university itself must change. Without fundamental institutional change, their effort, like so many other valuable multidisciplinary systems perspectives, will ultimately not be effective in mobilizing the valuable academic

resources of their institutions in a sustainable way. Without fundamental changes in universities, their effort will simply pass from the scene when the available money and/or energy is exhausted. The disciplinary bunkers will live on.

I do understand the *realpolitik* involved in Mishra and Zachary not taking this challenge on directly. But we also need to be realistic about how self-limiting any call to be multidisciplinary in contemporary universities is. Mishra and Zachary's framework is clear about the need for multiple disciplines, for sustained collaboration among them, for empirical realism through detailed and ongoing case studies, and for the need to engage nonacademic entrepreneurs actively in these processes of research and development. From my own observations, I have seen that Zachary and her colleagues are doing as much of this as they can with the resources and within the structures they must deal with.

At present, their entrepreneurial studies are poised on the boundary between academic research acceptable to the disciplines and current Tayloristic academic organization and its powerful disincentives for research valuable to the non-university stakeholders. Mishra and Zachary have done a good job, have mobilized significant resources, and have credibility beyond the university. But they are being forced to play a double game, meeting academic Tayloristic standards while trying to promote significant institutional and social change.

Currently, the status hierarchy between research and application goes unchallenged. The non-university entrepreneurs are either dealt with as research subjects or as clients to be helped. They are not full partners in a broad academic and social effort. In my view, trying to effect a change to a sustainable systems focus without challenging the existing academic organizational and reward structure and the separation of academic theory from social practice ultimately will not sustain their goals of the effective promotion of entrepreneurial studies and entrepreneurial activity.

Both entrepreneurship studies in the modality of Mishra and Zachary and action research as I have laid it out converge on the need for a very different academic organizational model needed for their promotion and sustainability. Understanding and acting on large-scale, dynamic systems problems like entrepreneurship, racism, and climate change require knowledge from multiple disciplines, collaborative relationships among the experts who are rewarded with salary, promotions, respect, and resources not tied to disciplinary bunkers. It also depends on fluid and respectful relationships with nonacademic stakeholders.

To avoid an unnecessarily long disquisition on this topic, I will point out that models that meet these requirements exist in both manufacturing and service firms where they are clearly successful. Such organizational models are generally called "matrix organizations" and they typically have structures like these:

In matrix organizations, neither authority nor functional areas are done away with but the core activity of the organization is carried forward by multidisciplinary teams drawn from different units and seconded to the team for a period of time or the duration of a particular project. Project managers play a complex and important role in managing teams, defending their interests, and articulating with the various functional areas of the organization. At the same time, the general manager and the functional area managers are facilitators and collaborators rather than unilateral authorities. Their role is to help develop the overall strategies of the organization and to promote the efforts of the various teams that are working on key projects. In manufacturing and service organizations, these teams also often have fluid relationships with key external constituencies including customers, competitors, etc., and are expected to help build and focus the team effort based on this knowledge.

There is nothing outlandish unusual about this form of organization. Where it is vanishingly rare is in university management, big banks and finance companies, and political organizations. The multidisciplinary organizations that exist in universities have some of the features I have mentioned but only when powered by enough external money to fight off the bunkers and authoritarianism of university administrators with their chain of command ideologies and practices.

Most university leaders have no conception of what contemporary corporate management is like, what real entrepreneurship is, or what conditions must be created to have universities to become learning organizations capable of actually using their vast stores of knowledge and resources for some meaningful purpose. Publishing more papers, getting more grants, and acquiring royalties from more patents are not “corporate” behaviors. They are a simulacrum of a business model.

Despite their apparent solidity, disciplinary structures did not arise from laws of nature. Indeed, these structures are only about 140 years old in the United States, beginning with the creation of PhD Programs at Johns Hopkins. The social science disciplines were created by dividing the broad field of political economy into economics and history and then subdividing further into anthropology, sociology, psychology, and political science, a process that took place between 1880 and 1905 in the United States (Ross 1992). The arbitrariness of these professional divisions is self-evident and bears no relationship to the phenomenal world they are supposed to study. The humanities are no different. It is also worth noting that the disciplines in the sciences are quite unstable. There is a constant emergence of new disciplines and new disciplinary combinations.

In the social sciences and humanities, the disciplines are mini-cartels that specialize in protecting themselves and that are the main consumers of their own products. This works so long as the academic research being done is not expected to have any “real world” relevance.

In addition, with the help of Joseph McCarthy, William Bennett, Lynne Cheney, and others of their ilk, these disciplines have also played a key role in driving a wedge between research and practice, treating research as a spectator sport and practice as the realm of the intellectually inferior. By making their research “pure,” they assure themselves of not being censured by political actors. And then, when their work is understood to be socially irrelevant, the funding for their work and their universities are attacked by other political actors because their work is viewed as being useless and therefore not worth taxpayer support.

The “pure/applied” dance is pathological. Both the “pure” academics and the applied researchers consider themselves superior. The pure researchers see themselves as intellectually superior. The applied researchers see themselves as more ethical and socially relevant. Together, they permit a bifurcation of theory and practice that guarantees their work will be largely irrelevant and, in practice, often wrong or even dangerous. This is not a world in which Mishra and Zachary’s approach or that of action research can prosper.

What Hope Is There for the Future?

There is a source of hope in the very pathologies I have discussed. Contemporary universities are so badly managed, over-administered, and so expensive that many will collapse under their own weight. Organizations in which there are two to three managers for every value producer do not have a sustainable future. The pressures created by university bankruptcies, defunding, and consumer and political actions will all have an effect on their future. Students and families going into deep debt for a poor quality education that does not guarantee a good job and good preparation for life will not continue down this path for much longer.

As workplaces, universities are becoming increasingly unpleasant. Repressive speech and behavioral codes, intense competition among administrators, among faculty, between temporary and tenable faculty, and among students and adversarial relations among these three key stakeholder groups create a dystopian existence. The literature on this dystopia is abundant. Books like *Lost in the Meritocracy* (Kirn 2009), *Zombies in the Academy* (Whelan et al. 2013), *Paying for the Party* (Armstrong and Hamilton 2013), and many others tell us that this not only

is not a sustainable system. They also suggest it is a system that should not be sustained. Its failures are evident in the declining achievements of American university students (Arum and Roska 2011, 2014).

Are there islands of good practice anywhere? The strong liberal arts colleges that still remain in the United States provide something like a meaningful educational and civic experience for many students. However, as Michael Crow points out, all their students would fit together in the football stadium at the University of Michigan at Ann Arbor (Crow and Dabars 2015). They are important but not scalable in relation to the scope of the problems we are facing.

A daring experiment in changing this picture is one being led by Michael Crow at Arizona State University (Crow and Dabars 2015.). While not perfect and certainly oversold by its originator, this approach has taken on the disciplines directly, dealt with the public stakeholders in a thoughtful and respectful way, and caused significant improvement in the quality of that university. What the future holds is not clear, but it is not an experiment to discount. Approaches like Mishra and Zachary's and action research could well find a more hospitable home there.

Going farther afield, there are significant experiments in developing greenfield universities by using the principles and practices of action research. Oguz Babüroglu has undertaken this kind of process in Turkey at the Sabanci University (Babüroglu and Emery 2000) and also in the development of two other greenfield universities in the past couple of years. These institutions were designed through action research processes carried on by collaborative stakeholder teams, the curricula were developed collaboratively, and the institutions are run in a much more collaborative and consultative way than are conventional universities.

Finally, there is the Mondragón University complex of the labor-managed cooperatives in the Spanish Basque Country. A four-campus university with some 8,000 students, this university is a worker/student cooperative in which all participants are direct stakeholders. This university requires the stakeholders to collaborate closely in the development and ongoing management of the university.

These four universities together have a central administrative staff that consists of three administrators and three secretaries. All other administrative and management work is carried out by the faculty, students, and other staff through commissions, social councils, and general assemblies in a fundamentally participatory way.

The pedagogy of the university is also consistent with these organizational principles. There are no large lecture halls. All classrooms have flexible seating

and operate in a seminar/discussion format. These campuses maintain close and fluid relationships with the government and businesses of the region and their graduates are readily taken up within the region, not something universities anywhere else in Spain can boast. For a field report on the university see Wright et al. (2011).

Following the scientific method, we cannot treat the above as “exceptions.” They are happening, they work, and thus they must be possible. To claim that this kind of fundamental redesign of universities is impossible is not only anti-entrepreneurial but it reveals an attempt by those who have benefited personally from the authoritarianism of the Tayloristic university to maintain their stranglehold on higher education. It is time for a change.

References

- Armstrong, Elizabeth, and Laura Hamilton. 2013. *Paying for the Party: How College Maintains Inequality*. Cambridge: Harvard University Press.
- Arnstein, Sherry. 1969. “A Ladder of Citizen Participation.” *Journal of the American Institute of Planners* 35 (4):216–24.
- Arum, Richard, and Josipa Roksa. 2011. *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press.
- Arum, Richard, and Josipa Roksa. 2014. *Aspiring Adults Adrift: Tentative Transitions of College Graduates*. Chicago: University of Chicago Press.
- Babüroglu, Oguz, and Merrelyn Emery, eds. 2000. *Educational Futures: Shifting Paradigm of Universities and Education*, Fred Emery Memorial Book. Istanbul: Sabanci University.
- Bargal, David. 2006. “Personal and Intellectual Influences Leading to Lewin’s Paradigm of Action Research towards the 60th Anniversary of Lewin’s ‘Action Research and Minority Problems’, 1946.” *Action Research* 4 (4):367–88.
- Bargal, David. 2008. “Action Research: A Paradigm for Achieving Social Change.” *Small Group Research* 30 (1):17–27.
- Berger, Suzanne, and Michael Piore. 1979. *Dualism and Discontinuity in Industrial Societies*. Cambridge: Cambridge University Press.
- Birnbaum, Robert. 2000. *Management Fads in Higher Education: Where They Come from, What They Do, Why They Fail*. Hoboken, NJ: J. Wiley.
- Boden, Rebecca, Davydd Greenwood, Budd Hall, Morten Levin, Judi Marshall, and Susan Wright. 2015. “Action Research in Universities and Higher Education Worldwide.” In *Sage Handbook of Action Research*, 3rd edition, edited by Hilary Bradbury, 281–290. Thousand Oaks, CA: Sage Publications.
- Joyce Canaan, and Wesley Shumar, eds. 2008. *Structure and Agency in the Neoliberal University*. New York: Routledge.
- Chayanov, A.V. 1966. *The Theory of Peasant Economy*. Translated by W. Jaffe, edited by D. Thorner, B. Kerblay, and R. E. F. Smith. Madison: University of Wisconsin Press.
- Crow, Michael, and William Dabars. 2015. *Designing the New American University*. Baltimore: Johns Hopkins University Press.

- Ennals, Richard, and Bjørn Gustavsen. 1999. *Work Organization and Europe as a Development Coalition*. Amsterdam: John Benjamins Publishing.
- Ginsberg, Benjamin. 2011. *The Fall of the Faculty: The Rise of the All-Administrative University and Why It Matters*. New York: Oxford University Press.
- Greenwood, Davydd, and José Luis González Santos. et al. 1992. *Industrial Democracy as Process: Participatory Action Research in the Fagor Cooperative Group of Mondragón*. Assen-Maastricht: Van Gorcum Publishers.
- Greenwood, Davydd. 2009. "Are Research Universities Knowledge-Intensive Learning Organizations?" *Handbook of Research on Knowledge-Intensive Organizations*, edited by Dariusz Jemielniak, and Jerzy Kociatkiewicz, 1–18. Hershey, PA: IGO-Global, 2009.
- Greenwood, Davydd, and Morten Levin. 2006. *Introduction to Action Research: Social Research for Social Change*. Thousand Oaks, CA: Sage Publications.
- Gustavsen, Bjørn, Tom Colbjørnsen, and Øyvind Pålshaugen. 1998. *Development Coalitions in Working Life: The 'Enterprise Development 2000' Program in Norway*. Amsterdam: John Benjamins Publishing.
- Gustavsen, Bjørn, Bernd Hofmaier, Marianne Ekman Philips, and Anders Wikman. 1996. *Concept-Driven Development and the Organization of the Process of Change: An Evaluation of the Swedish Working Life Fund*. Amsterdam: John Benjamins Publishing.
- Herbst, Philip. 2012. *Alternatives to Hierarchies*. Berlin: Springer Science & Business Media.
- Jacob, François. 1994. *The Possible and the Actual*. Seattle: University of Washington Press.
- Kirn, Walter. 2009. *Lost in the Meritocracy: The Undereducation of an Overachiever*. New York: Doubleday.
- Levin, Morten. 2002. *Researching Enterprise Development: Action Research on the Cooperation between Management and Labour in Norway*. Amsterdam: John Benjamins Publishing.
- Mishra, Chandra, and Ramona Zachary. 2014. *The Theory of Entrepreneurship: Creating and Sustaining Entrepreneurial Value*. New York: Palgrave Macmillan.
- Newfield, Christopher. 2003. *Ivy and Industry: Business and the Making of the American University, 1880–1980*. Durham: Duke University Press.
- Newfield, Christopher. 2008. *Unmaking the Public University: The Forty-Year Assault on the Middle Class*. Cambridge, MA: Harvard University Press.
- Ross, Dorothy. 1992. *The Origin of American Social Science*. Cambridge: Cambridge University Press.
- Sahlins, Marshall. 1974. *Stone Age Economics: Anthropology and Ethnography*. London: Routledge.
- Schrecker, Ellen. 2010. *The Lost Soul of Higher Education: Corporatization, the Assault on Academic Freedom, and the End of the American University*. New York: New Press.
- Slaughter, Sheila, and Larry Leslie. 1999. *Academic Capitalism: Politics, Policies, and the Entrepreneurial University*. Baltimore: Johns Hopkins University Press.
- Slaughter, Sheila, and Gary Rhoades. 2004. *Academic Capitalism and the New Economy: Markets, State, and Higher Education*. Baltimore: Johns Hopkins University Press.
- Marilyn Strathern, ed. 2000. *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy*. London: Routledge.
- Tuchman, Gaye. 2009. *Wannabe U: Inside the Corporate University*. Chicago: University of Chicago Press.
- van Eijnatten, Frans, and Hans van Beinum. 1993. *The Paradigm That Changed the Work Place*. Maastricht: Van Gorcum.

- Washburn, Jennifer. 2005. *University, Inc.: The Corporate Corruption of American Higher Education*. New York: Basic Books.
- Whelan, Andrew, Ruth Walker, and Christopher Moore, eds. 2013. *Zombies in the Academy: Living Death in Higher Education*. Bristol: Intellect.
- Wright, Susan, Davydd Greenwood, and Rebecca Boden. 2011. "Report on a Field Visit to Mondragón University: A Cooperative Experience/Experiment." *Learning and Teaching* 4 (3):38–56.