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The following is the transcribed and edited version of an interview held with Prof. Woody Powell, from Stanford University, for the purpose of commenting on this special issue of *Israeli Sociology*. The interview was held on 16 June 2020, in the midst of both Coronavirus pandemic and Black-Lives-Matter protests in the US and many other cities worldwide. Conducting the interview were Amalya Oliver and Gili Drori, guest co-editors of this special issue.

Prof. Woody Powell is a sociologist who, since 1999, is Professor of Education and (by courtesy) Sociology, Organizational Behavior, Management Science and Engineering, and Communication at Stanford University. He is the founding co-director of the Center on Philosophy and Civil Society. His sociological writings have become foundational pieces for several scholarly fields, confirming his influential contributions to organization theory, economic sociology, and the sociology of science. Most notable among his many publications are his 1983 journal article, co-authored with Paul DiMaggio, on mechanisms of isomorphism (which continues to be the most cited article in the history of the *American Sociological Review*) and their 199 edited volume on new institutionalism; his seminal work on network forms of organization (1990), as well as on network analysis of interorganizational collaboration (1996, with Koput and Smith-Doerr); and, his pioneering studies of the nonprofit sector (Powell, 1987; Powell and Steinberg, 2006; Powell and Bromley, 2020; as well as Hwang and Powell, 2009). Pertinent to the themes of this special issue, several of Powell's publications (e.g., Owen-Smith and Powell, 2004; Powell and Grodal, 2005; Powell, White, Koput and Owen-Smith, 2005; Powell, 2016) are widely recognized as influential contributions to the study of innovation and entrepreneurship.

Q:

What is your approach to innovation and entrepreneurship?

Powell:

In my work with John Padgett (Padgett and Powell, 2012), we emphasize the distinction between innovation and invention and, indeed, in recent years my research pivoted towards the study of invention, rather than innovation. I think of innovation as improving on existing ways of doing things, whereas, in contrast, invention changes the way things are done. Innovation combines things from adjacent domains, akin to what Stuart Kauffman describes as the "adjacent possible"; it is a re-combinatorial process that brings together familiar practices, concepts, ideas from proximate social worlds. Seeing that Innovation involves mixing things in interstitial spaces, if you want to increase innovation, you want more cross-rank and cross-unit contact, more demographic mixing, and more amphibians who move between these nearby spaces. And, fluid boundaries are very important for that to happen. On the other hand,

invention, which is more interesting to me, is about where does novelty come from – and that requires transposition across distant social worlds and are therefore are particularly transgressive. One can see these in the US at the moment, in every company and in every nonprofit, and in the way cities and nonprofits have responded to COVID. We see evidence for this in a new team project that studies cities worldwide, from Seattle and San Francisco here in the US to Shenzhen China, Vienna Austria, Taipei Taiwan, and Sydney Australia. Our team quickly pivoted to study the reorganization during COVID. With the changes, we see that our world is never going to be the same again; we're not going to go back to normal, but rather we will get to a new abnormal.

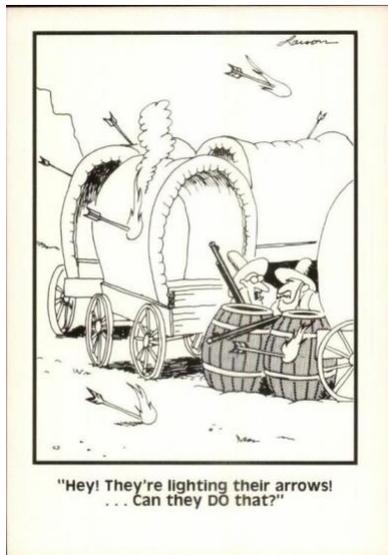
I regard this distinction, between invention and innovation, to be very important. John Padgett and I have this idea that innovation is sort of an inversion of Schumpeter's work, that innovation is perceived as a kind of common occurrence. Over the past several decades we studied such innovation processes in biotech and in the incrementally different pharmaceutical industry. Yet, invention, we think, creates new categories of people, new kinds of organization, and new industries. And, these kinds of changes have the possibility to cascade and profoundly remake landscapes, for better and for worse. And so, this sort of distinction between improving existing things and changing the way things are done has been essential to our thinking.

Q:

Is this distinction akin to the differences between incremental and radical innovation?

Powell:

Padgett and I got asked that several times and we insist, at the risk of sounding ornery, that invention is farther and more consequential in its transformative impact, changing the way things are done. A great example the way people think incremental or radical think about SmartPhone (e.g. internet of things platform) which combine a bunch of existing things – the TV, the telephone, wifi and more. Putting all these things together initially seemed different, but the downstream consequences of it are probably pretty strong. Yet, I think that one would want to ask “harder” questions, like who were the creators and carriers of an invention and, more importantly, what kinds of boundaries are being crossed and what is the distance. So often, when it comes to invention, one of the boundaries that gets crossed is a moral boundary. This reminds me of a Larson cartoon, with cowboys in their encircled wagons being attacked by Indians; one cowboy cries to the other “Hey! They’re lighting their arrows! ...Can they do that?!” And the idea behind it is about combination, the surprise of combining things that were not “supposed” to go together. That's where I start. And I don't know if radical innovation quite captures that moral dimension.



Q:

Can the making of the atomic bomb be an example for that?

Woody:

Absolutely, yes. The Los Alamos scientists shared the moral concern and a definition of their new product. This is a great example because it was an extraordinary achievement in physics, yet immediately some of the people who did it said, "we've made one of the greatest mistakes in the history of mankind" while others immediately said "no, we've done it to fight a war and to end a war". And then they gave the secrets away to other countries because they said it would only be fair if everybody had this bomb. Thus, they wanted to prevent the power struggle among countries.

And this is a terrific example for what I've tried to emphasize: that for so many people innovation or invention are good things, but there are plenty of examples for bad ones too. For example, the 9/11 terrorists combined the idea that kidnapping an airplane with the idea of turning it into a bomb, making something that people had never encountered in the past. John Padgett devotes a chapter to Stalin's purges (also known as the Great Terror) and when I teach this to students, they immediately recoil. But my point is to say how wiping out cadre of people in all sorts of positions – and I give them the example of professorial positions – is also an instance of "oh, there are be so many available jobs" and then they laugh about it. In this way I try and force people to realize that innovation and invention don't necessarily involve progress.

Q:

How would you relate it to entrepreneurship?

Powell:

The way Padgett and I think about this question is by asking "who are the people that are likely to be carriers of invention?" Our answer is pretty straight forward. The carriers tend to be amphibians, that is people who could have their feet in two camps and therefore have links across multiple networks. This allows them the capacity to, what we call, staple contradictory principles. For example, Sonia Gable, who is currently a graduate student, is studying, people who have multiple ethnic identities, or backgrounds: they are Taiwanese/Polish, German/Vietnamese, or African/American/Argentinian. Many organizations, also Stanford University, are slowly opening up to such multiplicity and at a few universities there is a form that allows you to self-identify in such a way. At one level they feel like misfits, but they also really skilled at toggling between multiple identities, at moving back-and-forth between "being" German and "being" Vietnamese. Carrying such skills and having these networks ties with multiple units throughout their life course create biographies that are unusual. And, to the extent that organizations allow them space, those are more likely to be places where novelty happens.

Q:

What does this say about innovation and entrepreneurship in immigrant societies such as ours? And, does this stapling also applies to other forms of diversity, such as socioeconomic and geographic periphery? In general, does stapling of multiple identities provide an advantage when it comes to innovation and entrepreneurship?

Woody:

Let's be careful when we use the word advantage; we may be saying that that is a benefit. In many respects, they are disadvantaged, but they are able to, through like a Jujitsu move, take the "disadvantage" and do things with it that wouldn't otherwise have been done.

One challenge I have with discussions about entrepreneurship is that they often describe it as character traits and thus assume that you can teach it. I think that what you want to think about is what are spaces and opportunities for it to happen. Therefore, people with multiple identities who were able to successfully navigate those challenges become less beholden to existing ways of doing things – but it remains more comfortable to have existing ways of doing things you can follow.

Q:

There is something very similar with regard to entrepreneurial innovation in the socio-geographical periphery in Israel. Those entrepreneurs, who are far away from the center and have very limited resources, are also at liberty to rethink differently. Being detached from the

norms and the institutional arrangements that exist in the center, or core, drives new forms of innovation and new thinking and builds the potential for something new to emerge.

Powell:

Indeed, in the Padgett-Powell book, we note detachment is one of the mechanisms. The form of initial incorporation and then of detachment allows the entrepreneur to take an idea from one setting, transpose it to a completely different setting, and develop something, you know, quite different. Detachment enabled them to have a different set of building blocks, those different building blocks produce new ways of acting and new techniques, and these then spread around the world, creating great transformation.

Q:

Quite a few of the terms your work suggests – transposition and braiding – lead in the same direction of bringing together ideas from here and there. To that you add the notion of detachment between the different segments. What else goes into the mix of driving innovation and entrepreneurship?

Powell:

Braiding goes along the idea of possibilities for heterogeneous isomorphism. From Freeman, as well as from DiMaggio and Powell, the notion of isomorphism focused on how pressures from the environment force organizations to adapt, but now we realize that pressures from the environment may have been applied commonly but responded to differently. For example, civil society, also for-profit corporations, are adopting transparency and openness and yet they enact transparency and openness in all kinds of different ways. Some share minutes of meetings, some report on hiring practices, and others incorporate the wisdom of the crowd. Some of these responses are adopted because they were labeled “best practices”. And still, while these organizations appear to act rationally, as if they actually knew what they were doing when they were doing it and therefore also making it seem like the responses to the environmental pressures were uniform, the actual activities vary greatly.

Q:

How do networks feed into the sociological research on innovation and entrepreneurship?

Powell:

In my life I've lived this contradictory principle in that, when I'm around institutional people I become a network person. When I'm around network people I become an institutionalist. That said, networks, in and of themselves, are merely communication channels. I think that what's much more important is what is the content that flows through networks and what are

the effects of people and of the ideas that are tangled in the network. Arthur Stinchcombe used to say: when I see a network chart, I just see a plate of spaghetti with meatballs; tell me what the sauce is. Harrison White too argued really strongly that we need to think about what styles are and how do styles mate. Therefore, a network person per se would want to think much more about what are the ideas that are present in networks that get combined and then study the processes of recombination. In regard to innovation, the heterogeneity, or diversity, of actors in the network matters.

Q:

How are universities responding to external pressures to be innovative and entrepreneurial?

Powell:

Our universities are poorly set up to do this: universities presumably promote interdisciplinarity but in effect they do not allow much for cross-unit affiliations and do not entice much cross-rank interactions. In departments, even with very eminent and famous faculty, the very senior famous people are unlikely to hang out causally on the block; in most universities, typically, connections happen across the same rank rather than cross rank. This is true also across units. At universities each unit, often disciplinary, has its own building: that's the economic building, that's the political science building, and that's the sociology department's building. This is also true for teaching: as a sociologist, I could not teach an economics course. It ends up that there's very little mixing of academics which means that fluid boundaries are not particularly common in universities. And yet, at the same time universities are very resistant to people who can move and flow through different places, we now know that some of the most influential and consequential scholars are those who are amphibian. Many researchers – including Daniel McFarland, my Stanford colleague, and Ben Jones – study who are the most productive scientists and which scientist produce papers that have the most impact. McFarland, in tracing the career course of individuals, finds that academics with appointments in multiple units and those who move units during the course of their career, turn out to be the most influential. And still universities are not set up for, and are also resistant to, enabling this fluidity of boundaries.

Q:

What is the sociological import to the study of innovation and entrepreneurship? And what in sociology today, beyond boundaries and actors, can fruitfully chart new paths for the study of innovation and entrepreneurship?

Powell:

I think that we have been neglectful of two core pieces of the sociological cannon: culture and politics. Therefore, in considering boundaries, also in regard to transcending and transposing

them, we should think more about the cultural consequences of boundary crossing. And thinking deeper about culture. Amir Goldberg is thinking about cultural fit in organizations and how organizations tolerate, or don't tolerate, different sets of views. I think that the next step is to ask how this feature of cultural fit affects what organizations do and dare to do. Do the companies with higher cultural fit, produce higher rates of new products, or do they just produce a steadier rate of the same product. It worries me that we're chasing misfits out of organizations, whereas it is the "misfits" that would bring something interesting. These dynamics are a cultural phenomenon; they are also a political phenomenon, with a capital P. And such power is not only the state but, for us, it is also Facebook, Google, Apple, Microsoft and Amazon that are now stronger than corporations have been in the US in the late 19th century and that are holding immense philanthropic power and replacing the state in terms of funding universities, social services, the arts, and health care. This dependence of public institutions on elite philanthropy is very much on my mind – and yet I try to use the word inequity more than inequality. I think of inequalities as a process and inequities as a structure of consequences.

Q:

This special issue is focused on innovation and entrepreneurship in Israel. What is your impression of the dynamics of innovation and entrepreneurship in Israel?

Powell:

There is a canonical account of Israeli entrepreneurship that hopefully this special issue will challenge or provoke. The standard account we hear is that in Israel the military service creates an opportunity for social mixing – and yet plenty of Israel's citizens are exempt from military service. There is also the argument, which often also gets linked with military service, that in Israel there is a tradition of talking back to those in the authority and questioning command – and yet several Israeli social groups are highly traditional and autocratic. I therefore think that any analysis of the role of military service in fueling innovation and entrepreneurship should add an organizational and cultural perspective. For example, the IDF should be analyzed for being open internally but closed externally, whereas some organizations, with Nokia serving as a prime example, are open to the world but closed internally.

Similar sociological reframing should be applied to the canonical account of migration as the cause for Israel's so-called innovation miracle. The migratory ethos, the tolerance of moving, and with it the adaptability and flexibility of thought – all these have sociological tales at their core. And the Israeli case is different than that of other migrant societies, such as the US, because in Israel it is not merely the gathering of many peoples and cultures, creating a pool of resources, but also the combination with the culture of creativeness. Therefore, it is not unusual to see such high rates of formation of new kinds of organizations in Israeli context.

Bibliography

- DiMaggio, Paul J., and Walter W. Powell. (1983). "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." *American Sociological Review* 48(2): 147-160.
- Hwang, Hokyung, and Walter W. Powell. (2009). "The rationalization of charity: The influences of professionalism in the nonprofit sector." *Administrative Science Quarterly* 54(2): 268-298.
- Owen-Smith, Jason, and Walter W. Powell. (2004). "Knowledge networks as channels and conduits: The effects of spillovers in the Boston biotechnology community." *Organization Science* 15(1): 5-21.
- Padgett, John F., and Walter W. Powell. (2012). *The Emergence of Organizations and Markets*. Princeton University Press.
- Powell, Walter W., ed. (1987). *The Nonprofit Sector: A Research Handbook*. Yale University Press.
- Powell, Walter W. (1990). "Neither market nor hierarchy: Network forms of organization." In B. Staw and L. L. Cummings (eds.), *Research in Organizational Behavior*, Vol. 12, pp. 295-336.
- Powell, Walter W. (2017). "A sociologist looks at crowds: Innovation or invention?" *Strategic Organization*, 15 (2): 289-297.
- Powell, Walter W., and Patricia Bromley, eds. (2020). *The Nonprofit Sector: A Research Handbook (3rd Edition)*. Stanford University Press.
- Powell, Walter W., and Paul J. DiMaggio, eds. (1991). *The New Institutionalism in Organizational Analysis*. University of Chicago Press.
- Powell, Walter W., and Stine Grodal. (2005). "Networks of innovators." In Jan Fagerberg, David C. Mowery and Richard R. Nelson (eds), *The Oxford Handbook of Innovation*, Oxford University Press, pp. 56-85.
- Powell, Walter W., Kenneth W. Koput, and Laurel Smith-Doerr. (1996). "Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology." *Administrative Science Quarterly* 41(1): 116-145.
- Powell, Walter W., and Richard Steinberg, eds. (2006). *The Nonprofit Sector: A Research Handbook (2nd Edition)*. Yale University Press.
- Powell, Walter W., Douglas R. White, Kenneth W. Koput, and Jason Owen-Smith. (2005). "Network dynamics and field evolution: The growth of interorganizational collaboration in the life sciences." *American Journal of Sociology* 110(4): 1132-1205.