Elizabeth Pontikes (Stanford University), winner of the 2008 Lou Pondy Best Paper from a Dissertation Award, interviews Woody Powell (Stanford University), the recipient of the 2008 OMT Distinguished Scholar Award.

Your presentation highlighted an interesting strand of your work that you presented as the merging of your research on institutionalism and networks. I find your ideas about network forms of organization intriguing. Do you see this as a recent phenomenon among organizations, or do you think this is a new way of looking at organizational fields that have previously existed?

Well, it's a bit of both. The paper on network forms was written almost twenty years ago. Actually, an early version of it appeared in California Management Review in 1987, so more than twenty years ago. Back then, network forms of organization appeared to combine elements of 19th century – craft based activities, ranging from construction and book publishing to cultural industries. I remember giving a talk soon after I arrived at MIT in 1985, and there were people in the room like Mike Piore, Chuck Sabel, and Tom Kochan who said that there were aspects of

the emerging software industry and computer industries that looked like the artisanal examples I was using. That raised the question of whether the network form was being rediscovered, or whether it involved a new set of tools. Here I use tools broadly, e.g., was computing power allowing small enterprises to do things differently, or did novel forms of distributed communication like email enable new modes of organizing? There clearly was a transformation underway that amplified the impact of organizations that were smaller but more relationally linked. But for me, one aspect of my research on the evolution of biotechnology that has been surprising is how some large, vertically integrated multinational firms have devolved their vertical structures to also become more relational. It's not clear whether that has, as yet, transformed their research activity, but clearly there has been a strong move in that direction.

So maybe it was something that there were traces of before, but that there is a resurgence of now?

Yes. Maybe the tough question– and I can't tell you I have the answer for it – is how much the resurgence represents old practices being given new life, or how much new practices build onto an older model and transform it and deepen or alter it in new ways. There are a handful of people doing research looking at interorganizational contracts and trying to see how relational features are moving into formal contracts. So that's one side of it. The other aspect is the extent to which a more academic "invisible college" model, which used to be the province of the ivory tower, has spread into the world of corporate R&D.

Do you see network forms of organization as a sub-area of institutionalism? Or do you see it as more of a fundamental shift of how we understand institutions?

Well - neither. I think of networks – not network forms of organization, but networks – as an element of social structure. Networks are patterns of affiliation, both existing patterns and potential patterns in terms of how ideas and practices can develop and diffuse. I think of these as the backbone or the skeleton on which institutions are layered. So you could have very informal forms of networks, i.e. personal ties and common schooling experience, or you could have more formal affiliations, such as corporate board memberships or inter-organizational partnerships. I wouldn't at all limit networks to just those organizations that are governed on more relational principles. The structural side of networks is the skeletal system, and the institutional side is the brain, that is the cognitive system, which shapes how ideas are formed and take shape. The cognitive system provides the framework on which networks operate. It's a recursive relationship. But it doesn't by any means have to be a "network form." Look at the work that Frank Dobbin and Lauren Edelman have done on equal opportunity employment and human rights issues inside of organizations. There is a strong story you can tell regarding how a "rights" logic diffused among personnel experts, with lawyers and HR staff also playing a role. This community played a role in promulgating the new logic. Employers with ties to the government via contracts helped diffuse these ideas further. Then social emulation occurred based on proximity and other social linkages. So in my view, ideas spread through networks. The content of what spreads, however, is shaped by institutions. In that sense, this example is about a rights consciousness and how issues about diversity were redefined.

You mentioned that network forms of organization are a triumph of "weapons of the weak." What do you mean by this? Why is this form a weapon of the weak?

Well, I used this idea in a specific paper. I was analyzing the evolution of the field of the life sciences over a thirty year period. When the field first began, the smaller firms generally had to sell their lead research projects to large multinationals that went off and took them to the final stage of development, gained regulatory approval, and marketed the medicines world wide. They typically garnered more than 75% of the rewards. The organization that came up with the idea and did the demanding basic science got only a small portion of the final revenues. So to those t hat already had – the big multinationals -- the system made a lot of sense. They were the ones with the deep pockets that could fund stuff, who had expertise in manufacturing and the wherewithal to get something through the regulatory process. And they were the ones with

the political action committees that contributed to congressmen and senators. They also had well established beltway consultancies to influence the regulatory process.

Universities and small firms lacked that kind of muscle. If they continued to play by the rules of the dominant parties, they would have remained in a position in which it would be very difficult for them to garner revenues that matched their contribution. So they turned to different models for financing research and novel models for developing new biomedical products. On the financing side, they relied on federal research grants from the NIH, Small Business Administration grants, and venture capital financing as opposed to a heavy dependence on the large multinationals. On the product development side, they did something rather unusual. They joined with social movements, various disease foundations and patients groups, and they did clinical trials jointly with leading research hospitals and patients associations. Previously, the drug developer was separate from the groups championing for the treatment of the disease. The new biotech firms used more of a social movement model for drug development. So an organizational model built on academic invisible colleges, federal research funding, VC financing, and the involvement of patient's groups and research hospitals in clinical trials transformed the recipe for product development. And those aspects were what I was referring to as "weapons of the weak" – using the political scientist Jim Scott's phrase, that is -- you couldn't compete head on with the giant multinationals playing by their rules, so you develop a different set of practices. As it turned out, there is some evidence – and there is contestation over this, so I don't want to suggest that these methods were superior – but they are at least comparably effective. They allowed a modest number of companies to move from tiny boutiques to decent sized firms in their own right. As they grew larger and more successful, they continued to use these routines, or weapons, as opposed to adopting what the larger firms had previously done. So rather than evolve into an organization that looked like a traditional multinational, they forged a new model of a science-based firm. Over time, many of the larger multinational firms began developing women's health initiatives and marketing plans that were more closely connected to patients groups, and increasingly relying more on university science for their basic R&D. So you see some of the large firms – multinationals – switching routines for how they developed new biomedical products.

When you say that there was a debate over whether the methods were superior, what would that be measured from? Social benefit?

Ah! This is why this area is so fascinating. The more narrow measure might be the time from the development of a research project from the lab bench to the bedside. There are all kinds of metrics that count this, and many of the metrics favor smaller firms. The second issue would be whether there is a difference in terms of the size of a market for a new medicine. A criticism of small firms is that they go after orphan drugs or diseases for markets that haven't been addressed previously; while the big firms go after cardiology and other very large, multi-billion dollar markets. The pushback on this metric is the difference in making a first to the world medicine, in which you have no rival, as opposed to what is called a me-too or me-three drug that another firm has already developed, and the firm is just 'joining the crowd.'. And there is the question, which I don't think gets raised enough, of measuring drug development on whether we are improving the quality of life, or patient's access to treatment. What difference have we made, in either remission or cure of cancer? What types of diseases and markets go ignored? Those questions don't get asked enough, but there is some work on that. One can imagine looking at different organizational forms and comparing them across these various dimensions.

You talked about organizations being interpreted through multiple logics. It seems that when one organization has multiple faces, it could provide an opportunity for conflict. Do you think these multiple logics help or hurt organizations? Under what circumstances?

The point I tried to stress is that it's very, very hard to pull off being multi-purpose or multi-vocal, because you're likely to be criticized from a variety of points of view. Imagine when you take the practices of the family into business or into politics. You get all sorts of questions like are decisions being made on the basis of favoritism, are they being made on the basis of meritocracy? Is this an enterprise that is being generated for the inter-generational transmission of wealth, or is there a larger economic or social purpose? And all of those things get muddied when family questions and political or business questions get linked together. Think of the Bush family or dynasty or think of any kind of family enterprise where those issues come up. Organizations with inchoate or fuzzy identities are often punished, as Ezra Zuckerman has taught us. The challenge is under what circumstances can an organization act with fidelity, and yet people read off of it many different things. They're good at research, good at marketing, good at manufacturing, they're a good citizen, etc. And not that they're scrambling to do all of

those different things, but doing what they do on a regular basis, and they are sustained by complex networks of affiliation.

John Padgett's work on Renaissance Florence is illustrative because there's a huge debate in Renaissance scholarship on this issue. Cosimo Medici prayed three hours a day. Is that a sign that he was a devout man? Or is that a sign of the effort that he would put in to send a sign that he was religious? More conservative historians like Dale Kent argue that he was profoundly religious. Marxist historians say: "look at what Cosimo did to hold onto power. He wasn't at all pious!" It's not clear in retrospect whether his prayer was for spirit or power. It was probably for a little bit of both. What is clear is that he was successful in maintaining ambiguity so that you could see him through many different lenses. Some people translate multi-vocal into multi-lingual. It's not. It's not speaking in many tongues; it's speaking in the same tongue and having many people hear it differently.

For example, in the biotech world, Genentech is regarded by many as a world class research organization. If you ask people at MIT or Stanford about the quality of science at Genentech, they'd say it's pretty impressive. If you talked with people interested in the product development side, they'd say Genentech has set records for number of FDA approvals for new medicines in a year, beating out every company in the world. Just from a business point of view of producing new medicines, Genentech is remarkable. If you talk to a patient group, specifically in the area of breast cancer, they'd say Genentech's drug Herceptin is highly effective at retarding the effects of breast cancer. If you talk to people on the marketing side, they'll say Genentech is highly effective in its marketing strategy. It's the same organization and it's the same people, but it is perceived in multiple ways. This feature of being viewed through multiple lenses is what we mean by multi-vocality.

As I understand it, your 1983 paper on the Iron Cage, the second most cited paper relevant to organization and management theory, was initially not accepted but you turned it around and it was not only accepted, but made a splash in the field. Stories like this are an inspiration to junior researchers. What made you persist? Do you have any advice for young scholars regarding when to internalize feedback, and when to follow your gut?

Our persistence was a pretty simple story. We initially submitted the paper to AJS and were rejected. Mark Granovetter was a member of my dissertation committee and I called him up and asked, “What should we do?” He said “stick it back in an envelope and send it to ASR,” because it went to the wrong reviewers. What happened in the initial pass at AJS is that the reviewers read it in a way that was completely fair, but people for the most part today see the paper through a very different lens. There’s a discussion in the paper about the nature of control, which was very important back in the late 1970’s and early 1980’s in political sociology and neo-Marxism. Our argument was that control takes place more through socialization processes, social conformity, and the lighter hands of control through organizational networks. At AJS the paper went to political sociologists and neo-Marxists, and not organizations researchers. When it went to ASR, it went to organizations scholars, who saw what was unique about the paper. So part of the message for younger people is not to just persist, but something that we didn’t know then, we were just newcomers, but how important it is to signal who a paper is intended for. You need to make very clear what conversation you want to join. An editor ought to have a sense of who the appropriate reviewers are within the first two or three pages of a paper. And in that paper – the first page began with Marx, Durkheim, Weber, Bourdieu, Harrison White – it was all over the map. We thought it was a theory paper and so we invoked the giants, but it was less clear who the relevant research community was. We had more luck at ASR, which was interesting because the editor at the time was Sheldon Stryker who was a structural social psychologist, not an organizations person.

So you didn’t change it at all?

No. We didn’t change it. And we had this amazingly wonderful experience that Prof. Stryker wrote back with two very positive reviews, and said correct the typos, and I’ll publish it. Gosh – from submission to appearing as the lead article in the April issue took less than six months. Nothing has been so easy since!

Where do you find inspiration for your research ideas? What is the most satisfying aspect of your work?

One of the things that has been a lot of fun for me for the past decade is having a laboratory model. There are eight, ten, twelve, or more PhD students and post-docs of mine who are all using similar tools and working in related areas. They're in different departments and are working on different dissertation topics, but we meet on Fridays for a couple of hours and people go through their research findings. That has been a continuing inspiration, I hope for them, but certainly for me, in terms of keeping work going and continually asking new questions. The work on biotech began because I had this Mertonian question of why was the commercial world acting collectivist, and why was the university world starting to act so proprietary. I was really curious that universities were asserting property rights and trying to generate revenues at the same time that companies were supporting other companies and publishing. The different domains were changing, and I wanted to study that. The development of that work has been, to a considerable extent, shaped by multiple collaborations with various students, and by now many of them are established faculty members. It's been fun, and a key inspiration for my work.

The second spur is that I've been lucky to pick topics that connect to phenomena in the "real" world that are developing rapidly, and that end up having some consequence. When I first started looking at biotech, I remember the labor economist Sherwin Rosen from your school – the Graduate School of Business at the University of Chicago – said to me at an economics meeting in the early 1990's: "Why are you studying this? It's the new alchemy. Nothing will ever come of it." His idea was that this was a weird little quirky industry, and that the big pharmaceutical and chemical companies would take it over, and a bright young fellow shouldn't be wasting his time studying something like this. I remember, my reaction to him was "Wow. It would be really fun to study the new alchemy." What an interesting thing! You can fool the world for a decade or so, and get billions to do it. Though I didn't really believe it was the new alchemy. I had much more of a sense from talking to scientists on the university side that it was going to be consequential. But in the early 1990's physics was still king of the sciences, and we were just beginning to see it being supplanted by biology. And so watching this process has been exciting, and understanding its far-reaching ramifications for law, medicine, the university, and corporate life have been really interesting. My current work on the rationalization of the

nonprofit sector, and the importation of business models into the social sector, has a similar excitement. This work brings me into contact with all kinds of interesting people and organizations. Another project currently underway examines the dynamics of interdisciplinary research centers, which affords me access to the labs of world-class scientists and their students. This work also involves collaboration with very talented computational linguists that is teaching me new methods.

Looking back, what do you think have been the most significant changes in the field of organization management theory? What do you think will be the most important changes moving forward?

I believe that organization studies is pretty unusual in that it is more of a cumulative area of inquiry than many other areas of the social sciences. I'm not going to jump into the Pfeffer versus van Manaan debate about paradigms, but I think if you look in organization theory at how much we've learned, whether in ecology, institutional analysis, network research, or transaction costs, over the course of fifteen to twenty-five years, it is quite impressive. There are core ideas in each, a clearly specified set of concepts, increasingly common methods that people use; overall, there is a push toward refinement that I think is rewarding. There is much current excitement in new linkages across sub-fields. For me, the linkage between network research and institutional research is one of these areas. There are people, who are a little bit institutionalist and a little bit ecological, thinking about the evolution of categories and the role of social movements in industry formation. The work on categories by ecologists is much more cognitive than their earlier work. In that sense there are shadings of more institutional work. I think some of the excitement comes from developing these connections in which one, two or three sub-fields begin to influence and shape one another.

That said, the question that I'd be asking if I were your age, is: "What's new for me to do?" What is the cool stuff, and where are the interesting ideas? There are two challenges. One is

the extent to which there are new kinds of phenomena in the world at large. Understanding the phenomena might help you to make theoretical progress. One area that's obvious is the move toward distributed cognition and product development, and issues about distributed governance. For example, in open source and Linux. There are lots of people looking at how software is developed around the world, or the interesting governance models developed in open source. The question is whether drilling down on those phenomena will offer new insights into questions about ecology or institutions or networks. I suspect they will; but it can be a slow process to make those links. And you could get labeled an "open source specialist." So that's the risk that would entail.

The second challenge is whether people can come up with fundamentally new conceptual and theoretical questions, and then find empirical settings for exploring them. One idea I find interesting concerns models of competition. Think of trying to catch an elevator on a middle floor in a high rise, or swimming in different lanes. Most models of competition assume everybody starts at the starting gate. But there are some domains where that's clearly not true. If we think about moving up the corporate ladder – what does an MBA do? They come in the middle of the ladder; they don't start as the office kid and work their way up. Well, how is it that a firm jumps into an area of competition, a product niche, or a market category after the niche has already developed? Is it either freed from, or relieved from, the constraints of an earlier era of competition? I don't think we have much insight into these processes. If you look at everything from the media to the internet to social networking, you see organizations morphing. Apple was a computer company, they're more an ipod and iphone company now. How does a company make those transitions, and can others copy them and catch up? Or do companies close the door once they move? I think that's a whole area where theoretically and conceptually we're pretty weak in terms of thinking about those kinds of issues.

Well, this has been really interesting. Thank you Woody!