Spatial Imaginaries and Tech Cities: Place-branding East London's digital economy

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Abstract

We explore place branding as an economic development strategy for technology clusters, using London's 'Tech City' initiative as a case study. We site place branding in a larger family of policies that develop spatial imaginaries, and specify affordances and constraints on place brands and brand-led strategies. Using mixed methods over a long timeframe, we analyse Tech City's emergence and the overlapping, competing narratives that preceded and succeeded it, highlighting day-to-day challenges and more basic tensions. While a strong brand has developed, we cast doubt on claims that policy has had a catalytic effect, at least in the ways originally intended.

Keywords: clusters, place branding, entrepreneurship, ICT, Tech City, local economic development

JEL: O38, R3, R38

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1/ Introduction: The Place of Place Branding

Place branding is now a common tool in the economic development box (Markusen and Gadwa 2010). This paper explores place branding as an economic development strategy for technology clusters, focusing on the recent 'Tech City' initiative in Inner East London. Tech City, launched in 2010, aimed to grow the vibrant community of about 1,500 firms that had emerged at the edges of London's financial district, concentrated on the iconic Old Street intersection ('Silicon Roundabout') (Nathan and Vandore, 2014). It developed a sector-specific place brand, and a brand-led strategy that also aimed to stimulate development in the city's nearby Olympic Park. In late 2014, the policy was re-launched as a London and UK-wide initiative, which is still live. We study the emergence of the milieu, and the overlapping, competing place and policy narratives around it, between the late 1990s and the present day.

Place branding is an established theme in urban studies, urban and economic geography (Zukin, 1982; Urry, 1995; Zukin, 1995); however, it remains under-theorised and underexplored by economic geographers (Power and Hauge, 2008; Pike, 2013). One issue is a lack of systematic analysis on the mechanisms by which place brands operate in real-world policy contexts (Lundquist and Power (2002) is one exception). Another is the need to know more about place branding for technology clusters. We argue that urban tech clusters may be especially amenable to place branding because tech firms' ways of working tend to produce distinctive local milieux, SoMa in San Francisco and New York's Silicon Alley being paradigm cases (Pratt, 2002; Indergaard, 2004). For the same reasons, policy-led interventions may also be resisted by cluster protagonists; many of the forces generating a bottom-up brand may also make it hard to manage from the top down.

Place branding policies have generally been sector-blind (Jansson and Power, 2010); the Tech City initiative is unusual in combining place with a sector focus, and in using a brandled strategy. Tech City was pitched as a distinctive, 'light-touch' approach, which promised to get around established problems with previous cluster programmes (Martin and Sunley, 2003). Since then, it has been claimed as a catalytic success, raising the profile of London as a tech industry 'ecosystem' and driving up economic activity in the area (Greater London Authority, 2015). Available data give some support for these claims, while raising questions about what policy has actually achieved.

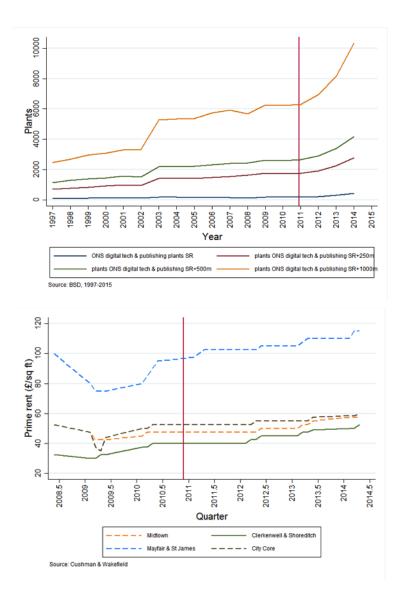


Figure 1. Growth and change in the Inner East London cluster, 1997-2015.

Sources: Business Structure Database, Cushman & Wakefield. Top panel shows firm counts: each branch of a firm is counted as a separate 'plant', so that activity at each location is recorded accurately. Bottom panel shows changes in prime rents, which are averages of the top 3-5% of rents in a given submarket.

Figure 1 gives an overview of some key success measures before and after Tech City launched in late 2010. The top panel show counts of tech firms over time, using distance rings to illustrate patterns of change moving out from Old St. roundabout. There is little change at the Old Street/Silicon Roundabout core ('SR'). There is continuous growth as we move further out, but no clear evidence of a policy effect: the biggest jumps are at the 1000m mark, the boundaries of the milieu at the time. An important driver of firm growth, venture capital funding for London tech start-ups also grew twenty-fold during this period, helping

fuel firm entry and growth.¹ But the cost of doing business locally has also risen. The bottom panel shows changes in commercial rents, using a leading analyst's own property market geographies: Shoreditch prices have gradually risen to match more central prime locations. Some studies now suggest fewer tech firms are forming in the area.²

We use mixed methods over a long timeframe to develop a rich analysis of the Tech City brand and strategy. This allows us to explore the preconditions for the place brand, and its evolution through interactions between cluster members and policymakers, across the whole lifetime of the policy and after. By exploring how cluster identity and more formal place branding came about and functions within the East London ecosystem, we also provide suggestive, fine-grained evidence on the initiative's likely achievements and limitations.

The paper makes a number of contributions. Tech City is an important empirical and policy case, to set alongside similar urban tech milieux in New York and San Francisco, as well as (for example) Berlin, Stockholm, Tel Aviv and LA. We add to a thin extant literature on Tech City (Foord, 2013; Nathan and Vandore, 2014; Martins, 2015; Jones, 2017), and build on an earlier generation of East London case studies on artists, 'new media' and the creative industries (Hutton, 2008; Pratt, 2009; Harris, 2012). We also add to the bigger empirical place branding literature, and the small set of economic geography studies that consider cluster identity in detail (Pratt, 2000; Indergaard, 2004; 2009; Hutton, 2006; 2008; Power and Hauge, 2008; Jansson and Power, 2010; Storper et al., 2015). The paper is also unusual as a longitudinal study that both tracks cluster evolution, and local actors' interactions with different policy systems. Importantly, we show how place brands – at least in the tech industry – can be created through bottom-up, organic processes as well as top-down policy actions, and illustrate their dynamics in detail. More broadly, we develop a theoretical framework that sites branding tools within a larger set of policies that seek to generate and work with spatial imaginaries (Jessop, 2012), and use this to specify potential affordances and constraints of brands and brand-led approaches. We link this to a critical view of public policies as 'fixes' (Harvey, 1989; Jessop, 2012; 2016), with an alternative view of

¹ https://www.ft.com/content/0ff8687c-8f52-11e4-b080-00144feabdc0, accessed 29 August 2017.

² <u>https://www.theguardian.com/media-network/2016/apr/12/startups-abandon-tech-city-commercial-rent-soars-east-london-shoreditch</u>, accessed 29 August 2017.

policymaking as 'muddling through' (Lindblom, 1959), and use these ideal-types to help us assess the Tech City case.

2/ Framework: Post-Industrial Clusters

Clusters are understood as physically co-located groups of interacting firms. Since their original specification by Marshall (1918) as localised 'industrial districts', there is now a vast body of theoretical and empirical work exploring cluster features, dynamics, and policy implications. A number of these developments are especially relevant for this analysis. First, an extensive literature on cluster evolution highlights the role of path-dependence in shaping present-day outcomes (Martin and Sunley, 2006). Local industry mixes can evolve gradually through technological 'branching' into related fields (Boschma and Frenken, 2011), so that at any given point, clusters may contain many previous 'versions' of themselves. As we shall see, the East London ecosystem exemplifies these features.

Researchers have also challenged the notion that clusters are self-contained entities (Bathelt, 2005), emphasising their integration into larger industrial systems such as global value chains (Sturgeon et al., 2008) or production networks (Yeung and Coe, 2015). Technology clusters such as Tech City feature both spatially bounded and extended workflows, with actors using multiple means to organise activity across space.

For clusters in post-industrial cities, such as the East London tech scene, the real estate industry can also influence processes and outcomes. Most obviously, in 'resurgent' post-industrial cities like London and New York, industrial land uses compete for space with residential housing, pushing up rents and/or displacing activity (Hamnett and Whitelegg, 2007; Hutton, 2008). At the same time, commercial real estate actors can play important roles in cluster promotion (Indergaard, 2004; Harris, 2012). Local developers and property agents – with or without the involvement of city government – often have a direct interest in pushing or even developing cluster 'brands'. But they will also be keen to extend and blur milieux' physical boundaries, which may in turn complicate cluster identity.

2.1 / Forming digital clusters in the post-industrial milieu

The distinctive features of digital technology clusters in the post-industrial city have particular relevance for place branding, especially where 'digital content' overlaps with the creative industries and what used to be known as the 'New Economy' (Hutton, 2008).³ This is because such milieux tend to generate their own distinctive identities via the boundedness of participating firms' most high-value workflows. Crucially, we suggest that these cluster identities can emerge from the bottom up, through the action and interaction of cluster actors, without the top-down co-ordination typical of cluster policies. This generates two paradoxes for those wanting to leverage such identities in economic development strategy. Urban technology and related clusters are highly amenable to place branding; but branding approaches may well be challenged and resisted by local businesses – in ways we explore in detail below. Similarly, some of the same forces that help generate local brand-like identities – such as real estate actors – also help to complicate those identities in ways that are unhelpful for policymakers.

We briefly outline some of the main cluster-identity-forming mechanisms here. Smaller tech firms tend to cluster in inner urban space (Scott, 1997; Hall, 2000; Hutton, 2008), exploiting the economies of production and consumption that large cities offer (Zukin, 1982; Hall, 1998; Glaeser et al., 2001; Duranton and Puga, 2004). Firms often locate into cheaper neighbourhoods with a distinctive built form, combining small office space and warehouses with good connectivity (Pratt, 2000; Pratt, 2002; Indergaard, 2004; Hutton, 2008). Workflows are typically both localised and spatially extended. A suite of new technologies (especially VOIP and cloud computing) enables work to be physically dispersed, but complex productive activities require intensive face-to-face interaction (Storper and Venables, 2004). The preponderance of small firms and freelancers also places a premium on networking (Pratt, 2000; Grabher, 2002; Charlot and Duranton, 2004; Currid and Williams, 2010). Cafes, coffee shops, members' clubs and other 'ancillary' spaces extend the office 'base' (Martins, 2015). These latter provide 'spaces for reproducing a (self-identified) community of like-minded

³ We define digital technology industries following Nathan and Vandore (2014). We distinguish between ICT (hardware, tech consultancy) and digital content (software, web, plus advertising, design, media companies that are online or multi-channel). We use 'digital technology', 'digital', 'tech' and 'digital tech' interchangeably. We use 'digital content' and 'digital creative' interchangeably.

people' [*ibid*, p143]. Hutton (2006; 2008) also emphasises how landmark buildings or public spaces often anchor these micro-geographies. They signify the milieu and reinforce cluster identity, with some participants fetishising these (often gritty) surroundings.

2.2 / Affordances and constraints in branding clusters

The idea of 'cluster policy' is itself controversial (Martin and Sunley, 2003; Duranton, 2011). To date, we know little about which policy mix is most effective (van der Linde, 2003; Chatterji et al., 2014). Policymakers face challenges in managing growing urban clusters, as these exhibit both positive feedback (from knowledge spillovers and labour pooling) and negative feedback loops (from competition, crowding and rising costs) (Nathan and Overman, 2013).

Recent years have seen a growing use of branding tools in cluster programmes (Moilanen and Rainisto, 2009; Friedmann, 2010; Markusen and Gadwa, 2010). The classical cluster development approach popularised by Porter uses branding alongside mapping and networking between cluster actors (Porter, 2003). Branding elements may also be used in conventional planning frameworks that delineate development zones, regulate workspace supply and regulate amenities (Pratt, 2009). However, more recent programmes have made more prominent use of branding as a lead element, either to promote the image of existing milieux or to help generate clusters from scratch (Lundequist and Power, 2002; Jansson and Power, 2006).

Kearns and Philo (1993) define 'the practice of selling places' as 'ways in which public and private agencies ... strive to 'sell' the image of a particular geographically defined 'place' ... so as to make it attractive to economic enterprises, to tourists and even to inhabitants' [p3]. Specifically, place branding involves generating an imaginary place, via selective drawing on and reshaping of existing local assets. This imaginary milieu combines existing place attributes with some desired future state (Lee and Yeoh, 2004; Bickford-Smith, 2009).

As such, place branding tools are – arguably – best considered as part of a larger family of policies that aim to generate and/or work with spatial imaginaries in order to achieve some set of economic growth outcomes (typically, attracting visitors and investors; attract new businesses; helping existing firms grow; raising employment; or simply 'regeneration').

Following Jessop (2012), we define imaginaries as simplified, selective mental maps that allow actors to organise social reality. Imaginaries are often 'policy spaces', such as those created by large planning frameworks (Haughton and Allmendinger, 2015), infrastructure projects or iconic buildings (Dembski and Salet, 2010) as well as clusters (Lundequist and Power, 2002).

Brands and branding activity are common across all of these imaginary-building interventions. But branding tools play different roles in different cases. A brand may be used in marketing and promotion *alongside* a number of other tools. Here, it will have three main functions (Lundequist and Power, 2002): to set out a clear and coherent vision of the area or development in question; to use this to attract new activity; and to complement what existing individual firms are doing to promote and market themselves.

In brand-*led* programmes, such as Tech City, branding will also be used to achieve two broader objectives. First, the place brand is used to generate (or reinforce) a common identity or sense of shared purpose (Staber and Sautter, 2011). In turn this may raise social capital, empowering local actors (Martin, 2003; Pasquinelli, 2010). Programme management needs to be flexible enough to allow for feedback from existing communities, engaging the latter in co-production and co-governance (Gibson and Davidson, 2004; Braun et al., 2013).

Second, the brand is used in programme management and governance, as a co-ordinating device for an often-complex set of public and private actors. If other programme elements are weak, this co-ordinating function becomes more important, requiring extensive institutional embedding work (Dembski and Salet, 2010). Relatedly, if brand sponsors are powerful – such as senior government or corporate figures – the brand may be used as a form of political leverage by one set of actors over another (Lee, 2017).

What might hold branding tools and brand-led programmes back? First, imaginaries are tough to generate: policy spaces are often 'fuzzy' and may not match up with underlying physical or economic geographies (Allmendinger and Haughton, 2009). Some critics see this as unavoidable, given the highly selective set of local assets needed to build simplified and sometimes sanitised 'place myths' (Jansson and Power, 2010; Johansson, 2012).

Second, brand-led programmes may be hard to manage. Involving local communities and stakeholders as fully as possible is essential for effective place branding – but it is challenging to organise multiple actors with overlapping and/or competing agendas (Jessop, 2016). Actions that help individual firms or neighbourhoods may be problematic at area level (Jansson and Power, 2010).

Third, since imaginaries are partial, resistance is possible: even strong brands can be contested by local communities (Kearns and Philo, 1993). Further, while large cities may have airspace for multiple narratives, resistance is far more problematic when brands offer competing descriptions of the same physical territory (Jansson and Power, 2010). As such, the implementation of place branding strategies may become entangled in gentrification processes (Montgomery, 2016): typically, developing a branding imaginary involves selecting some 'approved' characteristics while downplaying or erasing others; this can be a struggle between interest groups (McCann, 2002; Johansson, 2012) often resolved in favour of high-value target audiences (Bickford-Smith, 2009).

More broadly, expectations for place branding will also depend on expectations for public policy in general. A critical geography view (Harvey, 1989; Jessop, 2012; 2016) is that *all* policy is a temporary, unstable, exclusionary 'fix' – branding-led or otherwise – that can only hope to achieve incremental impacts which may be rolled back at any moment. An alternative view, common in the public policy literature, is that policymaking essentially involves a series of compromises, workarounds and second-best choices - what Lindblom's (1959) seminal essay terms 'muddling through' – but that the results can have lasting effects. We use these two ideal-types to help us frame our judgements of the Tech City initiative.

2.3 / Evidence base

The existing place branding literature tends to emphasise empirically rich case studies over conceptual frameworks. For brevity, we focus on urban technology, creative industries and/or UK examples. Indergaard's classic study of Silicon Alley (2004) is one of the very few indepth analyses of tech cluster identity formation (although see also Pratt (2000)). New York City's 1990s 'new media' scene combined ICT with the city's deeply rooted creative industries. The original cluster was located in a tightly bounded set of streets, well placed in Manhattan, combining office space, warehouses, cafes and clubs and anchored by landmark

structures (such as the Flatiron building). Local networks such as the NY New Media Association corralled local firms, entrepreneurs and freelancers, helping to create a collective identity. The 'Silicon Alley' brand then emerged gradually, as counterculture-orientated protagonists became more entrepreneurial. Property developers played a key role in amplifying the brand, not least by developing a series of 'wired' co-working spaces. (Pratt (2000) points out that the first and most famous of these, the NY Information Technology Center was actually located *outside* Silicon Alley.) Specialist media and local venture capital firms helped to amplify the brand further – leading to some local backlash.

The mid-90s SOMA (South of Market) new media cluster in San Francisco had distinctive roots and feel – but little if any explicit place branding. Pratt (2002) locates the cluster within the Bay Area's larger tech ecosystem and the city's countercultural history. This 'regional zeitgeist' also shaped Silicon Valley's development (Storper et al., 2015). Like Silicon Alley, the cluster emerged in a well-connected but still cheap inner urban location – close to freeways and the main train station, alongside light industry and nightclubs. Market St and South Park became central landmarks; the recently-launched Craigslist was an important online organising space. The cluster's growth involved substantial displacement of existing communities and firms (Hutton, 2009); like Silicon Alley, most activity collapsed in the dotcom crash.

Studies of the fashion and design sectors highlight similar processes (Jansson and Power, 2010; Power and Hauge, 2008). These industries' strategic and production functions are highly clustered, but value creation is closely related to brands attached to places – so that cities provide spaces through which firms build competitive advantage. Jansson and Power [ibid] highlight various 'brand channels', including the use of trade shows as temporary showcases; locally-based celebrity designers and power customers; and the use of one-off showrooms and flagship stores, often co-located in key neighbourhoods. City-level fashion and design identities emerge from the often-chaotic interplay of individual firms' branding activities.

The closest UK comparators to Tech City tend to involve large geographies, and are typically sector-blind. Haughton and Allmendinger (2015) explore the use of place branding in UK port and estuary planning zones. Some of these imaginaries have been more successful than others, but all suffer from disconnects between policy space and real geographies; some

(notably the Thames Gateway) also have poor governance. Haughton et al (2016) look at Greater Manchester's brand, finding a 'broadly accepted narrative' about effective 'GM' working practices and dealings with central government. This brand is powerful enough to influence other imaginaries, notably the 2004 Northern Way and 2016 Northern Powerhouse pan-regional planning concepts, which both became GM-centric. Lee (2017) argues that the Northern Powerhouse is 'more brand than strategy', repackaging many pre-existing policies. He is sceptical about its prospects for success, highlighting 'fuzzy geography', 'fuzzy institutional links' and lack of real resources.

A handful of recent case studies of art and creative industries milieux in East London touch on bottom-up place brands. Hutton (2006; 2008) highlights the role of visual markers and inner-urban aesthetics in developing environments for artists, creative and new media firms in 1990s Hoxton and Shoreditch. Pratt (2009) presents late-1990s Shoreditch as the spatial manifestation of 'Cool Britannia'; Harris (2012) shows how both artists and estate agents generated a highly selective 'urban pastoral' re-imagining of Hoxton during the late 1990s and 2000s. All three authors emphasise the fragility of these place brands, which can be pushed aside by competing industrial uses and by residential property markets.

3/ Methodology

We use this framework to explore the case of Tech City – which we set alongside other local place brands, two top-down (two iterations of the 'City Fringe'), one bottom-up (the playful brand of 'Silicon Roundabout'). Some of these imaginaries pre-date Tech City; others overlap and compete with it, so that our analysis runs from the late 1990s to the present day. This is a challenging object of study: we trace the evolution of an economic milieu, its narratives and its various communities of economic and policy actors over a long timeframe, against a shifting urban backdrop. Our methodology is rooted in guidelines for complex urban analysis laid out by Gordon (2006), who suggests a 'non-reductive ordinary city approach' (p185) using narrative and analysis based on pre-existing frameworks, a flexible use of scales and timeframes, and mixed methods. Such an approach typically combines observation, interviews and secondary sources, and is helpful for studying long-form change in local milieu. It is also used in the empirical place branding literature (for example Pratt

(2009), Pasquinelli (2010) and Johansson (2012), all of which involve complex long-duration analysis).

We integrate material from three distinct phases of fieldwork plus secondary policy / consultancy documents, then develop a narrative informed by the affordances / constraints framework in Section 2. This allows us to track the cluster over time, tracing the emergence of the Tech City initiative from key pre-conditions, exploring its implementation and post-policy outcomes. To handle the long timeline we exploit available sources of continuity, specifically unchanging core study sites and linked firm sampling frames.⁴

Phase 1 fieldwork (2009), involved ethnographic observation whilst embedded in four technology and design firms in the Old St Roundabout area. Alongside observational material, semi-structured face-to-face interviews were conducted with a snowballed sample of 19 participants, including company founders, programmers, designers, and strategists. Phase 2 involved a series of semi-structured interviews with local businesses in 2011-2012, after the launch of the Tech City initiative. The 2011 wave sourced companies from the list of 'Silicon Roundabout' firms developed in Phase 1 and published in Wired UK (2010). This yielded 16 face-to-face interviews with firms and policymakers, as well as a survey of local businesses. The 2012 wave sampled firms from the Tech City Map, a large local business directory partly developed from the Wired analysis, yielding 36 face-to-face interviews with company founders and senior staff. Further details are given in Vandore (2011) and Nathan and Vandore (2014). Phase 3 fieldwork involved semi-structured interviews with 11 policymakers: in early 2012, as the policy rolled out, and again in late 2014 / 2015 after the refocus. Participants were senior figures in London city government, London boroughs or TCIO, recruited via snowballing.

4/ Findings: Evolving Spatial Imaginaries in East London

The East London technology cluster sits at the boundary of Islington, Hackney and Tower Hamlets, just north of the City financial district. Old St roundabout and Shoreditch are at its physical core, and 'Shoreditch' acts as spatial shorthand (Pratt, 2009).

⁴ The authors conducted fieldwork, either separately or together, between 2009 and 2015.

Shoreditch's present-day industry mix exemplifies cluster 'branching' in practice (Boschma and Frenken, 2011). These neighbourhoods have a rich industrial history, especially in furniture, textiles, jewellery, printing and design, but experienced decline post-WW2 and severe de-industrialisation during the 1980s. This opened up commercial and office floorspace, gradually filled by business service and creative industries firms, as well as early loft-dwellers; in the 1990s artists, 'new media' firms and a vibrant evening economy also emerged (see *inter alia* Hamnett and Whitelegg (2007), Hutton (2008), Pratt (2009), Harris (2012) and Foord (2013)). Today's tech and digital creative scene has thus partly emerged from previous (but still live) versions of the area. Similarly, both local policymakers and cluster protagonists have used a series of spatial imaginaries to frame the area. In what follows, policymakers are tagged [P] and firms [F].

4.1 / Prehistory: Silicon Roundabout and the first City Fringe

The first economic imaginary for post-industrial Inner East London is the policy-led 'City Fringe', which dates back to the 1980s [P11]. It was first formalised in 2003, as one of nine City Growth Strategies implemented by the then-Labour government. Inspired by Michael Porter (2003), who identified 'inner city' clusters as having great potential, the UK Small Business Service funded two-year projects to boost the economic performance of inner urban clusters, via data gathering and consultation with local businesses (Bagwell, 2008).

The City Fringe exercise used place branding tools in two ways. The existing, loose imaginary of the 'City Fringe' was refined using data analysis and local consultation; it was then used to market the area, alongside a suite of economic development policies. Specifically, the City Fringe Partnership comprised the London boroughs of Islington, Tower Hamlets and Hackney, plus the City of London. It identified 13 potential 'fringe' wards containing around 142,000 people, 22,000 firms and 276,000 jobs. The partners envisaged the area as a series of local clusters, with key hotspots identified by size, growth or concentration (City Fringe Partnership, 2004). The resulting strategy aimed to support and maintain a diverse economic and residential base through a combination of place marketing, workforce training and grants to local business.

In practice, City Fringe I failed to present a coherent vision of the area, the first task of a place brand. Policymakers seem to have relied on networks into older, better-organised sectors for the cluster mapping, so that final strategy was most notable for the almost-complete *absence* of discussion of digital tech or digital creative sectors – despite their rapid growth on the ground at the time (see Figure 1). Even though 'ICT and digital' was identified in initial mapping, the final strategy instead concentrated on six well-established industries – fashion, furniture, health and social care, jewellery, printing and publishing, and the visitor economy.⁵ Where it appears, tech is described as a threat to firms in the six 'key' clusters – with policymakers providing training or equipment to help older businesses adapt to digitisation (Cities Institute, 2009). A mis-specified imaginary with a backward-looking policy stance, it failed to gained much policy traction at the time.

A second imaginary also emerged in the 2000s: a bottom-up, ironic brand developed by tech actors themselves. Following the 2001 tech crash, the area's 'new media' community had regrouped around dotcom survivors [F1, F3]. Other common links included the Haddock mailing list, the early UK blogging scene, and in some cases, spells building the BBC's first website. Physical proximity and co-location were essential features of the scene:

We live locally. All the firms live locally. We knew we wanted to be here, it made sense to be in this part of London ... we knew the area well, knew it was very vibrant, very close to home, lots of cheap space, lots of flexible space ... we were subletting from someone, then from someone else. Then the first person we sublet from sublet from us, then someone else came, then we took the whole space ... then we moved out. [F11]

We looked at lots of places, and there were a couple of companies in this area already, and we moved here because the other companies were here. And you know... the first weekend we were here we went out and got some sandwiches and sat in the park ... and I ran into some friends who worked at [redacted]. And that was, you know we talked about some possible ways we could work together ... [F3]

⁵ 'ICT' is mentioned twice in the document, 'digital creative' and 'new media' not at all.

This hyperlocality had pros and cons. One founder explained that 'I am literally round the corner from everyone' [F12]; another found an employee in a local pub, 10 metres from the office, being interviewed by a rival company [F9]. Informal subletting was regularly used to fill space and to convene like-minded operations (or friends) [F2].

The 'Silicon Roundabout' label emerged from this milieu, but was then rapidly amplified through media exposure. After an industry party in July 2008, programmer Matt Biddulph's early morning tweet about 'Silicon Roundabout, the ever-growing fun community of startups in London's Old St area' led to a *Financial Times* interview the next day: pressed to elaborate, Biddulph named 15 companies in the area who were 'friends' (Figure 2, top).⁶ The London *Evening Standard* escalated the story, claiming that "Roundabout is London's answer to Silicon Valley."⁷ This was followed by in-depth investigations in industry journal *Wired UK* in 2008, and again in 2010, who printed extended lists of firms in the scene. This media-enabled jump from local to national profile has strong parallels with the Silicon Alley experience 10 years earlier (Indergaard, 2004) – with social media standing in for local free papers.

Intended as an in-joke, Silicon Roundabout is a informal, playful spatial imaginary describing the social, professional networks of a small, established group, with a resonant landmark (Hutton, 2006) bounding the whole. Nevertheless, as a bottom-up place brand, it successfully presented a vision, attracted great attention, and substantially boosted the profile of firms in the milieu, whose common identity it successfully captured.

The Silicon Roundabout imaginary deliberately made no attempt to link its immediate scene into the wider London ecosystem of technology businesses. The bottom panel of Figure 2 highlights how much was missed out, by mapping contemporaneous employment densities of ICT activity for inner London wards using administrative data. As with Silicon Alley and the wider NYC economy, Silicon Roundabout (red circle) was part of a much larger agglomeration of tech jobs in London, which had multiple ICT hotspots across the city. This incompleteness highlights a double irony. Silicon Roundabout was a bottom-up place brand

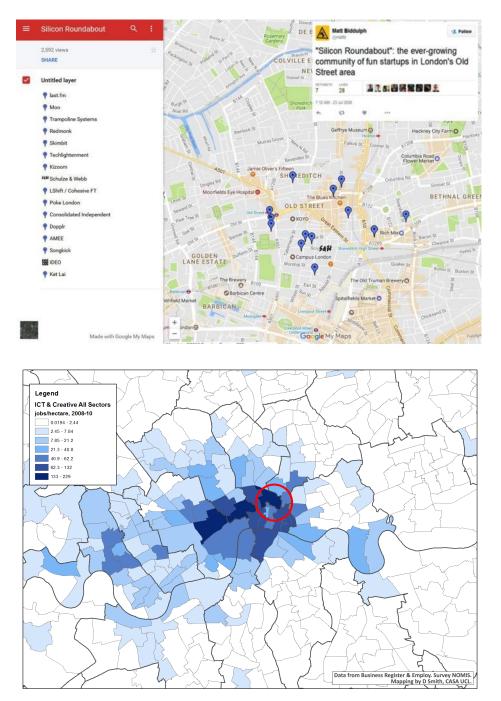
⁶ <u>https://www.ft.com/content/f815bdd4-4bfa-3e47-bfda-5948428001b7</u>, accessed 16 March 2017.

⁷ <u>http://www.standard.co.uk/news/roundabout-is-londons-answer-to-silicon-valley-6912063.html</u>, accessed 16

March 2017.

intended to amuse a group of friends, not to drive policymaking: however it, not the topdown City Fringe, then shaped the Tech City initiative.

Figure 2. Silicon Roundabout, 2008; ICT and creative industries employment density in Central London, 2008-10.



Sources: <u>http://twitter.com/mattb</u>, accessed 25 November 2015; <u>http://bit.ly/siliconroundabout</u>, accessed 17 March 2017. UK Business Register and Employment Survey. Spatial units are wards (electoral districts). In 2008-10 there were 625 wards in Greater London.

4.2 / Imagining Tech City

David Cameron launched the 'East London Tech City' strategy in November 2010, drawing strongly on the Silicon Roundabout imaginary:

Something is stirring in East London. Only three years ago, there were just fifteen technology start-ups around Old Street and Shoreditch ... Fast forward to today, and there are now over one hundred high-tech companies in the area ... combine that with the possibilities of the Olympic Park just a few tube stops away ... We understand where previous governments have gone wrong. ... Go with the grain of what is already there. Don't interfere so much that you smother. But do help out wherever you can. ... Here's our vision for East London tech city - a hub that stretches from Shoreditch and Old Street to the Olympic Park." (Cameron, 2010)

The initiative was intended as a new form of light touch cluster development programme, seeking to avoid the pitfalls of previous interventions (Martin and Sunley 2003, Duranton 2009). Cameron went on to list three objectives: building the cluster through awareness-raising and light touch business support; attracting FDI, and 'connecting' the Shoreditch scene to the Olympic Park (branding, plus re-fitting Park buildings and leasing them to tech multinationals and major universities). He also announced the launch of the Tech City Investment Organisation (TCIO), a public agency that would 'join up' policy agendas and link industry players into government.

Cameron stressed that the policy had developed through a "few weeks and months" of holding "dozens of meetings with technology companies and venture capital investors from across the world." In practice, the process seems to have been less evidence-based and more haphazard. As one interviewee explained:

I somehow got an invite to go on a trade mission to India ... Probably because I'd appeared in a list of influential tech people in Wired UK. And they didn't have many small companies represented ... I made a point of talking to as many people as I could, about this thing in East London called Silicon Roundabout, and what could they do to support it. ... eventually this special advisor who'd got me invited, said "you should come and talk to [the then Science Minister] David Willetts". So I went ... and I said, uh, I don't know what you can do, but do something. ... He said attention might be just about the right thing to do, you know, so not tax and not legislation. And I was like "that's exactly it". ... And he remembered that. And then a few months later there was the Tech City initiative, and [the advisor] dropped me a note ... "this is a continuation of that conversation we started in India". [F3]

Two tactical factors were also in play. First, a post-crash government was keen for good news stories. Second, London was preparing to host the 2012 Olympic Games, and public opinion was critical of the large amounts spent developing the Olympic Park. Of particular concern were the International Broadcast Centre and Media centre: 91,000 square metres of space, in a remote corner with poor public transport. Ministers and their advisers saw a chance to link the Silicon Roundabout brand, however tenuously, to the post-Games park [P1].

From the outset, the Tech City brand was an integral part of the strategy. Beyond this, we can see the initiative itself as brand-led. First, the stated goals are close to the definition of 'selling places' laid out by Kearns and Philo (1993): notably the emphasis on 'attention' and awareness-raising, the focus on inward investment, and the repositioning of the Olympic Park for new economic uses. Second, in interviews TCIO staff made clear that developing a clear brand was the first fundamental task [P1]. Third, many TCIO staff also had marketing and FDI backgrounds, and were seconded from London agencies or national government. Finally, many of the broader business support elements – notably the entrepreneur visa and tax breaks for early stage investment – were UK-wide policies, not local programmes. A key role of TCIO – and Tech City more broadly – was thus to associate these initiatives to the cluster through messaging and co-ordination activity.

4.3 / Implementing Tech City

The policy's emergence through chance meetings, informal consultation, little data, and reliance on the Silicon Roundabout imaginary combined to make implementation challenging. A first set of tensions involved aligning the Tech City vision with actual physical and policy spaces. In the spirit of Cameron's 'going with the grain', the borders of Tech City were kept deliberately vague. One policymaker suggested to us that '[it is] not an area, it's an attitude of mind' [P5].

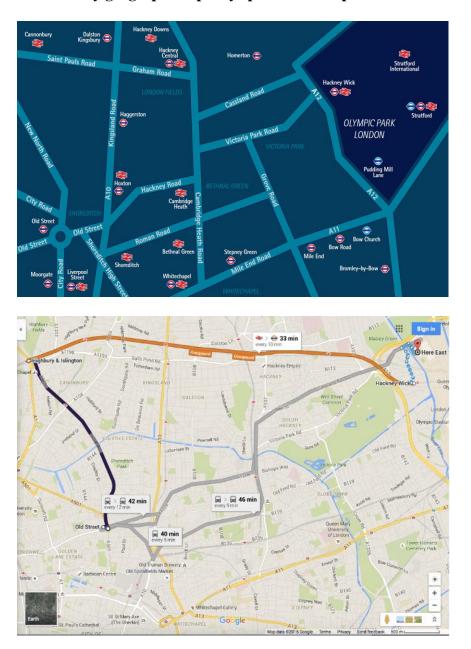


Figure 3. Tech City geographies: policy space vs. real space.

Source: TCIO; Google Maps, accessed 8 December 2015

Another argued that boundaries would be user-generated and in motion:

I have real trouble putting a line around [Tech City] because for me it's an idea. ... The geography of it will be very porous and actually quite dynamic over time because it will grow ... Tech City is actually where the companies which are part of it decide where they want it to be. [P4].

This desire for fluidity correctly reflected economic reality on the ground. But it also conflicted with the objective to formally 'connect' Shoreditch to the Olympic Park. Its implementation thus required some creative reshaping of distance, and of real-world urban form. For example, Cameron's speech highlighted that the Olympic Park was only "a few tube stops away" from Shoreditch, and also cited access to City Airport, St Pancras International railway station and the Stratford transport hub. Tech City Investment Organisation literature emphasised this proximity, suggesting the two locales were essentially adjacent (Figure 3, top). The reality is quite different to this policy space (Figure 3, bottom). First, the two neighbourhoods are 5.6 kilometres apart: the quickest tube journey between Old Street and the International Broadcast/Media Centre takes 33 minutes and involves seven stops, one change, plus a 10-minute walk at the end.⁸ Second, the TCIO map omits waterways, housing and commercial space, giving a misleading impression of empty space for firms and developers to fill.⁹

A second set of challenges concerned governance. The Tech City strategy combined a number of interventions including new visas for foreign entrepreneurs and highly skilled staff, increasing access to affordable workspace and early stage finance, raising foreign investment, and export promotion. In keeping with the 'light touch' ethos, implementation used a partnership model between public, private and third sectors, involving different levels and domains of the public sector, with the Tech City Investment Organisation (TCIO) as the co-ordinator. In theory, a brand-led strategy should be able to leverage the brand vision to help co-ordinate these elements and actors. In practice, this joined-up approach exemplifies 'multi-way, multi-spatial governance' (Jessop, 2016), and was much messier than formally conceived.

In particular, the Prime Minister's advisers continued to take an active interest in Tech City, even after handing over the initiative to UK Trade and Investment (UKTI) and TCIO. Monthly breakfast meetings were held at 10 Downing St with around 50-60 interested parties,

⁸ As calculated by TFL Journeyplanner, 21 August 2015, 12:45pm. As alternatives, Journeyplanner gives a 42 minute bus journey (involving a change of bus), a 29 minute bike ride (at 'moderate speed') or a 40 minute journey using a TFL hire bike. <u>http://bit.ly/1K9XPlQ</u>

⁹ Loose boundaries also allowed in a competing policy imaginary: Newham Council developed 'Tech City Plus', which combined the not-yet-existing Shoreditch-Stratford zone, plus a second not-yet-existing zone East along the Thames river (and entirely in Newham's administrative boundaries).

including local businesses, universities, the Department of Business, the Treasury, UKTI, TCIO, the Greater London Authority (GLA), the Olympic Park Legacy Company (OPLC), four London boroughs (Hackney, Newham, Islington and Tower Hamlets), as well as property owners and private sector service providers [P3-P7].

Each of these actors had their own priorities. For TCIO and No 10, this was to develop links into the local tech community, and build credibility with policy users. TCIO thus deliberatively borrowed from 'disruptive' tech sector practices: 'do it first and apologise later' [P2]. Such 'agile' working practices also reflected the need to develop detailed policy on the fly. However, this caused problems with civil servants and local government officers used to more structured, formal ways of working. As one policymaker told us, some spending departments would 'see 100 reasons why not to' do something; by contrast, the Downing St 'attitude was make it happen, why not faster. Who do you want the PM to call?' [P1]. Interest from Downing St meant other levels of government were 'all desperately keen to be a part of it,' so the set-up was 'more disorganised than normal' [P8]. Another described it as 'the biggest mess of governance I've ever seen both in this country and internationally.' [P3] Against this chaotic backdrop, TCIO staff managed to run an organisation and a number of projects, a large achievement.

A third set of issues involved managing stakeholder reactions. An effective place brand should complement individual firms' activities; a good brand-led strategy should knit actors together. Tech City achieved this for some, but not all local businesses. Interviews with local firms in early 2012 reveal roughly equal shares of positive and negative responses. More recent entrants typically welcomed the rebranding:

Tech City's great. I think all of this helps to push the ecosystem generally, because it gets into people's minds ... [F5]

The brand was also enthusiastically taken up by the property sector (Savills, 2012; Cushman & Wakefield, 2013), as did real estate players in other tech and creative clusters (Indergaard, 2004; Harris, 2012). As one interviewee told us, '[the industry] has a long tradition of inventing brands and names for places ... that's how they enhance value.' [P9]

More established businesses were sceptical, with some explicitly citing 'Silicon Roundabout' as preferable. These reactions echo similar critiques of Silicon Alley as a 'media term' and 'propaganda' by post-boom New York tech firms (Indergaard, 2004) [p48]:

Silicon Roundabout is the bottom-up name that describes the cluster of companies, mostly design and tech companies, but focussed around the internet, in East London. ... Tech City is a kind of a top-down, government name, which is used for attention and to get people into the area. [F3]

Another argued that 'my personal perception of Tech City is very much a government jumping on the bandwagon, and sticking a label on it' [F6]. A third said that:

... it's inexorably, naturally moving Eastward anyway. And I see Tech City is kind of a governmental co-opting of what's already a natural shift, a natural place, and also a shifting place ... I don't think it's got much to do with government what goes on in East London. [F11]

Two 'resonant sites' (Hutton 2006) were notable battlegrounds. First, governance and boundary issues came together in attempts to establish a Shoreditch satellite on the Olympic Park Media Centre site. A typical response from one local business was that 'I think it is the government's way to get more money into the Olympic Park without saying "we're putting more money into the Olympic Park".' [F9] Another suggested that 'There'd be a worry that you would be moving out onto a tumbleweed strewn cul-de-sac ... cut off from the vibrancy associated with this particular area.' [F10]

The second site was Old St roundabout itself. In December 2012 David Cameron and Boris Johnson unveiled surprise proposals for a radical redevelopment, featuring a multi-storey, architecturally iconic hub for startups and the local community – the Old St Institute, 'Europe's largest indoor civic space' – and extensive streetscaping.¹⁰ The only visual detail

¹⁰ <u>https://www.gov.uk/government/news/pm-announces-50m-funding-to-regenerate-old-street-roundabout</u>, accessed 9 September 2015.

was provided in renderings, leading industry newspaper The Register to dub the development 'The £50m THING'.¹¹

Assessed against Cameron's vision, the THING is hardly 'going with the grain', but might count as 'helping where we can'. However, as a concrete proposal it suffered from three major problems. First, the plans were impossible to deliver: they placed too much physical weight on the tube station below, where Transport for London already had their own redevelopment plans.¹² Second, there was little demand: streetscape improvements were the *lowest* priority identified by local firms we surveyed, many of whom appreciated the existing, gritty streetscape. Third, delivery was unfortunate: Cameron and Johnson pitched to a room full of local technology firms and critical urbanists, many of whom immediately took to social media to air hostile reactions.

The THING is an almost classically perfect example of how not to place-brand: a selective co-opting of an existing asset, repackaging it for an outside audience of investors and developers. More broadly, the brand-led approach once again failed to achieve co-ordination between policy actors, with TCIO, the lead agency, cut out of the process. Most striking is the lack of join-up between the London Mayor's office and Transport for London – even through the latter is directly controlled by the Mayor.

4.4 / After Tech City

Despite these early challenges, the Tech City brand has endured, and has become recognised spatial shorthand for the East London technology milieu.¹³ The policy architecture around the

¹¹ <u>http://www.theregister.co.uk/2012/12/11/silicon_roundabout_thing/</u>, accessed 9 September 2015.

¹² <u>http://www.techworld.com/news/startups/hackney-councillor-sheds-light-on-what-happened-50m-tech-city-fund-3612087/</u>, accessed 9 September 2015.

¹³ See for example <u>http://www.knightfrank.co.uk/blog/2017/06/30/tech-city-in-londons-city-fringe-no-longer-just-for-start-ups; http://www.talk-business.co.uk/2017/05/24/end-tech-city-shoreditch/;</u>

https://www.standard.co.uk/comment/comment/rohan-silva-tech-city-s-gogetting-example-can-help-postbrexitbritain-a3370851.html; https://www.theguardian.com/media-network/2016/apr/12/startups-abandon-tech-citycommercial-rent-soars-east-london-shoreditch; http://www.cityam.com/267743/opinion-tech-city-and-impactits-had-property-market-east; and http://www.londonlovesbusiness.com/business-news/adobe-opens-flagshipoffice-in-the-heart-of-londons-tech-city/16963.article. All accessed 22 August 2017.

brand has changed substantively, though, in ways that alter both the geography and meaning of the underlying spatial imaginary.

In Autumn 2014 the East London phase of Tech City was wound up, with TCIO rebranded as Tech City UK (TCUK), a body that aims to 'champion the UK tech sector nationally and internationally'. In further rebranding, from April 2018 TCUK will become Tech Nation.¹⁴ TCUK's creation was partly a response to criticism (from cities such as Cambridge) that Tech City unfairly favoured the capital [P10]. TCUK's new remit covers the whole of London and major UK cities. TCUK is also not a one-stop shop along the lines of TCIO: there is now a formal division of labour between TCUK's national promotion and lobbying for the tech industry, London & Partners¹⁵ (an inward investment/export promotion agency funded by the London mayor and the private sector) and the Greater London Authority (economic development, transport, skills, strategic planning).

These institutional changes have also changed the Tech City identity itself. TCUK is now a national sector development body, whose urban focus reflects the geography of tech activity, rather than an explicit focus on London. Its association with the Tech City brand is weaker than before, although the organisation is physically based in the Old St area and 'very much anchored here' [P10].

The Greater London Authority (GLA) is now the local lead policy actor. Rather than continue a brand-led strategy, it has taken a planning-led approach. To do this it has resurrected the City Fringe framework with a new geography – nesting Tech City within it (Figure 3). This represents a major re-working of both imaginaries. As the GLA plan explains:

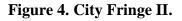
The City Fringe was historically regarded as the area around the north and eastern edges of the City of London's financial district ... much of what was considered fringe in the early 2000s is now considered core, whilst the City Fringe has moved north and east. (Greater London Authority, 2015) [vi]

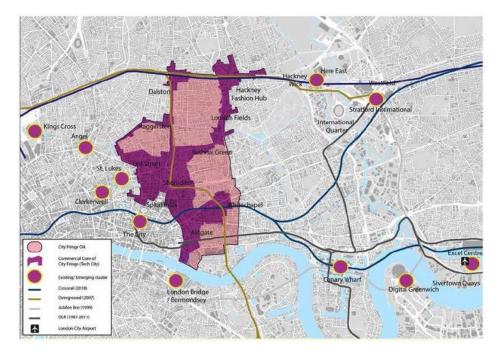
¹⁴ <u>http://www.techcityuk.com/about-us/</u>, accessed 22 August 2017; <u>http://www.techcityuk.com/blog/2017/11/we-are-tech-nation/</u>, accessed 23 November 2017.

¹⁵ <u>http://www.londonandpartners.com/about-us</u>, accessed 14 March 2017.

More precisely, Tech City is delineated as a business cluster within City Fringe II, but with boundaries far further to the North than previously:

For planning purposes Tech City represents the commercial core of the City Fringe around Shoreditch, Old Street, Bishopsgate and Spitalfields, extending north to Hackney Central and Dalston, and south and east to include Aldgate and Whitechapel. [p4]





Source: GLA (2015). Crown Copyright and database right (2018). Ordnance Survey 100032216 GLA

Geography aside, there are four substantive differences with the previous place brand. First, the planners locate Tech City within the wider London system, both as part of a wider East-West 'corridor' of high-value activity, and as part of a set of 'existing and emerging science and tech economy clusters' [p11] that surround the cluster to the West, East and South. Second, there is a recognition that clusters are moving objects, and via plan revisions, a process for redrawing formal boundaries. Third, the area's industry mix is depicted as broad-based, with digital content, not ICT, the dominant 'tech' strand:

Whilst activities such as software and web design and application development are important, Tech City is not really about creating new "tech" ... Neither is it homogeneous as there is distinctive sectoral clustering throughout the area.' [p6]

This more nuanced conception of the cluster informs the resulting strategy. The vision is for an 'innovation hub driving growth in London and the UK's digital economy' [vi] via a mix of large firms, SMEs and startups. Unlike City Fringe I and TCIO strategies, which advocated a single 'joined up' approach, the Framework specifies clear limits on what city and local planning can do (workspace provision, streetscape, transport, mix of residential and business uses), passing other functions (FDI, export support, city marketing, sector 'championing', business support) to TCUK and other agencies. Unlike earlier place narratives, City Fringe II also recognises conflicts and negative feedback loops: in particular, cluster growth pricing out smaller firms; competition between employment and residential uses; and the importance of preserving supportive leisure, retail and night-time economy functions.

In a final break from the Tech City imaginary, City Fringe II makes no attempt to join up Shoreditch with the Olympic Park. And in practice, place branding in the Park has followed different lines. Initially dubbed 'iCity', with heavy emphasis on the Stratford / Olympics location, the Broadcast and Media Centre site has been rechristened 'Here East' and is marketed as being in Hackney. This is both technically correct, and effectively shifts the site closer to culturally vibrant neighbourhoods in Hackney Wick.¹⁶ Here East is also developing a distinct offer focused on 'makers' in product development and design (based on the large spaces available for building and prototyping), as well as TV / media (reflecting the broadcast centre facilities and superfast internet connections). The marketing material inverts the invented aspects of the development, making a virtue of the new 'ecosystem which we're curating ... a new community is being forged'.¹⁷

'Here East' is a brand new policy space, with the site provided essentially *tabula rasa* (albeit after substantial initial public investment).¹⁸ Its imaginary plays with territory, reframing the

¹⁶ The eastern edge is 300m from the borough boundary. <u>http://bit.ly/2wATF62</u>, accessed 13 October 2015.

¹⁷ <u>https://www.youtube.com/watch?v=mCfTXIvULdQ</u>, accessed 26 August 2016.

¹⁸ The development of the Olympic Park was part of the £9bn overall budget for the Games infrastructure. The 2012 Legacy Company own the site, and Here East has a 200-year lease.

site's relationships to other neighbourhoods and delineating a new set of economic actors. The developers explicitly hope to shift mental geographies – both post-Olympics, and the growing profile of eastern Hackney. The only remaining link with Shoreditch is the hope that the rental 'price implosion' around Old St will help 'price in' firms to the development [P1].

The fate of the THING is less clear. In 2013, design firm Architecture 00 was awarded funding to develop the concept into the 'Open Institute London', but no public outputs are available.¹⁹ The Institute is briefly referenced in the City Fringe II framework, as a development intended to 'provide institutional support for the digital age in the way that institutions emerged in the 19th century around a shared interest in a specific domain, for example the RICS or the Reform Club' [p59]. However, the authors have found no other public information.

5/ Discussion

This paper explores the emergence and implementation of the Tech City place brand between 2010 and 2014, and the overlapping, competing spatial imaginaries that preceded and succeeded it. While place branding is now a well-established economic tool (Zukin, 1995; Markusen and Gadwa, 2010), its use for promoting tech clusters is poorly understood. This matters because urban tech firms tend to generate distinctive milieux (Scott, 1997; Hutton, 2006), which have proved tricky for policymakers to support (Duranton, 2011), but which could be highly amenable to branding interventions. Our analysis is unusual in examining a 'sector-place brand', Tech City, used in a branding-led strategy designed sidestep the problems of conventional cluster programmes, and which has been claimed as a substantive success. It is also unusual in its long timeline and rich longitudinal data.

The Tech City story to date has particularly striking parallels with the Silicon Alley story (Pratt, 2000; Indergaard, 2004), but also some major differences. Both were digital contentorientated milieux that emerged in well-connected inner urban neighbourhoods in postindustrial global cities. Both were hotspots in a larger city-regional ecosystem, with small numbers of high profile companies, alongside a mass of smaller businesses. In both cases,

¹⁹ <u>http://www.oi-london.org.uk/</u> returns a 403 (as of 20 March 2017).

place brands and image played important roles in cluster development, emerging organically, then amplified by media and real estate actors.

Silicon Alley was destroyed by the dotcom crash - but 'new media' has since re-emerged as part of New York's larger knowledge-based economy, with new hotspots especially in Brooklyn (Indergaard, 2009). London's city-wide picture is similar, with around 90,000 workers in tech firms across the city, and fintech, proptech and online retail developing as key 'verticals'. But East London's dotcom crash was softer (see figure 1) and the area has seen more or less continuous growth since then. East London's place branding story is more complex: rather than a single hyped brand emerging, a bottom-up imaginary was co-opted into a top-down policy space. The political economy also differs from Silicon Alley, with local and national policymakers playing central roles, and finance players emerging only later.

How far has Tech City policy contributed to this picture? This is not a formal policy evaluation, but we are able to provide suggestive evidence by looking at the ways in which the area's place brands came about and functioned. 'Tech City' became a well-known brand, which has helped position London as a well-known tech ecosystem, helping to trigger venture capital and other investment in the process, and likely inspiring other European cities to follow suit. As such, it has likely complemented individual firms' efforts to grow. Some elements of the brand worked less well, notably the Olympic Park satellite community, which has developed its own, non-Shoreditch spatial imaginary. As a brand-*led* strategy, Tech City had mixed success. It was welcomed by many firms as a community they could join; but as in Silicon Alley and other cases, we found pushback from other local protagonists. And in practice, a brand-led approach led by a single agency was not able to easily manage a large set of competing actors and interests. 'Tech City' is now nested as a place brand within a much larger planning framework, with TCIO functions given to three different organisations.

Overall, we cast doubt on the 'catalytic' claims made by London and national policymakers for the intervention. Our data shows no clear evidence of post-policy jumps in economic activity, and is consistent with positive and negative cluster feedback loops (Nathan and Overman, 2013). Our analysis helps show how an 'attention-led' strategy could have contributed both to a denser cluster with more resources for participants, but also to a more expensive milieu that gradually displaces activity to other parts of the city. This is catalytic, but probably not in the way policymakers intended.

Our analysis also highlights the limitations of a branding-led approach to clusterdevelopment (and to the use of place branding in a larger policy mix). First, fuzzy boundaries allow brand evolution but make strategy harder to work through. Second, the (understandable) desire to focus activity in a single delivery agency is likely to place extreme strain on that agency, which has to arbitrate across complex objectives, scales and modes of behaviour. Third, since digital tech firms tend to generate their own spatial imaginaries, policy-led rebranding is particularly vulnerable to charges of appropriation: as Lee (2017) points out, branding-led strategies risk ending up as brand, not strategy.

Does this mean that Tech City is simply a temporary 'fix' (Harvey, 1989; Jessop, 2012; 2016)? We show that elements of this ideal-type hold here, but not all. Rather, policy development and implementation more often resembles the second-best policymaking characterised by Lindblom (1959) as 'muddling through'. Our analysis shows that planners can usefully deploy a strong place brand within a bigger framework. It also implies that, to the extent that public policy can have an impact on such complex milieux, planning-based interventions for clusters are likely to have a greater chance of sustained impact than branding-led approaches. Future research should explore whether the plan-led iteration of Tech City has more success than the brand-led version has managed.

References

- Allmendinger P and Haughton G. (2009) Soft Spaces, Fuzzy Boundaries, and Metagovernance: The New Spatial Planning in the Thames Gateway. *Environment and Planning A* 41: 617-633.
- Bagwell S. (2008) Creative Clusters and City Growth. Creative Industries Journal 1: 31-46.
- Bathelt H. (2005) Geographies of production: growth regimes in spatial perspective (II) knowledge creation and growth in clusters. *Progress in Human Geography* 29: 204-216.
- Bickford-Smith V. (2009) Creating a City of the Tourist Imagination: The Case of Cape Town, `The Fairest Cape of Them All'. *Urban Studies* 46: 1763-1785.
- Boschma R and Frenken K. (2011) The emerging empirics of evolutionary economic geography. *Journal of Economic Geography* 11: 295-307.
- Braun E, Kavaratzis M and Zenker S. (2013) My city my brand: the different roles of residents in place branding. *Journal of Place Management and Development* 6: 18-28.
- Cameron D. (2010) East End Tech City speech. 4 November. London.
- Charlot S and Duranton G. (2004) Communication externalities in cities *Journal of Urban Economics* 56: 581-613.
- Chatterji A, Glaeser E and Kerr W. (2014) Clusters of Entrepreneurship and Innovation. *Innovation Policy and the Economy* 14: 129-166.
- Cities Institute. (2009) City Fringe Partnership: City Growth Strategy Evaluation Programme: Final Report. London: London Met University.
- City Fringe Partnership. (2004) City Growth Strategy: London City Fringe Main Strategy. London: City of London.
- Currid E and Williams S. (2010) The geography of buzz: art, culture and the social milieu in Los Angeles and New York. *Journal of Economic Geography* 10: 423-451.
- Cushman & Wakefield. (2013) From Goldman to Google. London Cushman & Wakefield.
- Dembski S and Salet W. (2010) The Transformative Potential of Institutions: How Symbolic Markers Can Institute New Social Meaning in Changing Cities. *Environment and Planning A* 42: 611-625.
- Duranton G. (2011) California Dreamin': The feeble case for cluster policies. *Review of Economic* Analysis 3: 3-45.
- Duranton G and Puga D. (2004) Micro-Foundations of Urban Agglomeration Economies. In: Henderson JV and Thisse J-F (eds) *Handbook of regional and urban economics 4*. The Hague: Elsevier, 2063-2117.
- Foord J. (2013) The new boomtown? Creative city to Tech City in east London. Cities 33: 51-60.
- Friedmann J. (2010) Place and Place-Making in Cities: A Global Perspective. *Planning Theory & Practice* 11: 149-165.
- Gibson C and Davidson D. (2004) Tamworth, Australia's 'country music capital': place marketing, rurality, and resident reactions. *Journal of Rural Studies* 20: 387-404.
- Glaeser EL, Kolko J and Saiz A. (2001) Consumer city. Journal of Economic Geography 1: 27-50.
- Gordon I. (2006) How Should We Write About London? The Working Capital View. *City* 10: 185-196.
- Grabher G. (2002) Cool Projects, Boring Institutions: Temporary Collaboration in Social Context. *Regional Studies* 36: 205-214.
- Greater London Authority. (2015) *City Fringe Opportunity Area Planning Framework*. www.london.gov.uk/sites/default/files/City_Fringe_low_res_19DEC2014_0.pdf.
- Hall P. (1998) *Cities in Civilisation: Culture, Innovation and Urban Order,* London: Weidenfeld and Nicholson.
- Hall P. (2000) Creative Cities and Economic Development. Urban Studies 37: 639-649.
- Hamnett C and Whitelegg D. (2007) Loft conversion and gentrification in London: from industrial to postindustrial land use. *Environment and Planning A* 39: 106-124.
- Harris A. (2012) Art and gentrification: pursuing the urban pastoral in Hoxton, London. *Transactions* of the Institute of British Geographers 37: 226-241.
- Harvey D. (1989) The Urban Experience, Oxford: Blackwell.

- Haughton G and Allmendinger P. (2015) Fluid Spatial Imaginaries: Evolving Estuarial City-regional Spaces. *International Journal of Urban and Regional Research* 39: 857-873.
- Haughton G, Deas I, Hincks S, et al. (2016) Mythic Manchester: Devo Manc, the Northern Powerhouse and rebalancing the English economy. *Cambridge Journal of Regions, Economy and Society* 9: 355-370.
- Hutton T. (2008) *The New Economy of the Inner City: Restructuring, regeneration and dislocation in the twenty-first century metropolis,* Abingdon: Routledge.
- Hutton TA. (2006) Spatiality, built form, and creative industry development in the inner city. *Environment and Planning A* 38: 1819-1841.
- Hutton TA. (2009) The Inner City as Site of Cultural Production sui generis: A Review Essay. *Geography Compass* 3: 600-629.
- Indergaard M. (2004) Silicon Alley: The Rise and Fall of a New Media District, Oxford: Routledge.
- Indergaard M. (2009) What to Make of New York's New Economy? The Politics of the Creative Field. *Urban Studies* 46: 1063-1093.
- Jansson J and Power D. (2006) The image of the city: Urban branding as constructed capabilities in Nordic city Regions. Oslo: Nordic Council of Ministers.
- Jansson J and Power D. (2010) Fashioning a Global City: Global City Brand Channels in the Fashion and Design Industries. *Regional Studies* 44: 889-904.
- Jessop B. (2012) Cultural Political Economy, Spatial Imaginaries, Regional Economic Dynamics. *CPERC Working Paper 2012-02.* Lancaster: University of Lancaster.
- Jessop B. (2016) Territory, Politics, Governance and Multispatial Metagovernance. *Territory, Politics, Governance* 4: 8-32.
- Johansson M. (2012) Place branding and the imaginary: The politics of re-imagining a garden city. *Urban Studies* 49: 3611-3626.
- Jones E. (2017) Planning for Tech City in post-recession London. London: UCL.
- Kearns G and Philo C. (1993) Culture, history, capital: A critical introduction to the selling of places. New York: Pergamon, 1-32.
- Lee N. (2017) Powerhouse of cards? Understanding the 'Northern Powerhouse'. *Regional Studies* 51: 478-489.
- Lee Y-S and Yeoh BSA. (2004) Introduction: Globalisation and the Politics of Forgetting. *Urban Studies* 41: 2295-2301.
- Lindblom C. (1959) The Science of 'Muddling Through'. Public Administration Review 19: 79-88.
- Lundequist P and Power D. (2002) Putting Porter into practice? Practices of regional cluster building: evidence from Sweden. *European Planning Studies* 10: 685-704.
- Markusen A and Gadwa A. (2010) Creative Placemaking. Washington DC: NEA.
- Marshall A. (1918) Principles of Economics, New York: Macmillan.
- Martin DG. (2003) "Place-Framing" as Place-Making: Constituting a Neighborhood for Organizing and Activism. *Annals of the Association of American Geographers* 93: 730-750.
- Martin R and Sunley P. (2003) Deconstructing clusters: chaotic concept or policy panacea? *Journal of Economic Geography* 3: 5-35.
- Martin R and Sunley P. (2006) Path dependence and regional economic evolution. *Journal of Economic Geography* 6: 395-437.
- Martins J. (2015) The Extended Workplace in a Creative Cluster: Exploring Space(s) of Digital Work in Silicon Roundabout. *Journal of Urban Design* 20: 25–145.
- McCann EJ. (2002) The cultural politics of local economic development: meaning-making, placemaking, and the urban policy process. *Geoforum* 33: 385-398.
- Moilanen T and Rainisto S. (2009) *How to Brand Nations, Cities and Destinations,* London: Palgrave Macmillan.
- Montgomery A. (2016) Reappearance of the Public: Placemaking, Minoritization and Resistance in Detroit. *International Journal of Urban and Regional Research* 40: 776-799.
- Nathan M and Overman H. (2013) Agglomeration, clusters, and industrial policy. *Oxford Review of Economic Policy* 29: 383-404.
- Nathan M and Vandore E. (2014) Here be startups: exploring London's 'Tech City' digital cluster. *Environment and Planning A* 46: 2283-2299.

- Pasquinelli C. (2010) The limits of place branding for local development: The case of Tuscany and the Arnovalley brand. *Local Economy* 25: 558-572.
- Pike A. (2013) Economic Geographies of Brands and Branding. Economic Geography 89: 317-339.
- Porter M. (2003) The Economic Performance of Regions. Regional Studies 37: 545-546.
- Power D and Hauge A. (2008) No Man's Brand—Brands, Institutions, and Fashion. *Growth and Change* 39: 123-143.
- Pratt AC. (2000) New media, the new economy and new spaces. Geoforum 31: 425-436.
- Pratt AC. (2002) Hot Jobs in Cool Places. The Material Cultures of New Media Product Spaces: The Case of South of the Market, San Francisco. *Information, Communication & Society* 5: 27-50.
- Pratt AC. (2009) Urban Regeneration: From the Arts `Feel Good' Factor to the Cultural Economy: A Case Study of Hoxton, London. *Urban Studies* 46: 1041-1061.
- Savills. (2012) London Occupier Focus: TMT. London: Savills.
- Scott AJ. (1997) The Cultural Economy of Cities. *International Journal of Urban and Regional Research* 21: 323-339.
- Staber U and Sautter B. (2011) Who Are We, and Do We Need to Change? Cluster Identity and Life Cycle. *Regional Studies* 45: 1349-1361.
- Storper M, Kemeny T, Makarem N, et al. (2015) *The Rise and Fall of Urban Economies: Lessons from San Fransciso and LA*, Stanford: Stanford University Press
- Storper M and Venables A. (2004) Buzz: Face to Face Contact and the Urban Economy. *Journal of Economic Geography* 4: 351-370.
- Sturgeon T, Van Biesebroeck J and Gereffi G. (2008) Value chains, networks and clusters: reframing the global automotive industry. *Journal of Economic Geography* 8: 297-321.
- Urry J. (1995) Consuming places, London: Routledge.
- van der Linde C. (2003) The demography of clusters findings from the cluster meta-study. In: Broecker J, Dohse D and Soltwedel R (eds) *Innovation Clusters and Interregional Competition*. Berlin: Springer Verlag, 130-149.
- Vandore E. (2011) The moulding of an East London cluster: Regeneration and foreign investment in Tech City. *MSc Thesis*. London: UCL Bartlett School of Planning.
- Wired UK. (2010) London's Silicon Roundabout. Wired UK.
- Yeung HW-c and Coe NM. (2015) Toward a Dynamic Theory of Global Production Networks. *Economic Geography* 91: 29-58.
- Zukin S. (1982) *Loft Living: Culture and Capital in Urban Change*, Baltimore: Johns Hopkins University Press.
- Zukin S. (1995) The Cultures of Cities, Oxford: Blackwell.