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Beyond Commercialization: Science, Higher Education and the Culture of Neoliberalism

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Abstract Since the 1980s, scholars and others have been engaged in a lively debate about the virtues and dangers of mingling commerce with university science. In this paper, we contend that the commercialization of academic science, and higher education more broadly, are best understood as pieces of a larger story. We use two cases of institutional change at the University of Wisconsin-Madison to shed light on the implications of neoliberalism for public research universities in the United States. We conclude that instead of neoliberalization being a timely strategy for the specific fiscal and other problems facing public universities today, it has become an omnibus solution available to be employed when any opportunity arises and, in fact, helps to define the "problems" of the university in the first place.

1 Introduction

How should we respond to the mingling of commerce and university science? Since the 1980s, scholars, journalists, and others have raised alarms about the growing commercial pressure on academic science and higher education (American Association of University Professors 1983; Shenk 1999; Krimsky 2003; Washburn 2006). Their overarching theme has been a deep concern for the communal and collegial norms said to characterize university settings—norms that may be threatened by the incursion of private industry. Not all commentators are alarmed, however. Wielding concepts such as "the triple helix"

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(Etzkowitz et al. 1998) and "mode two knowledge production" (Gibbons et al. 1994) some have suggested that the intertwining of science and commerce is both inevitable and beneficial, and that a university environment infused with codes and practices from the business world might offer great advantages—particularly with regard to economic development.

Yet commercialization, and the debate about it, are best understood as pieces of a larger story. Indeed, "commercialization" may be the wrong way to think about the intersection of science, higher education and commerce. Under closer examination, the competing rhetorics—one group citing a threat to cherished norms, while another celebrates hybrid ways of being and doing—reveal a broader set of concerns about the changing culture of higher education (Kleinman 2010; Kleinman and Vallas 2001; Mirowski and Sent 2008). These concerns draw our attention to the intersection of neoliberalism and higher education.

Neoliberalism has been defined in numerous ways in different political and scholarly contexts (see, e.g., Moore et al. 2011). Harvey (2005) offers a useful definition, describing neoliberalism as

> a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an industrial framework characterized by strong private property rights, free markets, and free trade (Harvey 2005, p. 2)

According to Peck and Tickell (2002), the primary features of this ideology are "a commitment to the extension of markets and logics of competitiveness" combined with "aggressive forms of state downsizing" and "a profound antipathy to all kinds of Keynesian and/or collectivist strategies" (p. 381). Although advocates of neoliberalism clearly see a role for the state in promoting the efficient operation of markets, the features typically associated with neoliberalism distinguish it from older liberal ideologies, which accepted that markets should be embedded in and subject to "a web of social and political constraints," including government regulation (Harvey 2005, p. 11).

In this paper, we use two cases of institutional change at the University of Wisconsin-Madison to examine the implications of neoliberal rhetorics and strategies for public research universities in the United States. We consider the Wisconsin Institutes of Discovery (WIDs), a new public–private research partnership, and the New Badger Partnership (NBP), a proposal to give the University of Wisconsin-Madison significant autonomy from the state. Drawing on interviews, media reports, and archival material, we identify important similarities between two cases that appear, on the surface, to be quite different. Our particular interest is the deployment of what can arguably be labeled neoliberal solutions to address the contemporary (and often contradictory) challenges faced by public research universities. Why, we ask, should such similar solutions be proposed for challenges that are defined so differently? Only one of our two cases is narrowly focused on science, but both of them are intimately concerned with the context of university-based research. There is no question that this context is changing; if these changes continue to follow a broadly neoliberal trend, the consequences for scientific research and education will be profound.

While the abstract ideology of neoliberalism (see Mirowski 2011; Peck 2010) claims to offer clear solutions for each of the challenges faced by public education—solutions which all lead inexorably to the complete privatization of public institutions—such radical solutions are rarely enacted "on the ground." In this paper, we do not focus on the sweeping ideological goals of neoliberalism and its evangelists. Instead, we are interested in the real, concrete initiatives through which complex alliances of people and organizations, some with

clear neoliberal commitments and others seeking only practical solutions to practical problems, respond to the increasing withdrawal of federal and state support for research and higher education more broadly (Mirowski 2011: 23, 37). Some of these actors seek to benefit from the withdrawal of government support, while others strive to protect their venerable public institutions from irreparable damage. Our cases show the highly contingent and contradictory nature of neoliberalism in practice.

Whether or not people are ideologically motivated by neoliberal positions, their actions can result in the realization of neoliberal goals—what we refer to as neoliberalization (cf Peck 2010). In our analysis, two aspects of neoliberalization emerge as particularly relevant. First, neoliberalization involves *privatization*: the retreat of the state from the provision of social/public goods, and the expansion or proliferation of private (and generally for-profit) solutions to broadly social or public problems. Second, neoliberalization involves *deregulation*: the relaxation of state controls over various aspects of commerce (in a way that specifically enables greater private accumulation). These two aspects of neoliberalization are complementary but distinct—privatization involves the shifting of public responsibilities to the private sector, whereas deregulation involves the loosening of public constraints on private activities. Both aspects of neoliberalization are accompanied by a distinct rhetoric that celebrates the creativity and efficiency of the private sector (especially valorizing the profit motive), while characterizing state agencies as ponderous and state regulations as burdensome constraints on the ability of private enterprise to identify practical solutions and generate economic prosperity. By definition, the outcomes of neoliberalization are to be measured solely through instrumental market indicators—percentages of taxes reduced, numbers of jobs created, dollars of wealth accumulated—while any non-market measures of success—decreasing social inequality, vibrant intellectual creativity, long-term environmental sustainability or broad-based human fulfillment—drop out as insignificant.

2 Neoliberalism and Higher Education: Historical Context

Peck and Tickell describe neoliberalism as "a starkly utopian intellectual movement [that] was aggressively politicized by Reagan and Thatcher in the 1980s," later "inspiring and imposing far-reaching programs of state restructuring and rescaling across a wide range of national and local contexts" (Peck and Tickell 2002, p. 380). The roots of our account go back considerably farther. Interactions between universities and businesses in the United States, in various forms, date back more than a century and a half. However, the pushes and pulls of the present period are distinct. In the wake of the Second World War, while other economies coped with devastated infrastructures and decimated workforces, the US economy was uniquely strong and vibrant. At the same time, US higher education was reaping the benefits of US military success. The GI Bill offered new opportunities for US citizens seeking higher education, dramatically increasing access to colleges and universities. Enrollment over pre-war levels doubled in response to demographic trends and a growing emphasis on credentialism (Collins 1979; Cohen 1998, p. 182). Growth in enrollment was accompanied by increases in revenue. Research expanded in parallel, as US universities entered what some refer to as a "golden age" of higher education, fueled by unprecedented federal support for both education and research (Geiger 1993, p. 174). Although there were already a wide array of linkages between higher education and commerce at this time, and business practices were clearly beginning to influence academic research (Kleinman 2003; Kleinman et al. 2011), it was still possible to imagine that

universities constituted a realm of autonomous action—an ivory tower. Any anxiety at the time about the encroachment of commerce on education was far outweighed by growing concern over the military-industrial complex, another example of neoliberalization that represents perhaps the most famous "public–private partnership" of the past century.

By 1980, the US found itself in a very different position. Economic rivals had emerged from the rebuilt nations of Europe and Asia, and from newly developing powers in the global south. Certainly, concerns with US economic competitiveness predate the emergence of neoliberal policies, but, just as surely, those concerns were amplified by trade liberalization, a neoliberal policy that put the US into direct economic competition with countries across the globe. Higher education, which had in previous decades been promoted as a critical component of national defense (United States Congress 1958; Rudolph 2002), was now re-cast as a crucial contributor to economic competitiveness (e.g., NCEE 1983). Industry leaders promoted university-industry research collaboration while government officials grew increasingly aware that universities were an important source of intellectual capital to fuel economic development in high technology sectors such as biotechnology and information technology. Many public universities, such as UW-Madison, partnered with local and state government to subsidize new business-incubator "research parks" modeled after the clusters of successful electronics firms that developed around Stanford University and MIT during the height of the Cold War. In an era of otherwise decreasing government support for education, university administrators realized that portraying their institutions as engines of economic development could raise their institutional legitimacy in the eyes of both elected officials and voters.

With the presidency of Ronald Reagan, the funding environment for higher education began to look increasingly grim. The policies of the Reagan administration (1981–1989) were characterized by a deliberate and self-conscious reduction in government provision of social services and an increasing emphasis on the role of the private sector. Peck and Tickell (2002) characterize the 1980s as a period of "roll-back neoliberalism," in which neoliberal policies focused on the removal and withdrawal of existing services and regulations. The Clinton administration continued many of these policies. President Bill Clinton asserted in 1996 that the era of big government was over; federal deregulatory actions became institutionalized and widely accepted, and, in the wake of anti-tax policies, the fifty states faced, and continue to face, fiscal crises (Lyall and Sell 2006). This later period corresponds to what Peck and Tickell call "roll-out neoliberalism" with government withdrawal replaced by active intervention—the creation of new market mechanisms and "the active destruction and discrediting of Keynesian-welfarist and social-collectivist institutions" (Peck and Tickell 2002, p. 384). In this climate, state-level support for public universities has consistently declined, and public universities have commonly boosted tuition, sometimes substantially, to make up for the shortfall. At UW-Madison, a year of tuition/fees, room and board, and books/supplies cost about $7,000 in 1990; 20 years later, the cost in unadjusted dollars was more like $20,000 (Finkelmeyer 2010).

Faced with mounting fiscal challenges, universities have had to do more than raise tuition and *talk* about their economic value. Public research universities, in particular, have embodied the full scope of neoliberalization. As elected officials, business leaders and citizens increasingly call on public universities not just to educate citizens but also to play crucial roles in economic development, these institutions have responded by developing public–private partnerships and drawing on codes and practices from industry as part of organizational restructuring (Kleinman and Vallas 2001; Etzkowitz et al. 1998; Gibbons et al. 1994; Slaughter and Leslie 1997). In this context, as governments pull back from funding higher education, public universities have turned to "new business models" that

draw on business language and practices as a means to support institutions once adequately supported by state governments, but now starved of cash (Lyall and Sell 2006).

Broadly speaking, this is the environment in which the University of Wisconsin-Madison found itself when it sought to embark on two new and distinctly neoliberal initiatives. One sought to promote innovative and commercially relevant research by fusing the "best" of the academic and business worlds. The other sought to promote financial stability for the University of Wisconsin-Madison by employing more "business-like" tools in the administration and governance of the institution and adding a layer of distance between University and state governance. Both initiatives reflect a prominent neoliberal idea—that we need to create new "institutional hardware" that is insulated from regulatory or monetary policy changes (Peck and Tickell 2002, p. 389).[1] Drawing on several sources of data as well as our observations, gleaned from spending our working lives at the University, we analyze the meaning and significance of these developments. We consider the tensions and contradictions they reflect and speculate on what they say about the current historical moment for higher education.

Importantly, in what follows we are not suggesting that the different actors, whose projects we describe below, are neoliberals per se. In our research, we have found that a wide range of people and organizations deploy broadly neoliberal strategies and the distinctive rhetoric of neoliberalism. While some surely adhere to the tenets put forward by the intellectual progenitors of neoliberalism and draw explicitly on these ideological premises, most are simply seeking practical solutions to problems that have resulted from decades of decline in state and federal support for scientific research and higher education, moves that are surely consistent with the views of many neoliberals (see Peck 2010; Mirowski 2011). We believe it is more interesting to focus on rhetoric and action that is consistent with neoliberalism—neoliberalism in practice—than it is to assume that people and organizations are neoliberal ideologues in some consistent and coherent way. Thus, ours is not a story of neoliberals explicitly and self-consciously attacking and redesigning higher education in the image of some essential and homogeneous neoliberalism. Instead, we look at a specific institution of higher education and consider the ways in which individuals associated with it adopt languages and strategies consistent with neoliberalism to achieve their own goals. As such, we do not seek to contribute to an essentialist history of neoliberalism. There is no monolithic steamroller of neoliberal ideology here. We provide profiles of two episodes that reinforce the idea that neoliberalism is constructed by actors improvising in specific contexts in the face of varied but related crises and draw our attention to the ways in which this contextualized improvisation is both laden with interesting contradictions and generative of productive insights (see Peck 2010: 4).

3 Case 1: The Wisconsin Institutes for Discovery

In November of 2004, with Wisconsin's economic competitiveness on his mind, Governor James Doyle proposed a new institution on the University of Wisconsin-Madison campus for pursuing scientific research on medical technologies. As details emerged, it became clear that this new entity would entail a relatively novel set of social and research arrangements, organizational structures, physical facilities, and management strategies.

[1] But both initiatives also embodied certain contradictions that worked to undermine the neoliberal ideal as well as support it—by, for example, acknowledging the need for publicly funded knowledge production driven by non-market goals.

The idea, which the governor elaborated in later discussions with John Wiley, then Chancellor of UW-Madison, and Carl Gulbrandsen, the managing director of the Wisconsin Alumni Research Foundation, among others, eventually grew into a proposal to establish two research institutes: a public program, the Wisconsin Institute for Discovery (WID), and a private not-for-profit entity, the Morgridge Institute for Research (MIR), that would jointly promote cutting edge interdisciplinary science with concrete payoffs in the area of human health. The two independent, but integrated, research organizations would be housed in a single facility and collectively referred to as the Wisconsin Institutes for Discovery (WIDs).

Those who conceptualized the WIDs sought to draw on what they perceived to be the distinct advantages of public and private sector organization, policy, and management, as well as the innovative design of building space, to promote novel research relationships and, ultimately, revolutionary science. They hoped the new hybrid institutes would strengthen connections between the University of Wisconsin and state government, local communities, biotechnology firms, venture capitalists, and other private entities. To this end, the project was strategically sited near other prominent science and engineering buildings on the University of Wisconsin (UW) campus (with claims that it represented the "scientific hub" of the university), and a carefully designed array of more-or-less publicly accessible spaces was included in architectural plans from a very early stage. These spaces, collectively referred to as the Town Center, were intended to become a literal crossroads that would not only bring together students, faculty, and staff from all corners of the university, but also connect campus affiliates with citizens, entrepreneurs, and stakeholders from the wider community.

Although the public–private hybrid nature of the WIDs is unusual, many of its characteristics reflect the goals of contemporary university-based research institutes already articulated many times by theorists and policymakers (see Gibbons et al. 1994). Among the most prominent of the WIDs' explicit goals are fostering interdisciplinary collaboration, speeding the movement from bench to market and promoting collaboration across the boundary between the public and private sectors. The latter two goals are suggestive of neoliberal ideology, directly evoking the recent significance of commerce for university-affiliated research, and implying that new connections between public universities and private industry that decrease the "turnover time" of intellectual capital into productive and financial capital are both necessary and desirable (on the commercialization of modern science see, among others, Berman 2012; Mirowski 2011; Kleinman 2003). And, of course, the University of Wisconsin-Madison, like universities more generally, would certainly use private support to leverage whatever public funding it receives.

4 Privatization and Freedom Rhetoric About the Wisconsin Institutes for Discovery

Although the WIDs, modeled on similar initiatives under way at both public and private peer universities in California and Massachusetts, were explicitly referred to as an economic development engine for the state of Wisconsin (e.g., Yager 2010), the dominant discourse used by University and state leaders did not focus on competition. Instead, the founding of the Institutes was steeped in the rhetoric of freedom and flexibility. Despite the longstanding association of intellectual freedom with public research universities (Hofstader 1996; Metzger 1955), the "freedoms" associated with the Institutes were almost universally associated with its *private* component. In particular, the private portion of WID was seen as a way of avoiding public constraints on biomedical research, such as the

federal restrictions on stem cell research imposed under President George W. Bush and echoed by social conservative interests in the Republican Party across the nation in various state-level battles. Stem cells, in particular, were a touchstone for John Morgridge, the former CEO of Cisco Systems and one of the major donors on the project. According to then-Chancellor John Wiley, Morgridge was "really stung by the memory of having our state legislature debate periodically banning all stem cell research on campus… [and thought] it would be really prudent to have a private research arm" (6/1/10). Morgridge believed, according to Wiley, that

> one of Wisconsin's strategic disadvantages was that unlike any private university and unlike some public universities, we had no affiliated private research foundation. The importance of being 'private' being that it would be outside of the control of government (6/1/10).

Freedom from public constraints on science was only one of the important freedoms that state and University leadership expected to accrue to the Institutes' private research arm. Project leaders also expected major gains in administrative efficiency, and regularly said so in oral history interviews. Julie Underwood, Dean of the UW School of Education, who was involved in the early development of WID, and who had overseen the construction of a major new facility for the School of Education, noted that "You grow to appreciate the flexibility that the state takes away when you're part of a state building project" (8/31/10). Rose Barroilhet, who moved from the University's facility management staff to the Wisconsin Alumni Research Foundation to work on the WID project, pointed to specific advantages a hybrid institute offers: "University of Wisconsin would be able to leverage the nimbleness of the nonprofit organization, with regard to procurement, hiring, a whole bunch of other things. And then, the acceleration of science into [a] business technology model" (6/14/10). Here, Barroilhet goes beyond assertions of nimbleness, pointing to areas where private sector flexibility will be a virtue for the MIR. Michael Falk, part of the WARF senior management team and a key player in early discussions about WIDs, echoed Barroilhet's confidence that the private and hybrid characteristics of the institutes would lower administrative obstacles, claiming that "the Institutes can be a little more nimble and specific in terms of what it can do to help foster start-up development…" (8/12/10).

Often, the language of freedom, as well as words like "flexibility" and "nimbleness," were lavished on the new institutes without any specific details about the freedoms involved and the contexts in which flexibility and nimbleness would be an advantage. An article that appeared in the *Milwaukee Journal Sentinel* after John and Tasha Morgridge's critical donation of $50 million for the private side of the Institutes, expressed the common wisdom that "private dollars… come with fewer restrictions than state and federal funds. Basically, the university will have more flexibility to do what it wants with the private institute." Then-chancellor John Wiley was quoted in that same article using a phrase we heard frequently in oral history interviews: "The private sector is just more nimble." Wiley drew a direct comparison with public institutions, which, he said, "have a lot more process." And Tom Still, the president of the Wisconsin Technology Council, reinforced the view that government is rigid and business flexible, arguing from the perspective of economic competition that "[Wisconsin] can't be slowed by excess bureaucracy" (Twohey et al. 2006, p. 1A, 7A).

Although the theme of economic competition emerged occasionally in oral history interviews, it was far less common than positive comments about improved freedom and flexibility in the hybrid institutes. One possible explanation for this is that the Institutes were consistently presented as a fundamentally collaborative entity. Science at the WIDs was intended, from the beginning, to be collaborative and interdisciplinary, both with the

public and private institutes and between them. Furthermore, as illustrated by the prominent inclusion of the Town Center, the early leadership of the WIDs hoped that the institutes would form a bridge between the university and many outside constituencies, including private industry. In light of this emphasis on synergies and partnerships, the only remaining targets for competition were abstract competitors and other states. But these same competitors could be invoked as models. In 2004, for example, it was a California public referendum allowing for significant state funding of stem cells that was cited in Wisconsin Governor Doyle's very first announcement of the WIDs idea. It was also a prominent private California university, Stanford, which housed the research institute that served as the primary model for both the interdisciplinary and the public–private aspects of the WID's institutional and architectural design.

5 Case 2: The New Badger Partnership

In the fall of 2010, then University of Wisconsin-Madison Chancellor Carolyn "Biddy" Martin outlined a "new business model" for the university—the New Badger Partnership (NBP) (Martin 2010). Chancellor Martin, who succeeded John Wiley, proposed that the university be granted substantial autonomy from the state, including significant independence and flexibility on a host of fiscal and administrative matters. In particular, NBP called for permitting the UW-Madison to set market-based tuition, provide more financial aid, and adjust faculty compensation independently of state pay plans. In proposing to create such a new relationship with only one state-funded school and not all, the NBP also called for substantially differentiating and distancing UW-Madison, the state's flagship university, from the other colleges and universities in the Wisconsin system. Chancellor Martin's rationale for this initiative focused on the fiscal relationship between the University and the state. Since the mid-1970s, state contributions have comprised a smaller and smaller percentage of the UW-Madison's budget, shrinking from over half of the budget in 1973 to below 20 % in 2011 (Lyall and Sell 2006: 37; UW Office of the Provost 2011: 64). The University of Wisconsin's experience is not unique in this regard. The last quarter of the twentieth century saw a decline in state support of public universities by an average of over 25 %; declining support occurred in 47 of 50 states (Lyall and Sell 2006: 10).

The New Badger Partnership challenged a diverse array of interests and required legislative approval at several levels, offering multiple veto opportunities. Although then-Chancellor Martin expressed early confidence that the stars were aligned to gain legislative approval for the high profile initiative, the NBP quickly ran into trouble on several fronts. The newly elected Governor, Republican Scott Walker, agreed to insert the NBP into his budget, but legislators in both parties found reasons to oppose it. This was an extraordinary demonstration of bipartisanship at precisely the same time when public concern over other parts of Walker's budgetary agenda—especially a "budget repair bill" which stripped most public-sector unions of the right to organize and negotiate—resulted in the largest and longest-sustained protests in the state capital since the Vietnam War era (Davey 2011; Nichols 2012). Republican State Senator Sheila Harsdorf noted that "There's quite a bit of consensus, or there's quite a bit of interest, in keeping the System together at this time" (Quoted in Ziff 2011). During a time of notable political rancor and public demonstration in the very same city as the University, opposition to the NBP was a rare point of agreement among Wisconsin legislators. Opposition from several fronts within the University was also substantial (and will be discussed below). Indeed, when Wisconsin

Governor Scott Walker signed the state's budget into law in late June 2011, the New Badger Partnership was not part of the law (although several key provisions of the NBP, such as the ability of the University to reconfigure its internal labor structure, were passed separately). Perhaps sensing the demise of her proposal, Martin accepted the presidency of Amherst College just days before the budget bill was signed.

6 Deregulation and Competition Rhetoric About the New Badger Partnership

Despite its failure to be enacted as a whole, the creation of the NBP and efforts to promote it shed important light on an initiative that would have contributed to the neoliberalization of public higher education in the United States. Although it was not framed in terms of deregulation, the NBP essentially proposed a withdrawal of state oversight from several core aspects of university governance. Perhaps surprisingly, though, the rhetoric of freedom that so obviously colored discussions about the WIDs was far less prominent in discussions about the NBP. In its place was a pervasive rhetoric of competition. Chancellor Martin claimed from the beginning that the NBP was necessary because "Higher ed, especially research universities, is increasingly market driven and increasingly competitive as a sector" (quoted in Finkelmeyer 2010). In comparison with other state agencies, she argued that UW-Madison "operates in a very different environment—one that is increasingly market-driven" (Martin 2010).

Many of those who opposed the NBP were quick to adopt Chancellor Martin's rhetoric of competition. The notion that UW-Madison was engaged in more intense competition with other universities, and therefore required unique administrative freedoms, did not sit well with leaders from other campuses of the University of Wisconsin System. Richard Wells, Chancellor of the University of Wisconsin-Oshkosh, captured the position of many of those affiliated with the non-Madison UW campuses. Wells argued that Madison's departure from the university system would make it the "toughest competitor" for the other UW campuses, and that this form of competition would not serve the needs of Wisconsin citizens:

> Should Madison break away from 12 other four-year universities, 13 two-year colleges, and UW-Extension that compose the system, the Wisconsin mission of effectively, efficiently, and cooperatively serving the educational needs of all the citizens of the state will be severely compromised (Wells 2011).

Strikingly, Wells and many others opposed the NBP but embraced many of the deregulatory policies it entailed. Making a rhetorical shift from competition to freedom, Wells and others argued for granting the "flexibilities" sought by Chancellor Martin to all of the UW campuses. This, Wells contended, would allow all of the campuses in the UW system to "more effectively and efficiently" obtain funding and to produce educational programs that would allow graduates to "recharge and retool our economy and communities" (Wells 2011). In essence, many of those who opposed the NBP effectively embraced the neoliberal terms of discussion, but resisted the designation of UW-Madison as a unique participant in the higher education market.

Among the opposition, even those who did not accept the virtues of competition adopted the language of competition in their attempts to emphasize negative aspects of the NBP. For example, a group of UW-Madison faculty who opposed the NBP attacked the chancellor's proposal for being "elitist and separatist," and worried that the NBP would weaken the University's commitment to the citizens of Wisconsin. They primarily objected

to the proposal on the grounds that the NBP seemed likely to produce "bureaucratic inefficiencies and political competition for scarce resources from the State with other UW campuses" (Bell et al. 2011).

7 Different Cases, Same Problems?

The two cases we have described, though situated in the same institution, have obvious surface differences. First, they seemed to arise under different circumstances. Although the plan for the WIDs was developed during a time of some fiscal strain, it appears to have been a pro-active plan, opportunistically pooling public and private money to advance the University's core research mission. The NBP, on the other hand, was launched during a time of great budgetary tumult, and was correspondingly framed as a response to that turmoil. Second, the two cases are characterized by different rhetorical emphases. Although both contain references to competitiveness and freedom from regulatory constraint, the WIDs emphasize the latter, while the NBP emphasizes the former.

Despite these differences, both cases fit comfortably within the overall "roll-out" neoliberalization trend, which involves, among other things, devolved governance and public–private partnerships (Peck 2010: 23). At the WIDs, the hybrid relationship between a public research institute and a private non-profit research institute embodies, with unusual clarity, more widespread attempts to marry business practices with academic research facilities, justifying the latter through appeals to the former. In fact, it seems to cast the entire scientific research process along a continuum that naturally leads from "bench to market" rather than from bench to "public good" or to "citizen understanding." Chancellor Martin's own categorization of the NBP as a "new business model" for UW-Madison is a more conventional reflection of this same trend. Under this vision, a university is less a unique space for the interrogation of conventional wisdom and the production of new insight, and more a locus of competition for both high-value talent (both high-salary faculty and premium-tuition students) and the competitive resources to support them (in the form of federal grants and private gifts). And in both cases, leaders actively promoted a new initiative's potential to help the University serve as an economic development engine for the state of Wisconsin, as a generator of new patents (helping to subsidize the university), an incubator for new businesses (internalizing the previous "research park" idea into a campus "hub"), a magnet for new federal and venture capital investment (underwriting the business risks of those new firms), and a producer of a steady stream of highly skilled labor (keeping the successful firms from fleeing to more desirable regions and larger urban realms).

Perhaps the most compelling argument for the deep similarity of the WIDs and the NBP, however, is the uncanny way in which two apparently different initiatives encountered the same problems. In the following section, we briefly recount how opposition to both initiatives focused on two flashpoints: the lack of administrative transparency and openness, on one hand, and the somewhat clumsy efforts to redefine the labor structures that specify the employment of faculty and staff, on the other. Through stakeholder reaction, these two flashpoints reveal the redefinition of public responsibilities and public roles in ways consistent with neoliberal rhetoric. The first battle centered on whether government norms of openness or more secretive private sector orientations should characterize decision-making, while the second centered on whether traditional public civil service and union protections should be afforded university workers or whether private sector norms should govern worker-management relations.

8 Controversy About Openness and Public Responsibility

In our discussion about neoliberalism and the rhetoric of freedom, we noted the existence of a competing discourse, in which freedom is closely associated with the intellectual openness of an academic institution, public or otherwise. This discourse, which reflects a highly idealized Mertonian notion of academic culture, emphasizes intellectual freedoms rather than administrative freedoms, and celebrates university science as more free than private industry (Merton 1973; Kleinman 2003; Kleinman and Vallas 2001). Although this ideal of freedom was missing from the rhetoric that accompanied the founding of the WIDs and the proposal of the NBP, it arose in oral history interviews about the WIDs and in statements of those who opposed the NBP.

During our oral history interviews about the founding and early evolution of the WIDs, multiple interview participants described situations in which decision-making processes governed by the Wisconsin Alumni Research Foundation (WARF) operated according to a set of rules uncommon in universities. These people pointed to secrecy in hiring processes, the impatience of WARF staff with cumbersome processes of faculty and staff governance, and the ways in which final decisions reflected the unilateral prerogative of management. Donald Miner, who was Wisconsin's Assistant Vice Chancellor for Business Services prior to his recent retirement, was one of several people to express anxiety about the unanticipated consequences of more "business-like" administrative processes in the new institutes. Miner, who helped construct the agreement that enabled a public and private entity to occupy the same building, described how he raised his concerns in discussion with a senior WARF staff person:

> we're dealing with two different cultures. You're a top down culture. Everybody is used to you as the [leader] of a relatively small organization that has to be very protective of the patents and licenses it's trying to maintain in the marketplace, and you are calling a lot of shots and making decisions…. On the university's side, it's a wide-open culture…. the administrative part of the university is about creating an environment that allows for the discovery and dissemination of knowledge. And you can't order people to do that. That just happens…. I don't want to kill that. That's what creates knowledge (9/1/2010).

Miner's concern is striking in part because of his role as an administrator responsible for the University's fiscal operations and, to some extent, its collaborations with the private sector. Someone in Miner's position would be acutely aware of the administrative freedoms available in the private sector, yet he still identified strongly with the normative ideals of academic freedom and openness.

Scientists involved in the planning of the WIDs voiced similar concerns. Jo Handelsman, a senior scientist who was deeply involved in several WIDs planning committees, drew the following conclusions:

> this university has evolved over 150 years to be a pretty effective entity and a pretty creative one….[A]fter evolving a way of doing business for so long that is very academic, it's very based on the value of research to society, the value of basic research, all sorts of academic values that I don't think are necessarily even apparent to the people who have been at this university. It just seems dangerous to suddenly let people who have been focused on patenting and licensing and discoveries leading to spin off companies and all the things associated with the process that WARF does, to have those people suddenly making decisions about what's supposed to be an academic institute. And like I said before, if we wanted to call it a private WARF institute, I would have no problem with them calling the shots, but the fact that it's being billed as a university institute and the fact that the hiring is of university professors, it just seems really odd to have people who aren't university-based driving the agenda that aggressively (8/6/10.)

Openness and transparency were also consistent themes in the opposition to the NBP. Members of the University of Wisconsin Regents publicly criticized Chancellor Martin for lack of transparency in developing the NBP proposal (Krueger 2011). The Teaching Assistants Association, the labor union of graduate students, also objected to "the non-transparent and undemocratic process by which the New Badger Partnership was designed" (TAA 3/21/11, Accessed June 24, 2011). And when it became apparent that the NBP initiative stood little chance of passing the state legislature, Republican State Senator Dale R. Schulz suggested that future efforts to transform the university's administrative process should follow a "much more transparent process" (quoted in Ziff 2011).[2]

9 Controversy About Labor and Public Roles

Though the concerns about transparency were intense at times, they were far less heated, and less personal, than the controversies that arose around the work and labor structures associated with the WIDs and the NBP. These controversies extended from the more privileged echelons of the faculty to the rights and salaries of custodial staff and food service workers. Jo Handelsman, who neatly encapsulated the broader anxiety about intellectual openness in the WIDs, also gave voice to the incredulity and suspicion that some faculty felt when discussing the tenure system with other, non-faculty leadership of the new Institutes. As Handelsman recalled:

> Perhaps the most disturbing moment is when one of the employees of WARF came to a meeting and we were talking about the Institutes and she said, "Well, can't we just throw out all the old models and kind of come up with something completely new?" …I was pretty cynical about the idea of completely throwing out the old model and getting the faculty senate to approve and she said, "Well, we're WARF, we have deep pockets, we can do whatever we want." And I said, "change the tenure process?" And she said, "Sure! People go where the money is" (8/6/10).

Although Chancellor Martin's proposal for the NBP never included any revisions to the tenure process, there was enough faculty anxiety about the redesign of UW-Madison's personnel policy that Martin felt obliged to clarify that "academic freedom, tenure and shared governance… are fundamental to this university," and that the new administrative board discussed in the proposal would not "have the ability to change or challenge those protections" (Martin 2011). Such reassurances of academic freedom came at precisely the same time as the Governor's other proposed budget measures—measures that restricted other forms of workplace freedom then enjoyed by state workers, from professors to custodial staff, including the freedoms to organize, unionize, and collectively negotiate the conditions of their labor.

While the collective concern about tenure focused on hypothetical changes, a far more concrete labor dispute arose over food service in the WIDs. Late in the construction of the new institutes building, WARF elected to work with a private company for management and oversight of the food venues in the Institutes' building, rather than contracting with the university food service vendors. Food service workers at the University of Wisconsin were unionized; had the new institutes been a fully public arm of the University, rather than a public–private hybrid, WIDs' leadership would have been obligated to contract with

[2] Interestingly, these concerns over transparency in the NBP proposal echoed similar concerns over process and participation in a previous effort on the part of Chancellor Martin to reorganize the University of Wisconsin research administration to better compete for and administer large, multi-institution, cross-disciplinary government research grants for cutting-edge science.

unionized food service providers. Not surprisingly, local union members and supporters saw WARF's decision to work with private contractors as a dangerous use of the private half of the WIDs to circumvent University obligation to the unions. WARF, clearly concerned about bad publicity and wishing to avoid public controversy, responded to public concerns with a vaguely worded press release:

> WARF and Wisconsin Union Food Service held good faith discussions about this unit servicing the food venues. However, for a number of reasons, the negotiations did not produce an agreement, convincing WARF to initiate a competitive food service selection process (Wisconsin Alumni Research Foundation 2010).

The language of competition, absent from most other discussion of the WIDs, serves as another reminder of this neoliberal theme.

Labor disputes associated with the WIDs and the NBP may offer the most complete representation of neoliberal tropes found anywhere in these two cases. Activist groups repeatedly responded to the language of competition with the language of privatization. Groups such as the Student Labor Action Coalition lambasted WARF's decision, which, the group argued "will take jobs typically represented by [the local union chapter]…and hand them over to a private company paying its employees poverty wages" (Student Labor Action Coalition 2010). At a protest staged the day the Wisconsin Institutes of Discovery building opened, Randy Brink, president of the local union chapter, told the assembled protesters that "the university is growing and leaving us behind, and privatizing our jobs as they grow" (quoted in Kibiloski 2010). Almost identical language was used to attack the NBP, which representatives of the Teaching Assistants' Association (the labor union of UW-Madison graduate students) called "a blatant attempt to privatize public education in Wisconsin" (Teaching Assistants' Association 2011).

10 Discussion and Conclusion

Scholars who discuss the commercialization of science, or of academia more generally, define their work in different ways and focus on different phenomena. Among the most common research is that which explores direct and formal university-industry research relationships—agreements by university scientists to do research for companies. This work either highlights the threat that university-industry relationships pose to the traditional norms of higher education (Shenk 1999; Krimsky 2003; Washburn 2006) or stresses the benefits to universities and the economy that such relationships may produce (e.g. Etzkowitz et al. 1998). Some work, instead, investigates changes in the structure and organization of higher education and academic science that have resulted as institutions of higher education move closer to the market (e.g. Slaughter and Leslie 1997; Etzkowitz et al. 1998; Owen-Smith and Powell 2003). Finally, some recent scholarship has begun to look at the ways in which the broadest elements of academic culture and administration have become commercialized (e.g. Tuchman 2009; Kleinman 2010).

Our work, which begins with concrete changes in structure and organization but ultimately points to pervasive cultural changes, is closest to this last category. Instead of focusing narrowly on commercialization, we emphasize a broader discourse that celebrates elements of neoliberalism and a trend toward neoliberalization, the real-time, ad hoc and often contradictory implementation of neoliberal goals. We have described two major initiatives at the University of Wisconsin-Madison and used multiple data sources to show how the structures and discourses associated with these initiatives represent neoliberalism

in practice, in that they are consistent with a broadly neoliberal restructuring of the relationship between government and commerce. This is true despite the overt differences between the two initiatives. They differ in focus and scale: the WIDs focus narrowly on one type of innovative science, at the level of two small to mid-sized research institutes, while the NBP addresses institutional governance and inter-institutional relationships at the level of the university and the state. They also differ in visible success: the WIDs were formally opened in December of 2010, 6 months before the NBP as a whole died in the Wisconsin state legislature. Perhaps most importantly, though, they differ in justification: although both were pitched as economic development engines, the NBP was clearly justified in terms of fiscal need and fiscal crisis, whereas the WIDs were portrayed as a proactive effort to fulfill the University's core research mission in a new and better way. Yet both cases fit within the established rhetoric of unfettered economic competition and neoliberal governance, and both, when examined closely, attempted to redefine roles and responsibilities in ways that provoked remarkably similar response.

In the subsequent months, critical public attention has been focused more broadly on the neoliberalization processes of corporate subsidy and public labor restructuring in Wisconsin, as Governor Scott Walker faces an historic recall election that is being seen as a national referendum on his party and his policies. Over the same time, as the University has adjusted to a new (interim) Chancellor, David Ward, the controversies over the WIDs and the NPB have taken on a new shape. The labor practices within the WIDs have faded from public controversy. At the same time, one of the most controversial aspects of the NBP—the opportunity to build a new personnel system specifically designed for University knowledge-production—has been granted and regularized into a year-long process of review committees and reports, through the uniquely democratic workplace structures of faculty and staff administration and governance. Contradictions continue to abound.

How do universities justify the establishment of new practices and structures consistent with neoliberalization? Sometimes an initiative is advanced as a response to features of the larger policy climate, such as resource scarcity (in the case of the NBP) or burdensome government restrictions (in the case of the WIDs). Sometimes an initiative is framed more-or-less openly as an attempt to emulate successful innovations elsewhere, particularly at private universities. This is clearly the case with the WIDs, which had at least one explicit model—the Clark Center at Stanford. And, as we discussed in the introduction, neoliberal initiatives can be promoted as a means for universities to become the economic powerhouses that contemporary political discourse increasingly demands.

We suggest that something different may be going on: neoliberalism has become sufficiently pervasive that the solutions it offers effectively precede the problems. In other words, instead of neoliberalization being a timely strategy for the specific problems facing public universities today, it is an omnibus solution waiting to be employed when any opportunity arises, helping to define the "problems" of the university in the first place. The essential notions underlying neoliberal ideology—that markets, competitiveness, and state down-sizing are virtuous—have become social commonsense (Peck 2011). This would explain why, in the case of the NBP and the WIDS, two very different sets of circumstances gave birth to initiatives that attempted to change the University of Wisconsin in such similar ways. The challenges that gave rise to the NBP and the WIDS, including the need to stay on the cutting edge of research amid fiscal shortfalls and diminishing public support, are hardly new. Neoliberal solutions that go under rubrics such as "public–private partnerships" have become the standard tools not only for solving old problems, but for defining new ones—problems that in other eras might have been solved, or even defined,

very differently. Under such circumstances, people who do not self-identify as proponents of neoliberal ideology are drawn, by default, toward neoliberalism in practice.

It is perhaps not surprising that public–private approaches, such as the two outlined above, have played such a prominent role in the neoliberalization of UW-Madison and other institutions of higher learning. Such solutions are not pure incarnations of neoliberal ideology. They maintain a rhetorical and substantive commitment to the public good, as well as a willingness to draw on the largesse of the state, incorporating many features of existing public institutions even as they dismantle others. As Peck and Tickell suggest, "'actual existing' neoliberalisms are always (in some way or another) hybrid or composite structures" (Peck and Tickell 2002, p. 383; see also Peck 2010). In the case of the WIDs, the symbolism is particularly rich: an institutional hybrid is housed in a physical hybrid structure—a building divided into separate spaces for public and private institutes, both of which straddle the Town Center, a space that is not only administratively but literally open to the public.

It is precisely the complicated, contradictory, and hybrid character of what Peck and Tickell call "actually existing neoliberalisms," and what we have called neoliberalism in practice, that should prompt reflection. Academic writing on neoliberalism tends toward either trenchant criticism (e.g., Mirowski 2011) or breathless praise (Gibbons et al. 1994). Yet no concrete instance of neoliberalism in practice is likely to fulfill all of the threats and promises of neoliberal ideology. Although there are valid political and ethical reasons to oppose neoliberalization, we believe that there is much to gain from careful empirical consideration of neoliberalism in practice. As illustrated in this paper, "actually existing neoliberalisms" are improvised in political and historical context. Although they share certain hallmarks of neoliberal thought, each is a distinct hybrid entity, and many are crafted in response to widely acknowledged and very real problems. Neither the costs nor, dare we say, the opportunities are immediately obvious. Does the infusion of business administrative norms and practices inevitably pose a threat to an academic culture that prizes openness? Here, we will need to be specific about the norms and practices with which we are concerned. Are the business norms and practices that might be applied to university research different than those that might be drawn on in the administration of hiring, firing, and purchasing? Are administrative secrecy and top-down authority always, everywhere problematic? Could they lead to more innovative science? If so, with what costs? Is the nimbleness and flexibility that advocates for neoliberal programs speak of simply code for a loss of the bureaucratic protections offered by formal civil service? Might there be contexts in which this flexibility could provide the foundation for greater worker success and satisfaction? Can neoliberalization revitalize and strengthen academic science, or is it, as Harvey comments, primarily a "political project to re-establish the conditions for capital accumulation and to restore the power of economic elites" (Harvey 2005, p. 19)? The answers to these questions are neither easy nor obvious, but they are questions to which we must attend using analytically sharp eyes and unusual care as we confront a world of "actually existing neoliberalisms."

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