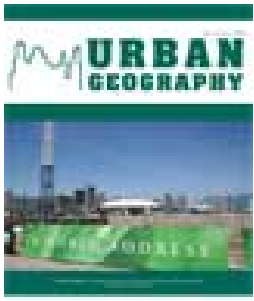


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The limits of university regionalism

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ABSTRACT

As producers of urban knowledge and urbanizing actors in their own right, universities play a vital role in identifying the projects, processes, and agents involved in constructing the “region in itself”. While academic and urban leaders in cities with one or two universities can open dialogues about citywide collaborations, such strategies are significantly more complex when scaled to extended global metropolises where provosts and presidents must vie for attention in a crowded governance arena. This paper critically examines universities’ ability to, and strategic interest in, facilitating the process of metropolisation: leveraging city-regional spatial imaginaries to transcend parochial territorial interests and generate modes of urbanization and collective action constitutive of a “region for itself”. An empirical analysis of the New York metropolitan area highlights the spatial contradictions and political tensions unfurling as universities create new (post-) metropolitan identities and inform decision-making at various scales, the limits of university regionalism.

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Universities, metropolisation, and the regional question

We have entered an era of regional urbanization in which distinctions between the urban and regional are collapsing (Soja, 2015). Whereas classic accounts discretely theorized “the urban” as a site of collective consumption and “the region” as the sphere of economic production and spatial divisions of labor (Castells, 1977; Massey, 1979), the polycentric, globally integrated nature of contemporary urbanization – alongside the hybridization of urban, suburban, and regional concepts (Phelps & Wood, 2011; Schmid et al., 2018) – defies the sociospatial functionalism of such neat binaries. Regional urbanization produces a shifting twenty-first-century “exopolis” (Soja, 2000) that, as Roy (2009, p. 872) evocatively states, “makes a fool of census jurisdictions, of the mappings of city and suburbs, and confounds easy narratives of regional change”. Read against this background, the process of metropolisation provides an intriguing analytical lens to examine what urban regions are and how they are rendered visible, experienced, and governed.¹ In this paper, I am concerned with interrogating the role, capacities, and limitations of universities in the process of “reconfiguring the city at the regional scale” as producers of both urban space *and* urban knowledge.

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The malleable nature of regional constructs elevates the importance of identifying and understanding what Paasi and Metzger (2017, p. 27) refer to as “ways of being/ becoming a ‘region’” or the “modes of regionality” internalized within the urban process. This rests not only on looking at the potential of regionality when conceptualizing and addressing the challenges of urban agglomeration/expansion but on foregrounding political questions regarding who mobilizes the institutional and imagined spaces of regional urbanization and to what ends. Here, Deas and Stephen (2017, p. 7) have called for heightened attention to be paid to the regional dimension of even ostensibly non-regional spaces of governance and territoriality – including those “in which explicit regionally based organizations are absent or in decline, but which nevertheless exist as containers for social, economic, and political processes that are intrinsically spatial”. This, of course, is a significant direction for discussions of metropolisation, both because it suggests the need to integrate urban and regional concepts in rigorous terms, and forces us to look beyond the traditional frames of formal city-regional collaboration (i.e. intergovernmental caucuses, regional governance authorities, economic development corporations, metropolitan planning agencies. . .).

Importantly, (city-)region-building can pivot as much on the machinations of non-state actors (Harrison, 2014) or the creation of latent “spatial imaginaries” – understood as mental representations of space that condition political practice and structure everyday life (Boudreau, 2007, pp. 2596–2597) – as it does forging a cohesive urban fabric or formal governance arenas from the messiness of extended urban agglomerations. Hincks, Deas, and Haughton (2017) have pointed to region buildings reliance on the spatiotemporal construction of “soft spatial imaginaries” that gain legitimacy, and may even achieve a degree institutional and rhetorical permanence, through an invocation of “real geographies” and “real economies”. Developing our understanding of metropolisation and the production of, and relationship between, the divergent regionalisms – economic, political, administrative, ecological, lived. . . (Parker & Harloe, 2015) – is especially pressing when conceptualizing a potential shift from the construction of a “region *in itself*” (via identity formation, analyzing territorial processes, etc.) to a “region *for itself*” (where some sort of collective agency and strategic direction emerges) (Paasi & Metzger, 2017; Robertson, Dale, Olds, & Dang, 2016, p. 3–4). But while the regional scalar restructuring of urban territoriality appears as a pervasive global tendency, reifying city-regions as coherent spatial and political units hides a multitude of sins: downplaying the complexities of managing intra-regional interests and the persistence of sub-regional competition and fragmentation (Henderson, 2017; Keil & Addie, 2016).

It is in this light that I turn to universities as sites of, and institutions with the capacity to drive, metropolisation – including their potential to galvanize a collective sense of urban regionality and generate the multi-scalar conceptual and policy interventions required by our contemporary urban condition. Universities, particularly large multi-faculty institutions, house deep expertise across a broad field of specializations that struggles to be matched by other urban actors (Hughes & Kitson, 2012). Despite certain localized territorial ties (connected to funding and governance regimes), both public and private universities have the ability to transcend the jurisdictional snares of the “territorial trap” (Agnew, 1994) in terms of their spatial imaginaries and institutional actions (Addie, 2017a; Moisió & Kangas, 2016). As an analytical problematic, metropolisation compels us to critically examine the privileged position now afforded to

universities in urban and regional development agendas (e.g. Etzkowitz, 2008; Foray, 2014) by questioning their ability to, and interest in, operating as city-regionalizing actors. My argument is that universities are vital players in the formation of post-metropolitan space (material and cognitive) through their material and institutional presence *and* through the production of urban knowledge. In other words, university-led metropolisation does not only hinge on the creation of material, institutional, and symbolic forms (Meijers and Cardoso, this issue): it requires the creation and mobilization of regionalized urban knowledge and an architecture of urban knowledge production to reconfigure the city at the regional scale.

The following analysis is situated at the intersection of debates surrounding the governance of city-regions and the politics of urban knowledge. Through a case study of the Greater New York region and the transformations illuminated by the 2011 “Applied Sciences NYC” competition, I demonstrate that the dynamics of university spatiality disclose essential avenues and engrained obduracies through which regionalized urban knowledge/space is produced. In doing so, this paper extends existing theoretical approaches to the regional question as it relates to universities (Harrison & Turok, 2017), and deepens our understanding of the under-researched role of higher education in global city-regions with multiple universities.

After reviewing current debates around university regionalism and detailing the parameters of the study, the remainder of this paper scrutinizes: (1) the post-metropolitan roles being ascribed to universities across the region; and (2) the spatial imaginaries adopted and mobilized by higher education institutions (HEIs) themselves. The empirical analysis is based on 42 semi-structured interviews conducted with university leadership, academic faculty, urban and regional planners, and public officials across the Greater New York region between 2014 and 2016. Research work was undertaken as part of a project investigating how universities respond to, and remake, post-metropolitan geographies in an era of global urbanization. Interviews focused on exploratory questions examining universities’ strategic orientations, spatial imaginaries, and terrains of engagement to uncover where and in what instances, they participate in the production of city-regional space and knowledge. Interviews were triangulated with desk-based research of institutional websites, municipal and regional plans, and reporting in newspapers and trade publications, as well as a systematic content analysis of university strategic planning documents (the findings of which are detailed in Addie, 2018). The paper concludes by assessing the ability of universities to galvanize the construction of a citified “region for itself”, and in doing so, brings the limitations of university regionalism into focus.

University regionalism

Over the past four decades, deep political economic rescaling of urban governance has combined with extensive sectoral re-regulation of national higher education regimes to profoundly unsettle normative understandings of university territoriality at a global scale. Universities are transforming, and being transformed by, supra-regional projects (e.g. the EU, ASEAN) that aim to address economic, political, and cultural challenges within and beyond the purview of nation states (Moisio & Kangas, 2016; Robertson et al., 2016). At the same time, the intersection of increasingly regionalized national

economies and the ongoing urbanization of knowledge-based capitalism has recalibrated the social and spatial expectations placed on universities at the sub-national level in terms of economic impact, skills training, capacity-building, networking, civic leadership, etc. (Cochrane & Williams, 2013; Drucker, 2016; Goddard, Hazelkorn, Kempton, & Paul, 2016; Harkavy, 2006; Pugh, Hamilton, Jack, & Gibbons, 2016).

An extensive body of literature now examines the diverse entrepreneurial, engaged, and developmental regional roles adopted by and attributed to (predominantly) European and North American universities (see Asheim, Lawton Smith, & Oughton, 2011; Uyarra, 2010). While variations between national higher education systems, regional policy frameworks, and types of HEI (with varied missions and managerial structures) effect concrete articulations, universities have been re-conceptualized as distinctly “territorial actors” (Lawton Smith, 2007); deeply imbricated into the fortunes of place in terms of their institutional presence and capacity to reshape the built environment (Cochrane, 2018; Perry & Wiewel, 2005). Reframed roles – both assumed and ascribed – now advocate for universities to take greater responsibility for their urban and regional environments, whether as an economic engine driving regional innovation (Etzkowitz, 2008; Pugh et al., 2016; Tripp, Sinozic, & Lawton Smith, 2015) or as an “anchor institution” stabilizing or revitalizing urban communities (Birch, Perry, & Taylor, 2013; Ehlenz, 2018). Universities have long served as place-making and city-building agents with deep and necessary relations to their regions (Cochrane & Williams, 2013, p. 53; Diner, 2017; Haar, 2011). But now, in the face of shifting local expectations and broadened global mandates, they are increasingly identified “as key transformative nodes in a globally networked and market-dominated world, carrying messages of competitiveness and innovation as well as actively delivering technological change through forms of knowledge transfer” (Cochrane & Williams, 2013, p. 46). Whether by pursuing publicly assigned mandates or their own self-interest, universities are positioned to benefit urban development and competitiveness through what Benneworth, Charles, and Madanipour (2010, p. 1616) term a “mode of urban engagement” – a combination of practices including: (1) creating new or improving existing, knowledge-intensive spaces; (2) contributing to the quality of urban governance (notably through involvement in city and regional planning processes); and (3) improving cities’ place branding and inter/national profile.

Despite shifts in institutional expectations and an increased interest in regional spatial practice, Harrison, Smith, and Kinton (2017, p. 1022) note most regional university scholarship assumes “the region” to be a pre-given territorial container across which institutional relations are played out and not the subject of critical attention in its own right. As a rejoinder, in a series of papers examining higher education in the United Kingdom, they identify new sub-national university consortia carving out relational regionalisms on top of the antiquated top-down territorial foundations of spatial Keynesian higher education policy (Harrison, Smith, & Kinton, 2016, 2017). Underpinning this shift is a recalibration of engagement from institutional obligation spurred by top-down state-policy to “coalitions of the willing” which enact relational region-building processes as universities pursue their own self-interest (2017, p. 1023). “Archipelagic” arrangements emerge as privileged research and equipment sharing consortia “[strive] towards stronger institutionalized forms and deeper-rooted regionalism through a process of layering up [doctoral training centers], and research funding

along their more exclusive lines” (2016, p. 933). And more informally, “de facto regionalisms” are generated as a byproduct of institutional spatial practice. These are therefore not aspirational models, but rather reflect a new geography of sectoral competition that is primarily animated by loose institutional financial considerations instead of sustainable and grounded public policy.

This transition from territorial forms of “old regionalism” towards variegated relational regional arrangements is evident across city-regions in a variety of national contexts. In Canada, Addie, Keil, and Olds (2015) observe universities occupying a central position in the development of both new post-metropolitan structures and knowledge economies. In addition to demonstrating a renewed interest in the university as a downtown city-builder, the changing geographies of HEIs in the Greater Toronto Area reveal two cycles of university and college expansions: the first opened throughout Toronto’s inner suburban municipalities during the 1960s as a project of spatial Keynesianism providing education to Fordist workers and their children; the second constituted by a post-2000 wave of smaller, predominantly specialized campuses spread across southern Ontario geared towards high-end economic sectors (ibid, p. 41). Balducci and Fedeli illustrate comparable spatial patterns in the Milan region in Italy, where the interactions between the internal logics of the Italian university and external urban and social dynamics have proved instrumental in the generation of post-metropolitan forms and the (re)production of forms of “cityness” and “urbanity” across regional space (2014, p. 49). As a result, they argue the urban university acts in varying ways in both the central city and wider urban region “as a complex ‘urban’ subject on multiple scales” from directing influence on political life in Milan to serving as a strategic resource in the development of an emerging regionalized knowledge economy (ibid, p. 62). Tomaney and Wray (2011) capture the tensions that emerge between such local, regional, and global imperatives as they develop within Australian university regionalism. Their investigation of Monash University in Melbourne illustrates how the University’s suburban satellite campuses (originally setup to open access and educational opportunities across the metropolitan area) have been institutionally and spatially repositioned within a global knowledge economy by planned and emergent polycentric city-regional growth.

Such studies illustrate that the symbiotic ties between higher education restructuring and post-metropolitan development have distinct ramifications both for the university and for the relational formation of urban space in global contexts (Addie, 2017a). Universities, though, are also sites of knowledge production where thinking about the city and region is developed and assessed in practical and conceptual terms (see Acuto, Parnell, and Seto, 2018). Universities do not hold an a priori privileged position relative to claims of authoritative urban expertise (Addie, 2017b; Schafran, 2015). However, the ways in which they engage urban and regional questions – as institutional actors in their own right and critical forums for researchers to pursue and apply urban knowledge – is an important dimension of metropolitanisation because of their ability to inform our understanding of regional urbanization and the formation of concrete interventions to address contemporary urban issues.

Paasi and Metzger (2017) capture the two-fold challenge that emerges when delineating the “subject of regionality” in this setting. On one hand, there is a need to pay close attention to when “people ‘out there’ (e.g. activists or policy practitioners) are

ascribing regionality, analyzing why ‘they’ treat/define something as a region in practice, and looking at what difference does this make” (ibid, p. 27). On the other, there is the somewhat uncomfortable task of turning this appraisal inwards onto the academic process of spatialized knowledge production. The politics of urban knowledge no longer simply hinges on the perceived importance of the city or region for the academic researcher, but on the value urban and regional actors place on the research itself and, crucially, “on how these concerns are mediated by the university as a site of knowledge production” (May & Perry, 2011, p. 353). As academics, Passi and Metzger continue, we must interrogate our own role in (re)producing “the explicit or implicit ontologies, epistemologies and normativities” of performing regional studies (2017, p. 27). The significance of this auto-critique is heightened by the changing landscapes of higher education governance and funding (Harrison & Turok, 2017). Universities and academics are increasingly evaluated through metrics that attempt to capture the local contributions that they make beyond the classroom (Hicks, 2012; Hoffmann, 2016). In response, the position of universities as key actors within regional innovation systems has taken on renewed salience for policymakers, funding agencies, and within the core mission statements of universities themselves (Collini, 2017; Etzkowitz, 2008; OECD, 2007). This paper is therefore grounded in the assumption that universities are both territorial actors whose operational and strategic logics are conditioned by territorially defined political power and territory makers capable of constructing, if not necessarily implementing, multi-scalar urban-regional arrangements.

Regionalism and higher education in the new york metropolitan area

While regional economic activity has become increasingly important, literatures on global city-regions and regional innovation systems have rarely engaged in substantive dialogue. The geographies of the global city system, global university rankings, and global urban knowledge production continue to show a strong overlap (Jöns & Hoyler, 2013; Kanai, Grant, & Jianu, 2017). Yet in academic and policy discussions, the usual suspects of university-led regional economic development – Silicon Valley, the Cambridges (MA and UK), Pittsburgh, the southeast Netherlands, among others – are treated as hubs of innovation leveraging key flagship institutions, not as nodes of global urbanization in their own right. In other words, these urban and regional terrains appear as spatial containers through which innovation processes flow, and not as essential constitutive elements of the symbiotic relationship between innovation and urban development. Even as selected global city-regions have emerged “as economic and cultural flagships of the new world order” (Scott, 2008, p. vii), there has been a tendency to downplay the impact of universities in global city-regions like London, New York, and Paris. There are exceptions in the scholarly (e.g. Wood & Lawton Smith, 2015) and grey literatures (e.g. Andes, 2017; London Higher, 2006), but a significant disjuncture exists between reading global city-regions as centers of innovation and urban theorizing.

The New York Metropolitan Area (metro), understood here as the 29 contiguous counties of the NY-NJ-CT combined statistical area, is a particularly pertinent but notably “extreme case” (Yin, 2009) to examine the potential and limits of university regionalism. It is a highly competitive global city-region centered around a dominant

economic, political, and cultural core (Manhattan), but with several major urban centers – including, downtown Brooklyn (NYC), Newark and Trenton (NJ), and Bridgeport, Stamford, and New Haven (CT) – and home to both substantial social inequalities and a strong home rule political culture; especially when compared to other global city-regions (Kantor, Lefevre, Saito, Savitch, & Thornley, 2012). Political fragmentation creates an environment of widespread intra-regional competition between lower levels of governments as municipalities and counties leverage tax breaks, localized zoning practices, and selective service provision in the pursuit of economic development.

While the City of New York has captured much attention given its history of regionalization at the turn of the twentieth-century, as with many American urban areas, the “old regionalism” of the 1960s and 1970s failed to significantly impact governance arrangements in the metro area (see Brenner, 2002). Regionalism in the New York metro, Kantor (2008, p. 117) argues, is practiced as a form of “pluralist competition”. In this context, regional policies arise as a by-product of discrete local decisions and higher level governmental actors seeking to manage local parochialism while pursuing their own agendas. The lack of capacity (and institutional architectures) to promote and address region-wide issues means the infrastructures of economic competitiveness have tended to shift up to the State level (ibid, p. 118), entrenching a rescaled intra-regional territorial politics along state lines. Important regional infrastructures, though, are governed through a plethora of public benefit corporations; the most notable examples of which being the Port Authority of New York and New Jersey and the Metropolitan Transit Authority. The Regional Plan Association (RPA), an independent non-profit planning organization, has produced strategic plans for a 31-county metro area in 1929, during the 1960s, and 1996, with a fourth plan released in November 2017, although these lack statutory powers of enforcement.

As Table 1 illustrates, the New York metro’s higher education sector parallels both the city-region’s diversity, and the highly decentralized, fragmented, and competitive nature of higher education in the United States (Koedel, 2014). The metro’s 140+ universities and colleges are animated by a variety of mission statements (public and private, research- and teaching-intensive, non- and for-profit), although HEIs in New York City exhibit traditional strengths in liberal arts education and training for the professions rather than the entrepreneurialism characteristic of Stanford or M.I.T. Their strategic plans evince multi-scalar strategies that insert them into global markets

Table 1. Higher education institutions in the New York Metropolitan Area, by type.

	Multi-Faculty Research Universities	Humanities-Based /Liberal Arts Colleges	Technical/ Medical Schools	Arts Institutions	Community Colleges	Total
New York City (NY)	22	18	15	12	7	74
<i>Manhattan</i>	11	10	9	12	2	44
<i>Brooklyn</i>	4	4	2	0	1	11
<i>Queens</i>	3	1	2	0	2	8
<i>Bronx</i>	2	2	2	0	2	8
<i>Staten Island</i>	2	1	0	0	0	3
Hudson Valley (NY)	2	9	0	0	2	13
Long Island (NY)	4	4	2	0	2	12
Northern New Jersey	4	13	2	0	12	31
Western Connecticut	1	7	0	1	5	14

and drive novel forms of local engagement (Addie, 2018). The following empirical analysis draws on primary and secondary data to (1) examine how HEIs are viewed in New York metro; (2) assess the regional spatial imaginaries and actions adopted by universities and colleges; and (3) analyze the capacity of academic bodies to serve as post-metropolitan region-builders in analytic and institutional terms.

Regional thinking about universities: diversification and decentralization

New York was never a place that looked to its universities and colleges as identifiers for what the city is about. This is now shifting rather dramatically (professor and architect, private New York City-based university, interview November 2014).

Leveraging the financial capital, human resources and economic output of anchor institutions affords an opportunity to address the structural challenges that perpetuate poverty and inequality across our region: access to jobs, quality housing and healthy neighborhoods (Regional Plan Association, 2018, p. 2).

New York's higher education sector has long played an implicit role in supporting and sustaining the economic vitality of the global city-region. However, after Michael Bloomberg assumed the mayoralty of New York City in 2002, there was a growing sense that universities could act as a catalyst to diversify the city's economy away from a perceived overreliance on the FIRE sector (finance, insurance, and real estate). Following the shock of the 9/11 terrorist attacks, New York City faced an economically and politically turbulent first decade of the twenty-first-century. Against this backdrop, and in response to a recession that hit the city in 2001, the early years of Bloomberg's mayoral term were marked by an interest in boosting local venture capital (which had traditionally been concentrated in the Bay Area and Boston, despite the growth of "Silicon Alley" in Manhattan) and bolstering biotechnology activity in the city (Wolf-Powers, 2013).

The collapse of Lehman Brothers in September 2008 and the rapid escalation of the Global Financial Crisis spurred both a quantitative and qualitative shift in the City of New York's interest in its higher education sector. Bloomberg's initial focus on industrial diversification extended into an open consultation on economic restructuring and resiliency. In early-2009, The New York City Economic Development Corporation (NYCEDC) launched a cross-sectoral "brainstorming" exercise engaging over 300 individuals and organizations (New York City Economic Development Corporation, 2009, p. 38). The "Game-Changer" conversation intended to generate a laundry list of ideas with the capacity to realize Bloomberg's focus on diversification and forge "a new bold vision to reset the city's economic trajectory" (NYCEDC representative, interview April 2016). New York City's tech ecosystem emerged as a recurring area of interest during this process. The tech sector at once appeared as an economic cluster in its own right and as an important source of innovation capable of disrupting key sectors of the city's economy, from media and fashion to financial services and beyond. Yet limited access to highly skilled tech talent in the local economy, multiple interviewees noted, presented a constant perceived barrier to growth.

In response, the NYCEDC initiated a suite of projects and programs intended to establish a robust foundation for a New York City innovation ecosystem, including developing a network of 15 incubators with various private sector partners, seeding the

city's first public-private investment fund, running mentorship, networking, and training programs, and launching a "Big Apps" competition utilizing city data. New York City's higher education sector was situated at the center of this emergent tech-driven development agenda. The NYCEDC articulated an instrumental role for the city's HEIs as hubs training people with hard skills, providing an infrastructure to support academic entrepreneurship, and supporting the creation of spin-off companies, etc.. Medical and biotechnology research was certainly underway across the city's "eds and meds" institutions prior to the Financial Crisis – evident as the City's provided land for the Alexandria Center for Life Science-NYC in 2004 (Skyler & Falk, 2005) – but commercialization activity had tended to relocate to more developed clusters in Boston and San Francisco due to a lack of venture capital or affordable lab space in New York (Bowles, 1999).

Amidst this maelstrom of activity, "Applied Sciences NYC" emerged as the City's flagship "game-changer" initiative. Launched in December 2010 as an international competition for educational institutions to develop new or expand existing, data sciences and engineering campuses in New York City, the program promises to transform both New York's skyline and its economic base by (attempting to) replicate the successes of Stanford and M.I.T. (New York City Economic Development Corporation, 2016). The City offered up to \$100 million in seed capital, the use of municipal-owned land, and significant administrative assistance in negotiating its labyrinthine planning and development procedures with the aim "not so much to get a university, but that this university would then generate spin offs in terms of technology and research" (administrator, public New York City-based university, interview April 2014).

Consortium bids led by Stanford University (with City College of New York) and Cornell University (with Technion-Israel Institute of Technology) emerged as frontrunners among the seven qualifying bids selected in October 2011. With both eyeing the same real estate on Roosevelt Island, "StanfordNYC" emerged as the assumed favorite, given the University's key role in the growth of Silicon Valley. As Stanford President John Hennessey asserted, "we know how to get young people involved in start-ups. Cornell's disadvantage is all its start-ups put together are smaller than Google" (cf. Pérez-Peña, 2011). However, Stanford abruptly withdrew from the competition shortly after the Cornell-Technion bid received an unprecedented \$350 million gift from billionaire alumni Charles H. Feeney to support Phase 1 construction. It was, therefore, Cornell University President David Skorton and Peretz Lavie, President of the Technion-Israel Institute of Technology who joined then-Mayor Bloomberg on 19 December 2011 to announce "Cornell Tech" as the competition's winning entry. Despite Stanford's reputation, its (late-stage) partnership with City College of New York, and status as presumptive favorite, the Cornell-Technion consortium successfully emphasized its institutional and cultural links to New York City – in addition to Technion's success with entrepreneurialism in Haifa – to win over City-based interests and secure the contract. Two years later, the City signed a 99-year lease transferring 12 acres of Roosevelt Island south of the Queensborough Bridge for the \$2 billion, 2 million ft² campus development, which opened its doors in September 2017 (Figure 1).

Applied Sciences NYC is clearly a municipal project concerned with economic diversification, growing the city's tech ecosystem, and territorializing major global knowledge flows within the Five Boroughs. Yet the competition has also sought to (at least partially) decenter economic activity – including the rapidly-expanding and highly urbanized



Figure 1. Cornell tech's roosevelt Island campus, with ongoing development surrounding long Island City, Queens in the distance, September 2017 (photo: Iwan Baan).

“Silicon Alley” tech cluster – away from central Manhattan. Echoing Benneworth et al.’s (2010) framework of university modes of urban engagement, Applied Sciences NYC has had several important and interconnected impacts on the metropolisation of the region and its higher education sector. First, the economic decentralization promoted by the creation of new knowledge-intensive spaces has restructured the institutional geography of university-led urban innovation. Although its consequences are yet to be fully realized (and it will likely be decades before they are), Cornell Tech’s Roosevelt Island campus opens opportunities for spin-off and commercialization activity to become embedded in the city’s outer boroughs rather than further concentrating in the global city core. In addition to Cornell Tech, the Applied Sciences NYC initiative also supported several other competition bids. Funds and city land were provided for New York University’s (NYU) Center for Urban Science and Progress (CUSP) in downtown Brooklyn; \$5 million in low cost financing for the New York Genome Center; \$15 million to support the Columbia University Data Science Institute; and \$3.5 million for the Pittsburgh-based Carnegie Mellon University’s Integrated Media Program (with Steiner Studios) at the Brooklyn Navy Yards. Several interviewees working in the innovation sector (inside and outside of the university sector) expressed optimism regarding the potential of the resulting institutional architecture to (1) foster novel university-city-industry partnerships; and (2) realize multiplier effects in Queens and Brooklyn given the availability of more affordable real estate and old warehouses to incubate spin-off companies.²

Second, decentralizing economic and employment opportunities from the hyper-gentrified and over-developed global city core promotes the integration of university spatial strategies with broader planning agendas in and beyond New York City. Several urban and regional planners in the New York metropolitan area interviewed for this project embraced the idea of universities as “anchor institutions” capable of supporting vibrant employment centers and urban communities outside of Manhattan. For example, reflecting on how

universities can support the polycentric development envisioned in Bloomberg's 2007 strategic plan, *PlaNYC*, one planner noted:

If you look at a place like Jamaica-Queens; it has York College which might not be a major institution, but should be part of the mix in terms of how you make an attractive place and how you attract people and businesses. (regional planner 1, interview November 2014)

At the city-regional scale, the RPA's fourth regional plan ascribes a prominent "anchor" development role to some 340 universities, colleges, and hospitals across New York, New Jersey, and Connecticut (2017, pp.271–274) to be supported by a proposed cross-region "Anchor Opportunity Network", intended to enable the sharing of information and best practices, collaborative policy development, and advocacy (Regional Plan Association, 2018). Such planning strategies implicitly position the university as a post-suburbanizing actor (Phelps, Wood, & Valler, 2010) – facilitating a concerted approach to nodal densification and the distribution of mixed-use activity into Fordist inner-suburban areas, even as the universities in question (including St John's University and Queens College in central Queens) self-identified as inner-city institutions during interviews.

Third, the broad shift in regional thinking about universities is expressed in a growing interest in directly engaging centers of urban academic knowledge production in municipal and regional planning and decision-making. In part, this reflects a desire to redress the sense that academic expertise and influential university-based urbanists have only had a limited impact on the quality of urban governance, especially when juxtaposed with the lobbying power of the business community. Academic interviewees bemoaned "you won't walk into City Hall and see a group of experts from Columbia or NYU talking to the administration about housing policy" and that "we've not tapped into the Ricky Burdetts or Richard Rodgers; people with a philosophic bent that puts them outside the realm of pure practice who have become informal advisors to cities like London". Discussing the work of their professional chapter, a regional planner framed the challenge in the following terms:

We have the four planning schools in the city; Hunter, NYU, Pratt and Columbia – and we're adopting Rutgers as well. We need to have a better relationship with the New School, which is urban policy – there are a ton of planning courses there – although it's not a planning degree. Fordham has an urban studies masters. Pace University has a big land use center. How do we bring them all into the Chapter?. (regional planner 2, interview November 2014)

This observation highlights an important recognition of universities as producers of urban knowledge and of the role played by particular institutions in shaping "ways of knowing" the New York metro as an urban/regional space. However, it also reflects the fragmentation, specialization, and to a certain degree the competitive relations found among HEIs as they seek to differentiate themselves in a crowded urban higher education marketplace. These institutional silos place constraints on the comprehensive curation and dissemination of urban expertise across, and for, the New York metro.

Finally, as I discuss in the following section, the groundswell of activity surrounding the Applied Sciences NYC competition was itself a game changer that prompted municipalities across the New York metro to (re)engage their universities, and in

doing so, shifted how universities understand their own connections to regional urban, economic, and innovation systems.

Universities thinking regionally: competing imperatives and imaginaries

Emergent relational regionalisms

The Applied Science NYC initiative received widespread support from across New York City's political and economic spectrum. The Center for an Urban Future, a progressive New York City-based urban think tank, lauded the initiative but in doing so also noted the need for a new paradigm of entrepreneurial activity to be internalized within the governance and strategic orientation of the city's new technology campuses. This was to be university-led urban economic development, but not under the established logics of higher education practice:

Mayor Bloomberg hit a homerun with his plan to attract a new applied sciences and engineering campus to New York. . . These tech campuses must become catalysts for local start-ups, a role that is second nature to institutions like Stanford and MIT but which has not always come naturally to New York's research universities. As such, city officials should make sure that the leadership of the new applied sciences campus promotes and supports entrepreneurship at every turn – and forms deep connections with New York-based start-up founders (Bowles & Giles, 2012, p. 24).

Cornell Tech's leadership, for their part, recognized and embraced this challenge by integrating the rhetoric of the university-government-industry "triple helix" within the institution's mission statement: "New York City is establishing itself as a new nexus of the tech world. . . But it can only achieve its potential as an innovation center through extensive and deep cooperation between the academic, public and private sectors" (Cornell Tech, 2017).

Such expectations captured a broader shift in how New York universities approached their urban and regional roles. Over the previous decade, several major universities, notably NYU, Columbia University, and the City University of New York (CUNY) system started to strategically ramp up entrepreneurship and technology-transfer programs and have increasingly worked together to better leverage their resources and institutional capacities. One CUNY administrator observed that:

We're starting to see fiefdoms break down a little. CUNY is in a great position, partly because of its ties to the city's communities [and that it understands] their needs.. Columbia and NYU maybe haven't had those historical ties because they've been so global in focus. But they also have a lot of talent there, so how do we leverage that talent? That's why we're beginning to see a lot of collaboration. (senior administrator, CUNY, interview November 2014)

Such outward-facing collaborations have crystallized into a loose and selective form of "archipelagic" university regionalism. The New York City Regional Innovation Network (NYCRIN) connects over 25 universities located in New York, New Jersey, Connecticut, Delaware, and Pennsylvania to operationalize training around intellectual property, technology commercialization, and entrepreneurship at the early stages of company formation (Figure 2). NYCRIN's primary purpose is to teach the National Science Foundation's I-Corps Lean Launchpad training program, which brings together



Figure 2. The New York city regional innovation network (NYCRIN) of partner HEIs (credit: Richard Sheinaus).

academic faculty, students, and mentor-investors to develop university technologies for the market. The network provides, and enhances, a regional infrastructure to promote university-led innovation activity through a model intended to ensure business development and economic externalities remain localized within NYCRIN's territorial footprint (Pellicane & Blaho, 2014).

Yet, as Harrison et al. (2017) note in the case of the United Kingdom, relational higher education regionalism tends to mobilize exclusive forms of partnership. This helps solidify new geographies of knowledge production and exchange. But it also has ramifications for those left out of new premium networks, both with regards to impacts on institutional prestige and their need to adjust to changed catalyzed in higher educational and economic landscapes. In New York, a senior administrator from a private multi-faculty university without major engineering, bioscience, or tech programs, framed the challenges and opportunities of adapting to these circumstances in the following terms:

Now the New York region is a tech center, we're going to work around that and say 'come here if you want to learn about entrepreneurship'. We are going to become focused on start-up businesses, how they relate to tech advances, and look into e-business (administrator, New York-based university, interview April 2016).

In this sense, academic institutions not officially part of the regional innovation system in municipal or institutional terms are pulled into a "de facto" regionalism by gravitational effects engendered by the urbanization of knowledge capital.

Seeing the region

From a position of institutional and geographic centrality, regionalized networks and spatial imaginaries have an implicit appeal. The primacy of the global city core, and the resources and institutional capacities this allows flagship research institutions to leverage, was reflected in a frequent discursive slippage during interviews between New York as “the city” and “the region”. Appeals to the region tend to reflect the logics of what Keil (2011) terms “internalized globalization”. Rescaled spatial imaginaries attempt to open place-based institutions to global flows by materially and symbolically opening the central city to the region, and foregrounding the “urbanity” inherent within the New York metropolitan agglomeration. This is evident in how a regional planner framed universities spatial orientation:

Basically, if you’re trying to attract a top-flight faculty or an international student body, you tend to get the regional picture because you know that even though you may be located in the Hudson Valley, people identify this area with New York. (regional planner 1, interview November 2014)

Beyond New York City and the core of the global city-region, however, universities are confined by, and need to play, alternative sub-regional territorial games (Henderson, 2017). In the case of the New York metro, the state-wide mandates of many public HEIs significantly shape their spatial imaginaries with regards to their governance structures, funding arrangements, and the communities they serve – even as certain facets of a regional innovation system (knowledge exchange, training programs, etc.) transcend intra-regional boundaries. For instance, bringing the city of Newark, NJ and its established cluster of HEIs more fully into these dynamics – metropolisation across the Hudson River – presents a number of contradictory problematics when looking at the global city-region from the outside in. On one hand, New Jersey-based university leaders and municipal officials emphasized strong competitive advantages with regards to their location in the metropolitan area, their local and global transport connectivity, and more affordable real estate. Yet, on the other hand, several interviewees noted the difficulties in getting people from New York City to come to places like Newark, physically and culturally. There are, as one university administrator argued, “physical boundaries to the thinking process” (administrator, north-New Jersey university, interview April 2016). At the same time, the need to focus time, effort, and resources into local development pushes some institutions to concentrate on more geographically immediate forms of engagement to capture positive externalities from the region’s wider economic successes; particularly in a historically deprived and racialized city like Newark (Addie, Angrisani, & De Falco, 2018).

Persistent territorial politics and knowledge infringe upon university-led metropolisation in the New York metro in two mutually-reinforcing ways. First, the engrained culture of political fragmentation and “pluralistic competition” (Kantor, 2008) leads to a dearth of regionally based organizations interested in, and capable of, supporting university regionalism, especially across state lines. The situation was put in clear terms by a regional planner, who argued:

[Regionalism] always sounds nice in theory, but... there is no governmental framework to talk about regional economic development, much less universities’ place in it. There’s no

region-wide body giving out money or making decisions that universities see as critical to their base. (regional planner 1, interview November 2014)

Second, this vacuum galvanizes the imperative for universities to forge often explicitly non-regional relations and spatial strategies. These can revolve around forging a distinct institutional profile. As exemplified in the expertise and (sub)urban imaginary of the National Center for Suburban Studies, Hofstra University in Hempstead, NY has strategically positioned itself as a Long Island university with expectations of national relevancy and impact, at the expense of a regional orientation. City-regional fragmentation may also coerce HEIs to forgo the New York metro region as a survival strategy in a highly competitive higher education environment. Faced with a decline student pool in across the northeastern US and rising tuition fees, one senior university manager suggested that:

[when you] look at building your institutional regionally, you going to have to take on a larger and larger piece of a smaller and smaller pie. So the strategy that we are taking here is to go national and international; we're not attempting to put that regional focus into what we're doing (administrator, New York-based university, interview April 2016).

What then happens to universities as potential agents of “regionality” and sites of regionalized urban knowledge production? The rise of data-driven urbanism and desire to mobilize applied policy-relevant academic research offers some answers, most evidently in the pedagogic and research direction taken by NYU’s Center for Urban Science and Progress (CUSP). As an Applied Sciences NYC project, CUSP was established as “unique public-private research center that uses New York City as its laboratory and classroom to help cities around the world become more productive, livable, equitable, and resilient” (Center for Urban Science and Progress, 2017) and animated by the assertion that, in the words of founding Director Steve Koonin “[data] underpins the solutions to urban problems [as] you can’t improve what you can’t measure” (Koonin, 2012). The Center operates within the terms of a memorandum of understanding with the City of New York, and co-produces research and teaching activities with several municipal departments and New York City-based organizations in novel and transformative ways.

The novel government-university-industry arrangements forged in HEIs like CUSP do open important new channels for applied urban research to directly impact public decision-making. For some, this presents a profound opportunity to reshape how urban and regional planning is conducted; “You don’t really hear about CUSP, but in terms of their goal and desired scope, this is something really huge. This is really transformative in terms of data driven analysis really determining our infrastructure and really determining our economic capacity and capability” (regional planner 2, interview November 2014). However, there are cautionary implications for realizing regional governance and collective agency. First, the Bloomberg administration’s support for Big Data-driven policy created opportunities for universities to be plugged into municipal policy formation and analysis, but in a partial and highly selective manner. This elevated differentiated networks of access within the university as CUSP emerged as privileged interface between NYU and the City, and reinforced criticism that Bloomberg preferred to deal with elite private institutions including Harvard, Johns Hopkins, and NYU rather than schools in the public CUNY system (a situation that has shifted under the De Blasio administration). Second, CUSP’s reliance on City of New York datasets means regional actors have struggled to identify interfaces for involvement with the campus. As a result, the fragmented nature of the New York metro is

reproduced in institutional and policy practice. On a deeper epistemic level, this introduces problematic questions regarding the scalar blind fields and “methodological cityism” (Angelo & Wachsmuth, 2015) engendered by the territorial limits of municipal “Big Data”: data availability, governance, and privacy laws pose significant limitations upon the capability of urban informatics to mobilize city-regional scale analysis. With this, as Kitchin (2014) suggests, there is a danger that territorialized data come to shape urban research questions through a new empiricist paradigm of urban academic inquiry – with university-generated urban analytics overlooking how regional urbanization defies such constraints.

Universities and the creation of a citified “region for itself”

As producers of urban knowledge and urbanizing actors in their own right, universities play a significant role in identifying the projects, processes, and agents involved in the construction of the “region *in* itself”. In this paper, I have demonstrated how universities are actively (if oftentimes unintentionally) involved in building the material landscapes of regional space; shaping both urban and regional spatial imaginaries through the abstractions of scholarly analysis and institutional planning; and codifying symbolic discourses regarding the rise of a highly urbanized form of knowledge capital. Yet (acknowledging the uniqueness of the case) university regionalism in the New York metro demonstrates that this is complex, contested, and contingent set of processes that are embroiled in multi-scalar political, economic, and cultural geographies. This is not the regionalization of the city in terms of traditional readings of metropolitan expansion. Rather, the regional landscape of higher education is being transformed through the sum of different universities’ diverse “modes of urban engagement” (Benneworth et al., 2010). The embrace of universities as anchor institutions serves to promote the citification on the region in physical and planning terms by leveraging campuses as nodes for urban densification and economic decentralization. At the same time, questions of urban knowledge production illustrate how the functional and imagined spaces of regional innovation are compelling institutions to position themselves relative to regionalizing urban knowledge economies.

Returning to Meijers and Cardoso’s (this issue) framing of metropolisation, we see universities driving the “citification of the region” in a number of important ways. On a spatial functional level, “archipelagic regionalism” New York-style, clearly invokes distinct knock-ons, lock-ins, and strategic trajectories. University campus development catalyzed through the Applied Sciences NYC initiative has engendered an immanent decentralization of high-skilled economic activity (even if only in modest terms) within New York City in a manner that also builds on growing collaboration between academic institutions (particularly around urban innovation and technology transfer). Planners and think tanks in the region are clearly also taking seriously the potential of universities to act as urbanizing anchors for polycentric post-metropolitan development in symbolic and governance terms, as exemplified most clearly in the RPA’s (2018) proposed “Anchor Opportunity Network”. Programs like NYCRIIN (alongside collaborations among university technology transfer officers) also create novel mechanisms to formalize topological connectivity across an expansive territory while clearly fusing discourses of urban innovation to regional space.

While the reshaping of higher education compels certain universities to realign their mission and offerings to embrace the scalar imaginary of the global city-region, we see evidence of broader socio-demographic trends invoking “de facto regionalisms” that paradoxically push schools away from regional discourses and forms of institution practice. In this sense, the region appears as a competitive arena where non-elite schools must respond to the realities of a shrinking regional student pool. Elsewhere, at the intersection of global and local imaginaries, investment in the built environment on Roosevelt Island and Downtown Brooklyn embody the symbolic capital – and transformation – of urban space through the idea of a new accumulation regime grounded in knowledge production, urban innovation, and the production of urban space. Concomitantly, university networks are gathered, curated, and disseminated through moments of place-bound reterritorialization. These are global in vision but highly localized and selective in terms of geographic topology and institutional involvement.

The ability of university regionalism to support the process of metropolisation in material and symbolic terms is therefore partial and fragmented. Importantly, the task of providing the rigorous evidence-base necessary to inform decision-making on the challenges of regional urbanization cannot be met if the apparatuses of urban knowledge production are inhibited, or prohibited, for adopting appropriate regionalized urban spatial imaginaries. Here lie the limits of university regionalism. The work of individual scholars or research centers can mobilize post-metropolitan imaginaries in ways that can direct the material and discursive recognition of the process of metropolisation. But in the case of New York, this is a challenge that is restricted by territorially defined funding and governance mechanisms and political-institutional mandates. The effective absence of “regionality” in institutional terms leads to a lack of “ways of seeing” the region when confronting the opportunities and challenges presented by contemporary urbanization – in the face of both the extended spatial integration of urban space and the regionalization of an increasingly urbanized knowledge economy. The institutional infrastructures of urban innovation are now framed at the regional scale in the New York metro. Yet the absence of forums for regional urban knowledge production and dissemination in political and research space infringes upon the possibility of an emergent “region *for itself*”.

Finding institutional solutions to these issues – realizing the potential of “regionality” – involves adjusting the scalar imaginary held by key players across the city-region to recognize the implicit process of metropolisation they are (at least partially) fostering, but also acknowledging that entrenched local political geographies will continue to deeply shape any regionalized economic and urban development programs.

Notes

1. Although it is a loosely defined concept with strong roots in European planning debates (Krätke, 2007; Meijers, Hoogerbrugge, & Hollander, 2014), I understand metropolisation here in terms of the “citification of the region” (Meijers and Cardoso, this issue).
2. This logic was borne out in the (albeit aborted) selection of Long Island City as one of two locations for Amazon’s second North American headquarters (HQ2) in November 2018.

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