New Cultural Infrastructure: can we design the conditions for culture?

John Bingham-Hall and Adam Kaasa

From its inception in 2011, Theatrum Mundi has been concerned with the spaces of and for artistic and cultural production in the city. A core question at the heart of Theatrum Mundi’s research agenda is what is the relationship between the production of and the display of urban culture. From workshops on ‘Social Movement’ and ‘Architecture and Music’, to debates like ‘Can the Temporary leave a Trace’ and ‘Designing for Learning’, to event series on libraries, commons and public spaces, and expert roundtables comparing London’s Olympicopolis to Hamburg’s Oberhafen and Gängeviertel, Theatrum Mundi addresses conceptual and pragmatic concerns bridging academic inquiry, artistic practice, and architectural and urban contingency. In its fifth year, Theatrum Mundi assembled 60 thought leaders across London’s urban cultural fabric to address the following question: What is the infrastructure for culture, and can it be designed into the city?
New Cultural Infrastructure: can we design the conditions for culture?..1

Introduction ................................................................................................................. 3

Method ............................................................................................................................ 4

Participants ..................................................................................................................... 7

Infrastructures of Performance .................................................................................... 9
  Temporary and the Trace ............................................................................................... 9
  Rehearsing Space ......................................................................................................... 10
  Finding Space ............................................................................................................... 12
  Domestic (or Shrinking) Space .................................................................................... 15
  Embodiment, Embedding, and Memory ....................................................................... 16
  Residing in Space ........................................................................................................ 18
  Focused Space ............................................................................................................ 20

Infrastructures of Making ............................................................................................. 22
  Equipped Space .......................................................................................................... 22
  Labouring in Space ...................................................................................................... 23
  Non-Aesthetic Space for Making ............................................................................... 25
  Production Space Without Display ............................................................................ 26
  Ecosystems and Networks in Space ........................................................................... 27
  Practice Expanding Across Space ............................................................................. 28
  Culture in Infrastructural Space ................................................................................. 29

Infrastructures of the Virtual ....................................................................................... 31
  Unspecified Space ........................................................................................................ 31
  Spatialised Value ......................................................................................................... 33
  Itinerant Production .................................................................................................... 35
  Institutional Infrastructure .......................................................................................... 37
  Claiming and Making Visible ...................................................................................... 38

References ..................................................................................................................... 42
**Introduction**

As part of an “infrastructural turn” in thinking about the city, technical systems for the provisioning of transport, food, and energy are framed alongside ‘social’ factors such as planning and regulatory codes, knowledge networks, and corporate interests as a set of underlying, and often invisible, urban conditions that are strongly implicated in the formation of political and cultural life. This thinking “foregrounds the urban backstage to reveal the sociality of roads, pipes, cables, broadband, code and classification”.  

Infrastructure itself is “conceptually unruly”: different things become infrastructures depending on the object of study, and any object of study may be an infrastructure for something else. Generally, though, they can be thought of as relatively invisible systems – whether as material as cables or as immaterial as the data they carry – on top of which everyday life is built. Infrastructure as a general category, then, describes a set of conditions within which human action plays out, giving rise to political and cultural conditions shaped in varying degrees by its unequal shape and distribution.

While many domains of life have been identified and analysed in relation to infrastructural conditions, artistic practice has rarely been thought of in this way. This report contends that artistic production and reception constitutes a formal notion of urban ‘culture’, are fundamentally shaped by material space, and that those spaces are shaped by infrastructural systems. This could include a complex of effects, from legal frameworks for and economic demands on urban development, to the geographical distribution of facilities for artistic production and the ecosystems of supply and distribution that support them, to the size and material form of individual studio spaces and their physical relationships to one another and to public spaces. All of these can be analysed as infrastructural conditions.

Doing so allows an analysis of how they constrain or facilitate the development of particular types of artistic forms in London, and in turn how those forms engage particular types of encounters with and between their audiences. This report suggests that invisible infrastructures, that themselves are created through intentional acts of design and implementation, shape the situations in which cultural producers do work and subsequently take effect on the emergence of forms of public life around the display of those products.

---

1. (Amin, 2014, p. 139)
2. (Larkin, 2004, 329)
**Method**

The current Mayor of London, in his manifesto, committed to developing a Cultural Infrastructure strategy “to identify what we need in order to sustain London’s future as a cultural capital”, including the introduction of designated Creative Enterprise Zones and the use of planning law to protect and promote the development of cultural space.\(^3\)

In the autumn of 2016, Theatrum Mundi (TM) convened three roundtables to debate issues raised by the prospect of a Cultural Infrastructure Plan by asking artists, architects, writers, scholars, publishers, and institutional leaders: can we design the conditions for culture? In doing so, the aim was to contribute to an enrichment of the definition of infrastructure in relation to culture. These three roundtables raised new questions around the effects of cultural infrastructure on artists and the condition of their work, through collaborative thinking with makers of culture.

*Infrastructures of Performance roundtable at Siobhan Davies Studios*

The three roundtable workshops were organised around broad fields of practice related by

---

3 [http://www.sadiq.london/making_the_most_of_arts_culture_and_creativity](http://www.sadiq.london/making_the_most_of_arts_culture_and_creativity)
their spatial characteristics rather than through traditional notions of genre: performance, making, and the virtual. Each workshop brought together practitioners working within the respective fields, able to offer perspectives specific to that field, with a core group consisting generally of architects and scholars, allowing for comparative thinking across all three.

Each roundtable was hosted by an organisation providing cultural infrastructure relevant to the field under discussion, and was developed collaboratively with leaders of those organisations, in order that existing infrastructures could act as case studies in situ, and questions facing those organisations as starting points for discussion. Participants were contacted proactively, with no open call for participation issued, in order that the best possible attempt could be made to assemble individuals with a range of perspectives. As well as drawing on Theatrum Mundi’s existing network of artists and scholars, and those of the host organisations, a significant number of participants were identified as being in a

---

4 These fields are defined in full in the relevant sections below, but are worth introducing here for clarity. *Performance* is understood to be a mode of cultural production in which a series of actions are presented as an event that unfolds in time, whether purely bodily or with and in relation to instruments, props, and spaces. *Performers* are artists that present work in this way, and *rehearsal* is understood to be the process through which performances are tested and refined. So whilst the roundtable was framed broadly in relation to performance, which is a mode of public display, it was often rehearsal that was discussed. The *performance* roundtable was weighted towards dance and music in discussion. *Making* is understood to be a form of cultural production in which materials are manipulated with tools and hands to create objects, whether they be functional, decorative, or fine arts. As making refers to the productive process itself, *display* is used as a general term covering situations in which the end products are presented publicly, whether that be in a gallery or a shop, for example. Artists working in this way are referred to as *makers*, and the participants were largely artists, craftspeople, and gallerists. The final roundtable theme, the *virtual*, is a less common term for a group of artistic practices. We understand *virtual culture* to be any form of cultural product that can be both produced and consumed via a screen (taking paper itself to be a form of screen. This definition therefore incorporates writing, graphic design, illustration, and web art. Though the term *virtual producers* is used collectively for artists working in these ways, the conversation largely focused on writing, and therefore *writers* is often also used. Although writers are ostensibly only one kind of virtual producer, we also see writing as a term that could be expanded beyond its normal usage to include any practice that creates meaning through marking a surface with symbols to create a ‘text’ that can be replicated and distributed (hypothetically) endlessly. Finally, it is important to note that we acknowledge that there are many overlaps at the edge of these definitions, and that many individuals work in each of these modes at different points within and throughout their practices. However, we would argue that they remain useful categories for distinguishing quite different ways that their respective productive processes need and make use of urban space.
position to make a valuable contribution and were contacted ‘cold’. Theatrum Mundi is aware of the social and structural inequalities internal to cultural production. While there was the aim to be mindful of these inequalities in terms of the makeup of the participants and in terms of represented art forms in this undertaking, the makeup was strongly shaped by Theatrum Mundi’s existing connections and interests, as well as those of our partner organisations. Nonetheless, we would argue that the 60 participants across all three workshops represent a very broad range of positions, levels of experience, and ways of working, and an extremely valuable resource for thinking about cultural infrastructure.

For each roundtable, a different brief leading question was sent to participants along with a general background document. Furthermore, four participants for each were asked in advance to develop a ‘provocation’, in the form of a reflection on their own practice and issues in its relationship to the city, that would serve as a starting point for discussion. After each set of two provocations open discussion was invited, which was free ranging across social, political, and artistic as well as spatial issues, but brought back where necessary, by the chair, to the question of infrastructure. The evidence created through this process is qualitative, though where relevant figures were referred to in discussion references have been included in this report to support them. The production of the qualitative data was dialectical – as opposed to qualitative surveying in which opinions are assumed to be pre-existing and able to be collected through workshops, new thinking and ideas are produced in conversation in the context of the experience and expertise of the participants. Some of this thinking can be characterised as reflective, being descriptions and critiques of current phenomena, while some was propositional, being suggestions and imaginings of different ways cultural infrastructure could be produced.

This report is strongly informed by the evidence produced in the roundtables. What is presented below represents a summary of opinions and experiences discussed, but in the words of the report’s authors and with critical reflection added by them. Text in “quotation marks” that is not otherwise attributed is taken verbatim from the discussion. Footnotes add references that can be read alongside the report, to case studies, literature, data, and media reporting, that corroborate with the content of the discussions but were not necessarily raised in them. The evidence in the report is presented separately for each roundtable, with cross-cutting themes to be developed further and added as an Executive Summary.
Participants

Richard Wentworth
Artist

Anna Harding
Director, Space Studios

Edwin Heathcote
Architecture Critic, Financial Times

Richard Sennett
Professor of Sociology, LSE

Adam Kaasa
Director, Theatrum Mundi

Deborah Saunt
Architect, DSDHA

David Hills
Architect, DSDHA

George Henry Longly
Artist

Bahbak Hashemi-Nezhad
Artist

Stefania Donini
Doctoral Researcher, Guildhall School & Barbican Centre

Adrian Lahoud
Dean, RCA Architecture

Wilf Langridge
Senior Cultural Strategy Officer, GLA

Henry Ward
Head of Education, Freemlands Foundation

Katriona Beales
Artist

Emmanuel Balogun
Writer & Filmmaker, Visual Ideation

Kathrin Böhm
Artist

Rachel Causer
Artist

Karen Davies
Artist, Artist Development Manager, Space Studios

Florence Magee
Head of Artist Development, Space Studios

Philippe Castaing
Community Director, Peckham Levels

Eleanor Lakelin
Maker

Will Jennings
Artist, Activist

Lauren Wright
Programme Director, Siobhan Davies Studio

Marianne Forrest
Artist, Director, Auto Italia South East

Sarah Wigglesworth
Architect, Sarah Wigglesworth Architects

Siobhan Davies
Choreographer

Susanna Eastburn
Director, Sound and Music

Michael Keith
Director, University of Oxford Centre on Migration, Policy and Society

Mel Dodd
Programme Director, CSM Spatial Practices
Robert Ames  
*Conductor, London Contemporary Orchestra*

Efrosini Protopapa  
*Choreographer & Scholar*  
*University of Roehampton*

Orlando Gough  
*Composer*

Sean Gregory  
*Composer, Director of Creative Learning, Guildhall School & Barbican Centre*

Helen Frosi  
*(Freelance) Artist-Producer, Founder, SoundFjord*

John Sloboda  
*Research Professor, Guildhall School*

Brian Brady  
*Head of Theatre Programme, Trinity Laban*

Susanne Foellmer  
*Reader of Dance, Coventry University*

Teal Triggs  
*Associate Dean & Professor of Graphic Design, RCA School of Communication*

John Bingham-Hall  
*Researcher, Theatrum Mundi*

Elisabetta Pietrostefani  
*Project Coordinator, Theatrum Mundi*

Richard Martin  
*Curator, Public Programmes, Tate*  
*Visiting Lecturer, King's College London*

Alice Honor Gavin  
*Lecturer in Fiction & Writing, Sheffield*

Shumi Bose  
*Co-founder, REAL Review*  
*Senior Lecturer, CSM BA Architecture*

Justinien Tribillon  
*Writer, Editor, Migrant Journal*

Jordan Rowe  
*Centre Manager, UCL Urban Lab*

John Davies  
*Research Fellow, Nesta*

Edward Saperia  
*Founder, Newspeak House*

Tom Keene  
*Artist, Researcher, Activist*

Matthias von Hartz  
*Director, Berliner Festspiele*

Will Mercer  
*Head of Strategy, The Trampery*

Molly Strauss  
*Rachel Brain*  
*Larissa Heinisch*  
*MSc students*  
*City Design & Social Science, LSE*
Infrastructures of Performance

27th October 2016
Siobhan Davies Studios, 85 St George’s Road SE1

*Performance is by its nature temporary, and is focused on the body, meaning it is mobile and does not always leave a trace. In theory, then, everywhere could be an infrastructure for performance, but beyond the stage what else in the city enables performance to be made, and by whom?*

**Temporary and the Trace**

Performance defines a broad set of artistic forms in which a rehearsed set of actions, usually involving both bodies and objects, is presented in a time-limited or event-based manner. Essentially, performance only exists within the time period within which it is being presented. Even in documentation or memory, it can only exist in a duration of time, as the actions that constitute it must play out through time and cannot exist synchronously. In this sense performance is both temporal and temporary: it plays out in time and does not exist outside of the time period within which it is played out, hence its definition here as temporary. While exceptions exist, generally performance does not leave a physical legacy in that it tends not to have as its aim the creation of objects or physical materials, but of situations and events. So while performance notations such as scripts or musical scores may exist as stable, synchronous forms, they are only guides to performance that must unfold temporally to be realised. Equally, though performance can be recorded in various ways it can also disappear immediately from the space within which it is presented and leave no evidence of its having happened, save for the traces within the performers themselves and the audience. As many vastly differing performances often take place in the same theatre or institutional spaces, after one performance happens, its traces are removed back to the ‘empty’ black box, so that another can then take its place.

This temporary and temporal quality links a number of cultural forms including music, theatre, and dance, and perhaps to a lesser extent performance art. These forms have more in common with each other than they do with the plastic and spatial practices of installation, sculpture, design, and so on. While music and dance are the focus here, it is

---

5 (Bial, 2004, p. 57)
assumed that art forms sharing these temporal characteristics will also share certain aspects in their relationship with physical infrastructures that are distinct from other forms of practice grouped under making and the virtual, as will be described in the following sections. Furthermore, if performance can be taken as a general mode of display shared by a number of art forms, then the rehearsal is the common mode of production they share, which itself has some general, if not universal, characteristics as a process. Rehearsal itself is temporary. A rehearsal requires a body or bodies in place, it can gather those bodies in different places from one instance to the next, and it must usually leave places blank so that other rehearsals may then take place.

Rehearsing Space
Performers do not tend to gather together in stable studio spaces like material artists. When the fight to save “one of London’s last studio colonies”\(^6\) is reported, it is the makers of objects that are referred to rather than the makers of sound or movement. Performance making (or rehearsal) is both mobile and temporary, in that it takes place in a distributed infrastructure of rehearsal spaces that are usually accessed in a time-limited way rather than through long-term occupation. Indeed, many studio providers disallow the spaces they rent out from being used for music rehearsal due to its acoustic impact on other artists and the extra cost of soundproofing.\(^7\) Rehearsal rooms are available generally by the hour or day, rather than on a lease basis, meaning that the cost of rehearsal space for small groups without stable spaces of their own (whether they be theatre, music, or dance) must be factored into budgets as costs for individual productions or recordings, rather than as ongoing costs of practice.\(^8\) Larger stable institutions like dance studios, theatres, music halls, and universities become important not just for their spaces of display, but also in having spaces for residency and rehearsal, different from the institutional role of an art gallery or

---


\(^7\) See for example ASC’s FAQ: “What kind of artists can rent a studio?: Studios are not soundproofed and therefore we can only accept artists working in sound installations and video if they use headphones” [http://www.ascstudios.co.uk/faqs/](http://www.ascstudios.co.uk/faqs/)

\(^8\) See (Swain, 2016) for a survey of rehearsal spaces in London by cost per hour, reporting an average increase of 20% in these costs between 2013-2016. Swain notes: “I’ve rehearsed shows in spaces ranging from the back rooms of pubs and actors’ living rooms, to professionally-appointed spaces used by national companies. Rehearsal space is a very substantial part of a small-scale production budget, and in a time of increased rents in London in general, this cost is only getting higher”
museum, who rarely lease out parts of their buildings for artist studios. There is an important difference, then, for performers situated on a long-term basis within institutions that provide stable access to rehearsal facilities and performance space, and those attempting to sustain an individual or non-institutional group practice through a more mobile approach to finding space for production and display. If performers are mobile, use infrastructures for time-limited periods, and are less tied to specific locations, are they also less implicated in the politics of place, and particularly the set of development processes loosely defined as “gentrification?” Is that to their benefit? Or, in being more mobile and therefore less visible in place, has performance failed to gain the political and media voice that makers have, as evidenced by the now relatively common media coverage citing the detriment to cities through the loss of artist studio buildings? What are the urban politics of rehearsal spaces, and how can these be recognised in urban planning and design?

While the importance of small music venues is now gaining recognition, related strategy has privileged performance over rehearsal space in addressing, for example, the night-time economy of live gigs. As spaces of display, what have been defined as “small music venues” are not analogous to individual artists’ studios: they are not the settings within which new forms are tested out and refined through hours of private practice. The GLA’s most recent Artists Workplace Study (2014) does not mention music in its survey of space for arts practice. Individual performers, it would seem, are not seen to have “workspaces” in the same way that visual practitioners and those employed in small creative businesses

---

9 See for example https://www.theguardian.com/artanddesign/2015/nov/10/council-rejects-plans-london-car-park-800-artists-studios-southwark-peckham. Whilst artist studio spaces are still declining, the mainstream media has to some extent taken up the issue, citing threats to the creative industries as the main issue in the loss of artist’s studios. Such commentary is heavily weighted towards visual arts, and does not tend to cover rehearsal space.

10 As evidenced by the introduction of the Mayor’s London Music Board https://www.london.gov.uk/what-we-do/arts-and-culture/music/london-music-board

11 The Mayor of London’s Music Venue Task Force “Recue Plan” sets out a definition of the infrastructure of small music venues as necessarily consisting of separate stage and audience areas (p. 33) https://www.london.gov.uk/sites/default/files/londons_grassroots_music_venues_-_rescue_plan_-_october_2015.pdf. This encodes an implicit assumption that performance is by its nature something with a present audience, rather than something that is made in private and brought into the public realm

12 https://www.london.gov.uk/sites/default/files/artists_workspace_study_september2014_reva_web_0.pdf
are.
The same cannot be said of larger institutions such as orchestras and dance companies, who are housed within their own purpose-made infrastructures,\textsuperscript{13} or as part of larger arts centres.\textsuperscript{14} This belies a fundamental difference in the relationship between performers and makers in terms of their relationship to spatial infrastructures: performers are more often expected to be guests in their spaces of production whereas makers have a greater tendency to take up residence (in practice if not in legal or economic terms). A guest might be seen as less able to adapt a space to their practice or build up an archive from which to work, whilst being dependant on institutional spaces may make performers subject to a greater degree of institutional influence as they negotiate the aesthetic and curatorial frameworks they hold, and the large teams of technical staff.

**Finding Space**

It is worth paying attention to situations in which performers seek to escape from the purpose-built infrastructures of institutions to both display and produce their work, and the different ways in which this can be achieved. Auditoria, for example, are highly useful for performers in creating special spaces for focused listening and watching, but in their formality and clear definitions between audience and stage they can be “frustratingly rigid”. As the pressure on space in London has increased through the uplift of residential values there has been an attendant conversion of previously empty or informally-used ex-industrial and residential spaces into “luxury” accommodation, meaning the availability of “found” space,\textsuperscript{15} unintended but practical for rehearsal and performance, has reduced. Accordingly, some performers have turned to exterior urban spaces, public or otherwise, as sites offering

---

\textsuperscript{13} For example, the new purpose-built Studio Wayne McGregor at Here East
http://waynemcgregor.com/

\textsuperscript{14} As in the case of the London Symphony Orchestra and the Michael Clarke Company, both housed within the Barbican, which is a purpose built arts centre but not an infrastructure designed specifically for either of these groups

\textsuperscript{15} A 2017 report commissioned by the real estate investment trust SEGRO found that employment land in London has been released for residential development at 3 times the rate targeted by the GLA over the last 5 years (p. 121)
http://www.segro.com/~media/Files/S/Segro/documents/Keep_London_Working/SEGRO-Keep-London-Working_Report.pdf. Whilst this report focuses on industrial uses, employment land also incorporates spaces such as 80-84 Wallis Road in Hackney Wick, a series of small scale warehouses that had been turned into artists studios by the studio provider Cell Space https://www.hackneycitizen.co.uk/2015/06/03/wallis-road-studios-hackney-wick-approved-lldc/
the “productive friction” that unintended spaces once did. Performance in the urban public
realm – which is constituted by a complex arrangement of people, architecture, and other
foci of attention\(^\text{16}\) – brings opportunities for both unintended encounters and unintended
consequences: it can be seen and heard from angles not offered by the stage; it has a mix of
purposive and accidental audiences; it recombines with other aesthetic phenomena in
unplanned ways, and is often received very differently to its intention.

Public spaces were regarded in the roundtable as valuable infrastructures for performance,
but were said to bring their own set of constraints. With such a complex of environmental
influences, it was seen as questionable whether performance in public can challenge
audiences in terms of content and style. The logistical challenge of performing in public, for
example, was said to be able to dominate the possibility for technical challenge internal to
the performance: the performance becomes something “wild” rather than “crafted”. Public
space has long been defined as a site of “unfocused attention”,\(^\text{17}\) and it was argued that
performing music in this setting tends to mean limiting styles to those suited to
“background listening”. Performance, it was suggested, requires settings for special focus:
“outside of the ordinary” and an “interruption” of the casual and diffuse sensory experience
of the street.\(^\text{18}\) These settings do not necessarily need to be functionally specific, in design
terms, to performance. What matters is that they are a space apart and fundamentally
distinct from the public realm. This suggests the possibility for a greater number of existing

---

\(^{16}\) Recent debates have highlighted highly differentiated, and arguably problematic,
ownership of different parts of exterior space in the city, that is often described generically
as the “public realm” but which can often be owned by private corporations, non-
governmental bodies such as the church, or managed in partnership between local
authorities and developers (see Minton, 2012). As pointed out in the workshop, the different
legal frameworks and interests governing the use of urban spaces with different owners
should be seen as infrastructural conditions of public performance.

\(^{17}\) (Goffman, 1966)

\(^{18}\) Sennett (1996, p. 65) describes this contrast through a comparison of the ancient
Athenian agora, which was the site of multiple, overlapping activities, and the Phyx, a
theatre in which focused political speech took place: “the theatre’s clear design, its rakes fan
of seats with regular terraces and aisles, made it possible for the spectators to know other
men’s reaction to speeches and how they voted, forming a contrast to the visual imprecision
of the agora, where a person would have trouble seeing more than the few neighbours
standing immediately nearby”. In other words, although the theatre focuses attention
outwards from a crowd onto a single figure, it brings members of a public into a closer form
of communication with one another than the dispersed agora in which people are
physically proximate yet disconnected from one another.
unintended spaces to be identified as infrastructures for performance, but with the requirement, for them to be valid settings for challenging new work, that they have a degree of enclosure and distinction from the public realm.\textsuperscript{19}

How, then, is new work for public space developed? Making large scale public performances is often costly, making regular rehearsals too expensive to be sustained, notwithstanding the logistical issues.\textsuperscript{20} This also raises the question of whether it is possible to rehearse in public, or whether a rehearsal with an audience is always a performance. Performers participating in the roundtable argued that it is constricting to know they can be seen and heard in rehearsal, suppressing the ability for the rehearsal to be a laboratory of experiments, which necessarily entail failures. The open rehearsal was seen to have become a common strategy for public inclusion in the processes of performance making, but it was argued that there should be caution over creating a situation in which performers cannot find space for production that is private and affords experimentation. In this sense there are limits to the degree that the urban public can be an infrastructure for the development of new types of work, though it can be a setting for productive and unexpected encounters with existing and familiar forms.

The move out from purpose-built performance spaces into unintended spaces such as the public realm, museums, ex-industrial spaces and so on, could be seen as a reaction against the spatial and cultural inaccessibility of some institutional space. Large dance, theatre, and music institutions are concentrated in Central London and cannot generally be used on an informal basis for rehearsal or performance. This move has undoubtedly opened up

\textsuperscript{19} Peckham Multi-Storey car park is an example of an existing infrastructural space that has very successfully been made use of as an infrastructure for performance by the Multi-Storey Orchestra \url{http://www.multi-story.org.uk/}. Although it is very centrally located within Peckham it is raised up and separated from its high street, fulfilling these criteria. This raises the possibility that transport infrastructure itself may be a good starting point in identifying new space for performance where purpose-built new infrastructures are not feasible.

\textsuperscript{20} For example, Orlando Gough’s piece XX Scharnhorst was performed on a boat on the river Thames to an audience of onlookers on the bank with a very large cast of performers. Due to the expense of doing this, it could only be rehearsed a very limited number of times, and many of these were “off-site” in a school hall that was large enough to fit all the performers.
possibilities for new audiences and new types of work. Arguably, though, there is a danger that over time such a reaction become systematised and expected, as it is both cheaper to fund and ‘ticks the box’ of widening access. Though there was said to be value for many artists in exploring the productive friction of different settings for performance, this should not lead to the deivaluation of purpose-built space for both production and display. When new or non-traditional spaces are opened up for performance there is often a demand for an excess of value beyond the performance itself, in terms of an extra return through education, engagement, and so on.

How do we define unintended space? There are legal frameworks invisible in space itself that allow busking in certain locations, so not all performance in public is unintended. There can also be architectural gestures that suggest the possibility for performance in certain places. These conditions are very different to truly unintended space that is colonised informally and possibly illegally, and where new forms of practice can grow. So in order to create the conditions in which performance can keep finding space, there is need for permissiveness to be built into the city through legal frameworks or spatial design, without over-specifying space so that it becomes too ‘precious’ in both economic and aesthetic terms.

**Domestic (or Shrinking) Space**

Domestic space remains an important non-institutional space for the development of performance. The contemporary musical figure of the ‘bedroom producer’, from experimental sound art to pop, represents a tendency towards individualised music production. Using computers and MIDI instruments to create an acoustic space entirely contained by headphones, this kind of production can fit within domestic spaces that may not be suited to acoustic instruments because of lack of space and sound proofing. This kind

---

21 Erika Fischer-Lichte (2014, p. 24) notes that “since the end of the 1960s, theatre artists have moved productions out of dedicated buildings into spaces previously used for other purposes. These new spaces did not come with designs that implied a specific relationship between audiences and actors. Hence, theatre productions in these new spaces emphasised the role of performance itself in defining the relationship between actors and audiences, and in redefining new possibilities for movement and perception.”

22 The Multi-Story Orchestra, for example, which performs at Peckham Multi-Storey carpark as part of the Bold Tendencies cultural programme, has education as a core focus and regularly works with local school children, [http://www.multi-story.org.uk/about/](http://www.multi-story.org.uk/about/), epitomising the link between non-traditional settings for performance and

23 Leafcutter John etc.

24 James Blake, Jamie XX, Disclosure
of music-making is perhaps therefore more focused on mental than physical skill – the
development of knowledge of technology rather than the embodied technique of
instrumental proficiency. If so, there is a relationship between regulations over domestic
building materials, room size, sound proofing regulations, and shifts in musical practice.
This shift in musical practice brought about in some ways because of spatial constraints is
arguably also a political shift. Noise is always social, in that it involves hearing and being
aware of those whose acoustic cultures (in terms of language, music, and so on) may be very
different to another, and therefore always political. To rehearse out loud at home requires
negotiation with or tolerance on behalf of neighbours, and makes music rehearsal a
networked act that goes beyond the boundaries of the space it takes place in. This issue is
quite specific to music. Unlike forms of visual communication, including dance, it cannot
be contained by physical barriers such as walls. Thinking about the turning inwards of the
bedroom producer, inwards into the technologically-mediated acoustic space of software,
suggests a reduction in the degree to which music-making requires political and social acts
of negotiation.

In dance cultures, this move inwards takes a different form. Rather than the emergence of
new dance companies, themselves small institutions, there is a growing generation of
individual artists with personal practices developed in private, and often domestic, settings.
Dance artists, without the support of institutions that provide large infrastructures for
collective rehearsal, are often moving into individual, domestic forms of production. Due to
a lack availability of unintended space at the scale needed for group work, it is harder for
new dance companies (or, presumably, music ensembles and theatre companies) to grow
and themselves institutionalise. Arguably, then, in the context of a lack of informal
infrastructure for groups, there are opposite trends towards increasingly private and
individualised performance practices on the one hand and a greater reliance on and role for
large institutions on the other hand.

**Embodiment, Embedding, and Memory**

Choreography could be described as a negotiation of a set of relationships between the
interiority of the artist, bodies, other subjectivities, space, and place. As such it is a tool for
understanding the city, from a material point of view, which is an assemblage of bodies in
motion, minds, and space, working closely in concert to give rise to patterns of use.
Choreography, it was argued, should be used as a tool to develop better ways to tune the
synthesis of architectural elements that shape the way bodies relate within and to a rehearsal space. Using the location of the workshop, Siobhan Davies Studios, as a focal point, architectural techniques were referred to that engendered “physical and mental noticing”: the way light changes through the day, for example, bringing attention to different aspects of the physicality of the building as a stimulus for making work. “The building is a point of choreography where mind and body and relational activity are working together”. The building has a “certain perfection” that is very valuable in allowing intense focus, compared to unintended rehearsal spaces such as church halls, with bad heating and acoustics. The qualities of rehearsal space and its relationships to its surroundings should not just be seen as an inert background to practice, then, but as active elements in the stimulation of new work.

Many individual dance artists without the stable infrastructure of a company and residence in a purpose-built infrastructure are, as mentioned previously, developing work in domestic spaces. The public display that fuels the ongoing development of work of this kind was described as highly mobile, taking place in small performance spaces across the city. Mobility is a particular condition of making for many performers. Rehearsals often take place in different spaces from one time to the next, requiring performers to make do with infrastructure that is not specific to their practices. Rehearsal spaces need to be erased of all trace of use in order to leave them blank for the next set of users. In each new performance space, it was suggested, a new audience has to be “initiated”, which reduces the possibility for an ongoing co-development between artist and audience and slows down the process of creation. The ephemerality of dance has been noted in scholarly accounts as an issue for its development as an art form.Whilst visual arts have access to a rich historical archive, of painting and sculpture for example, dance has proven hard to notate. It has only been able to be recorded in full since the advent of moving image capture, making it much more reliant on physical transmission between performers, which itself is liable to change and interpretation. There lacks a spatial model for rehearsal within which performers can

25 The ephemerality of dance and its lack of archival forms has been described as both a challenge and an asset for contemporary creation. In the introduction to the anthology Preserving Dance Across Time and Space, Brooks and Meglin argue that “dance’s relationship to place is…fragile” and ask “can we hold on to our dancing past?” (Brooks and Meglin, 2016).

26 See Hall (1983, 390-392), who argues that because of “the losses caused by imperfect
retain archival memory of their work that is accessible during the process of creation. This challenges the evolution of performance, and particularly dance, in terms of reference to personal practice and the transmission of forms historically. Furthermore, dance works can be changed in their performance by the spatial characteristics in a way that plastic art forms and writing are not. Whilst there can be a value in this constant renewal, it stunts the ongoing building of new practices and groups.

A fixed site for development, such as Siobhan Davies Studios, allows people to return over and over again to a space in which they have physical memory and can build psychosomatically on work they have made in and with the space. However, SDS is rare, and there are few stable infrastructures for production that allow this return. What kind of space allows for the authorship of individualised, private production to be supported but brought closer to the kinship of collective work? There is perhaps an argument for a new model of combined production and display space for performance with lease-based rather than timed access, within which individual artists can build up their practice with access to the physical transmission of ideas from other performers, the development of personal archives, and the building up of a local audience over time.

Residing in Space

One approach could be to combine residential and production space in a way specifically imagined for performers. The notion of the production space as a living space was experimented with in Independent Dance’s Residential Festival, which was described in the roundtable as highlighting the way that individual, domestically-produced dance practices could be recombined in a shared infrastructure, and overcome the issue of lack of personal memory and archive.27 A number of dance artists were invited to live and work in Siobhan Davies Studios for three days, setting up temporary sleeping and cooking facilities within the rehearsal spaces and working alongside one another, with no pressure to produce anything specific by the end of the residency. Systems were established to support moments in which artists came together, through, for example, the use of a blackboard to advertise informal shared activities like walks and discussions. Artists were free to try things out and fail as part of the festival, both alone and together. The project was presented as a transmission…every so often the art of ballet has to be re-created almost from scratch”

27 http://www.independentdance.co.uk/programmepage/activities/what-festival/
proposition about contemporary choreographic practice and the kind of space it might use. By allowing the domestic into the dance space, it was suggested, there is a greater possibility for a fluid relationship between individual and group practice, unlike the formalised spatial and temporal structure of the rehearsal which brings individual practitioners together at a set time and for a specific purpose. Rather than forcing people to work together, it creates a concentrated setting for working in parallel, and the possibility for the development of lightweight infrastructures for collaboration, such as the blackboard.

The festival and residency space was open to the public each afternoon and evening, creating interesting tensions between the processes of production and display. Assumptions about the activity contained by a building like a dance studio were undone by the visibility of making and unmaking the daily materials of living (beds, stoves) to make space for dance. The presence of members of the public transformed the space from domestic to performative. A principle was adopted in which anyone entering the room was initiated into the activity underway, so that they became internal to it rather than external, in the mode of the audience, as a way to overcome the transformation that observation inevitably engenders in action. Nonetheless, it became evident that non-residents could never truly witness the unmediated act of creation, as it always became more performative under observation. Finally, the festival challenged the doctrine of empty space that is prevalent in the provision of infrastructure for performance. It was asked what empty space really offers to a performer. It is presumed that for performers artistic inspiration comes purely from within, and has no need for stimuli within the production space. This presumes too no need for a direct relationship between physical acts of dwelling, in the way visual artist is imagined to inhabit their production space, and of creation. The domestication of rehearsal space makes it messy and allows the build up of traces of activity that can spark creation. Dwelling allows for the adjacency of artists without the necessity of collaboration, also providing stimulus.

This project raises several questions that could open up new approaches to the creation of new infrastructures for performance. What would an infrastructure for performance look like that combined residential and production space by design, and could this combination make it financially viable to supply individual studios for performance practitioners? What
is a collective live-work space for performance, and how would it balance privacy, collegiality, intended and unintended collaboration? Should production be made visible, and if so what are the spatial conditions in which the process of creation can be witnessed without being undermined through transformation into performance? Would such an infrastructure benefit performers in allowing them to work in messier, more inhabited spaces that provide more stimuli than a blank slate? What would be lost and gained for performers in no longer having to be mobile to find space for production? What value is there in the networked quality of mobile production, in which performers have to make contact with and negotiate with many different kinds of people to mobilise the disparate resources for a performance to take shape?

**Focused Space**

In response to the notion of the Residential Festival, questions were raised about the need for specificity in performance space. Architecture can be used to bring about attention at different levels and create varying degrees of focus on particular activities or parts of a space. Museums, for example, are not spaces intended for dance, but these large institutions are rediscovering performance as a way to draw in audiences and activate their spaces. This allows dance artists to experiment with the different levels of attention they can ask from a gallery audience, standing and possibly with the distraction of a visual arts collection, as opposed to a seated audience in darkness, with full focus. Dance in the museum can require the activation of parts of the body that would not be on show in a theatre. In terms of display, it may be more difficult then in both unintended space to create the kind of focused attention that traditionally is thought to constitute a full encounter with a work. In terms of production, loosely-defined spaces, like those combining residential and work space, and that are either open plan or semi-partitioned reduce focus, make it hard to pay attention to the work at hand: “intelligence can be examined in a focused

---

28 A rare example of an experiment in a model like this is the Musician’s Housing developed by 24H Architecture as part of the Hoogvliet Building Exhibition in the Netherlands in 2010. It consists of 38 houses facing into a communal garden in which a complex of purpose-built individual practice rooms are gathered under a grass mound, balancing the need to private space for production and the development of a community of practice [http://www.natrufied.nl/live/housing-for-musicians/](http://www.natrufied.nl/live/housing-for-musicians/)

29 Marvin Carlson (1989, p. 195), for example, in reference to modern theatres, compares foyers that are often architecturally detailed and allow for diffuse attention, and auditoria in which detail is eschewed to focus full attention on the stage
space” it was argued. There is also a close link between memory and specificity: certain spatial typologies have developed over long periods of time through habitual forms of use, and have become home to particular practices. There should perhaps be caution around the breaking down of familiar forms of infrastructure, and value given to stable forms of design for specific functions.

To respond to these issues, it was suggested that there is need for small-scale, low-cost performance and production spaces that can build localised and more stable audiences around them, whilst offering affordable rehearsal space to individuals and groups. This could partly be achieved by breaking down large institutions for performance into networks of small-scale infrastructures across the city, that combine the stability institutions afford to their resident artists with the qualities of local accessibility and scale suited to individual practice. Churches were pointed out to be a huge existing infrastructure for performance, that could be made greater use of through a centralised and intensified system. This could be linked to an audit of unused infrastructural capacity in unexpected places such as above and behind shops, and in areas of offices.
Infrastructures of Making

10th November 2016
SPACE Studios, 129 – 131 Mare Street E8

The makers of objects require stable, safe spaces to protect the tools and products of their labour, and are therefore implicated in the politics of the places they inhabit. Is there a special kind of space required for ‘cultural’ making, and does it add anything to places that manufacturing cannot? What if instead of artist’s studios we built factories?

Equipped Space
Making is understood here to be a process in which physical materials are manipulated to make new forms. Making, including manufacture and mass production, creates products that are generally objects of some kind. However, making as an artistic or cultural practice tends to bring the activities of design or conception and of production closer together, and often carried out by the same person or people: the maker. In this context, production is a set of activities that produces objects,30 and display is the presentation or consumption of those objects either as functional (in the case of some forms of craft making such as ceramics) or non-functional (in the case of fine art making such as sculpture). This report largely limits the discussion of making to craft and fine art practices, and indeed treats these two sets of activities as essentially the same in terms of the way they use space. However, the term making has in recent years been adopted for use in relation to digital coding and programming.31 Spaces of production for making can generally be assumed to require permanent storage of or easy access to tools, equipment, and materials, which in turn suggests that makers require stable locations for their practices. Spaces of display for making are distinct from those for performance in that they do not generally require the co-presence of artists and audiences.

30 For example: craft skills such as woodwork, clay spinning and needlework; artistic practices such as sculpting, installation testing and building, painting; and iterative design processes.
31 Nesta for example defines “digital makers” as a set of practitioners making processes and systems within technological platforms, rather than new objects http://www.nesta.org.uk/project/digital-makers. Our definition of making is specifically related to the manipulation of materials because of its distinct spatial requirements, which are different to those that can work with a screen and that we have grouped under the virtual.
The roundtable raised a discussion of the economic and social conditions within production spaces, and the relationship of these to infrastructural conditions. Where space is at a premium – such as in the context of a city-centre instrument workshops\(^{32}\) – highly skilled craftspeople work in close proximity on delicate objects. In this case, forms of negotiation between craftspeople emerge that are silent and physical rather than encoded in written or spoken guidelines. This kind of cooperation has been described as visceral rather than intellectual or ideological, and as requiring a high degree of assumed trust based on a well-executed choreography of movement.\(^{33}\) It was argued that these conditions, based on the ability for craftspeople to share space for highly skilled forms of making, are ideal settings for innovation in craft practices and technical problem solving. Individual art studios presumably cannot create such conditions, whereas shared technical facilities such as printmaking and wood- or metal-working studios can.\(^{34}\)

**Labouring in Space**

Unlike creative office spaces such as those supporting the advertising and communications industries grouped under the creative industries rubric, artists’ studios operate outside of formal employment frameworks, without regulation of working hours, pay, parental leave, working conditions, and so on. This lack of regulation, arguably, relates to the way art studios are made available, on an individual lease basis, which encodes an assumption of the artists as a lone actor or even as art practice as a personal pursuit rather than a form of employment: “precarious working conditions are completely normalised” within the cultural sector, it was suggested. Research carried out by DACS in 2010 suggested that the

---

\(^{32}\) The example was given of JP Guivier, a specialist violin workshop on Mortimer Street W1, with description of the way work is carried out there coming from direct observation [http://guivier.com](http://guivier.com).

\(^{33}\) In *The Craftsman* (2008), Sennett shows that workshops in which highly skilled collaborative manual work is carried out support high levels of non-familial bonding, and describes how craft forms have been sustained historically through non-discursive forms of knowledge transfer such as observation and the development of embodied knowledge.

\(^{34}\) Peckham Levels is an example of a new piece of cultural infrastructure that will provide a mix of individual studios and “shared creative facilities including maker space, manual workshops, and ceramics, print and music rehearsal studios” [http://www.peckhamlevels.org](http://www.peckhamlevels.org). It remains to be seen what kind of cooperative culture emerges in these shared facilities and their role in innovation in their respective craft forms.
median wage of a practising fine artist was £10,000 and a 2013 survey found that over 70% of artists had not been paid fees to exhibit their work. With average rents in Greater London at over £15,000 per year the average artist cannot afford to live in the capital on the proceeds of their work. To counter this, groups such as Artists Union England are campaigning for minimum rates of pay from National Portfolio Organisations and against a “culture of volunteerism and the discrimination it perpetuates”.

The unionisation of artists is predicated on a definition of artistic practice as labour, which could be seen as conflictual with the notions of craft, personal practice, and so on. A definition of art as labour is not universally recognised by artists: it was argued that there is a tension between the professionalization of art as a form of employment and its ability to be deeply personal or politically radical as a practice. The art studio is often seen as a ‘home away from home’ for artists. There will be a challenge in navigating the relationship between formalisation and regulation on one hand and the freedom to create and operate in very different conditions on the other. These tensions relate very clearly to the way spatial provision is made for art: it was argued that “hobbies do not need to be remunerated or have working conditions. Art becomes relegated to the status of a luxury that only an elite can afford to do, and then only an elite are interested in”. Re-defining art studios as places of employment may require a different design approach. This raises the question of what a legal and economic model governing the way in which production infrastructures are provided for making would look like, that supports art to be properly remunerated but does not allow regulation to become a challenge to its modus operandi. If making is to be treated as formal labour, should there be a legal framework for the regulation of space for artistic making, bringing it in line with other forms of employment? Could a sustainable spatio-economic model for making involve artists becoming employees of studio companies rather than lessees, offering them protections such as minimum wages and sick pay but without threatening their artistic independence?

36 https://www.a-n.co.uk/news/paying-artists-survey-71-receive-no-fee-for-exhibiting
37 http://www.artistsunionengland.org.uk/rates-of-pay-working-towards-a-fair-days-pay-for-a-fair-days-work/
Non-Aesthetic Space for Making

Clearly, beyond the studio, affordable housing is an essential infrastructure for making and one of the key issues challenging its viability in London. Secure housing must surely be seen as a fundamental requirement for all aspects of cultural production in London, as it is for all kinds of work. In this sense, artists should not be singled out for support but included in provision focused on all low-income workers. It was argued that Creative Enterprise Zones, as far as they entail protections for studio spaces, will be meaningless unless they are tied directly to affordable housing for a range of workers and the tackling of low pay and precarious contracts.39 Concern was also raised that the definition and location of the proposed Creative Enterprise Zones would be predicated on a “creative aesthetic” that is derived more from the presence of spaces for display than production. Making in materials requires large amounts of space, and is messy and noisy. As such, where some new developments include creative workspaces by design40 it is generally on the basis of small-scale, clean working practices better suited to knowledge workers and the digital economy.

It was argued that there is a pay off for developer-led cultural provision in an expectation that the bodily presence of artists themselves in a place will increase its attractiveness to other kinds of residents, both commercial and residential.41 Artists are quite literally expected to perform, to be attractive, in order to create a return on investment for their provision. Town centre management in Hackney, where Space Studios is headquartered, was said to have been focused on ‘cleaning up’ areas, through shop front improvements and the introduction of new retail.42 Regeneration led by art and cultural retail ends up

39 Beyond this point and the recognition of this fundamental issue, though, proposals for affordable housing provision were deemed to be beyond the scope of this exercise.  
40 For example, the Barrett Homes Galleria development in Peckham includes studio spaces provided by ACME http://www.acme.org.uk/studios/galleria within the same building as private rental and ownership flats, that was reported by the GLA to have added “significant market value” to the development (p. 7) https://www.london.gov.uk/sites/default/files/gla_caw_140911_web.pdf  
41 As an example, the strategic siting of CSM at King’s Cross before all other developments in the area to kickstart its regeneration through creative use, alongside the careful management of the square outside CSM that prevents any forms of messiness or production spilling over into the square from the university  
42 As an example, when £2million from the post-riot Mayor’s Regeneration Fund was allocated to Hackney Town Centre it was spent converting railway arches on Morning Lane from light industrial uses such as car mechanics to a “fashion hub” focused on retail, and with the inclusion of a small number of maker spaces for fashion
moving on many of the ‘messier’ businesses that are essential suppliers and fabricators for makers. “We’re the beneficiaries of a lot of this regeneration because we're clean and tidy, quiet, well behaved… We’re moving on a lot of the infrastructure that we need”. Many Space Studios facilities are anonymous, industrial buildings without transparency or active frontages: they do not perform creativity in the way that many developers would like.\textsuperscript{43} As an example, provision of studio facilities at Here East has been “reimagined as a 21st century cabinet of curiosities”,\textsuperscript{44} putting production on show as entertainment for visitors and with investment focused into performative architecture rather than facilities. The question was raised as to whether makers, and specifically those working with materials and at large scale, are better allied with light manufacturing in the city. In political terms, artistic making and manufacturing share an issue of low remuneration and job protection, that may be able to be addressed through similar spatial policies. In urban terms, the co-location of making and manufacturing could reframe the notion of creative zones as being necessarily dirty and noisy, and not compatible with the retail and display-led streetscapes that attract residential investment. Should artistic making become a category of manufacturing rather than of the creative industries and subject therefore to the same planning protections applied to industrial and employment land, with similar regulations around space and distance from dwellings? By becoming part of an urban landscape of production, that does not necessarily perform its creativity visibly from a public point of view, would artistic making be freed to become more ambitious and less constrained?

\textbf{Production Space Without Display}

A shift like this in the categorisation of and spatial planning for artistic making represents a challenge to the way it is instrumentalised in development as a tool for value creation in regeneration. Artists, for example, are sometimes offered space in shop fronts as part of planning requirements for ‘active frontages’, placing them on show as part of the performance of place as creative.\textsuperscript{45} However, as in the case of performance, making

\textsuperscript{43} Some forms of spatial infrastructure for making ‘perform’ themselves, through visual communication media applied to the exterior of buildings, signage, or architecture, for example. Many studio buildings, though, occupy ex-industrial buildings that are not evidently, from a public point of view, in use as such

\textsuperscript{44} http://hereeast.com/discover/buildings/gantry/

\textsuperscript{45} The significant new Anthology Deptford Foundry development in south-east London, for
production visible makes failure, which is an essential part of the creative process, much riskier for artists. The ability to fail creatively requires the possibility to be vulnerable, which arguably requires privacy. A similar issue was said to play out architecturally now within art schools, which need to advertise their creativity in a market of paying students and industrial patrons leading to a refocus away from productive space onto display, squeezing studios out in favour of galleries. Artistic making, like performance, requires rehearsal: it is not a linear process from conception to product, as is the case in industrial production, but the result of many unproductive and non-goal-oriented processes, experiments, and improvisations.

That the economic value created for developers by the presence of artists is not recaptured for the artists themselves was felt to be a serious issue. It was also argued that support for artists in new development is often “token” in the form of temporary studios or residencies. This arguably though represents a misunderstanding on behalf of developers of what constitutes valuable infrastructure for artistic production. It was suggested that artists should capitalise on their own creativity to propose new models of provision that create long-term value for both themselves and the private companies that are now the main source for new housing and public space investment in the city. It was warned that developers should not be set up as the enemy of artists, as has been common in media coverage.46

**Ecosystems and Networks in Space**

Studio operators were described as meaning more than simply access to space but also an organisational infrastructure of access to residencies, funding, and social networks that build up in locations over time. Studios are not just places to make, but to store work, to create an archive and have continuity of practice, be undisturbed, invite in and host curators and collectors, showcase oneself, which all contribute to making an economically

---

example, is making 30,000 sqft of “affordable workspace” available through Second Floor Studios, much of which will be ground floor railway arch space with glass frontages onto the communal parts of the development


46 See for example http://theartnewspaper.com/news/in-the-frame/designer-digs/: “London’s reputation as a home for creativity… is increasingly under threat as artists are displaced from their studios by property developers”
sustainable arts practice. Furthermore, studios entail the build-up of specialist equipment, whether individual or shared, and the development of the expertise to use it, which makes the long-term stability of studios essential to technical innovation in practices. Art studios were also described as being part of an ecosystem of suppliers and fabricators – printers, building suppliers, stonemasons, corner shops – and therefore better seen as being part of a mixed business community than a specialist zone for creative enterprise. Diversity of businesses is more beneficial to makers than a concentration of artists. Art studios, it was argued, should be seen as a distributed network of research and development facilities for London’s extremely successful commercial art market. They were described as being inextricably linked to the “front end” of commercial and public galleries, as laboratories are to medical research. Arts Council and DCMS funding were suggested to have been overly weighted towards this front end. So, public-facing spaces of display, private and possibly invisible spaces for production, housing, fabricators, and suppliers, should all be seen as part of an ecosystem for making that operates at quite local scales. Without the accessibility of all these infrastructural conditions in any given zone, will making be sustainable there?

**Practice Expanding Across Space**

At a larger scale, questions of the relationship between the spatial requirements of making, forms of art object, and the scale of infrastructures was raised. An individual maker, with the examples of both a well-known fine art sculptor and a commercial jeweller given, can take two approaches as their practices expand in size. With commercial success, they can either find or build larger and larger individual spaces to make, house, and display large scale commissions, or they can ‘urbanise’ their process by developing a network of small spaces servicing different aspect of production, with objects and materials transported between them. In the latter case, the process of production spills out into the street naturally, and contributes to the diversity of public activity that constitutes urbanity without needing to be put on display.

---

47 This demonstrates a striking difference from the way performers or virtual producers related to locality. Gentrification, community, and the role of the artist in urban development was raised early on in the roundtable on making, and remained a theme throughout. Though housing was raised in other conversations, no performers or virtual producers spoke about their relationships to specific localities or described themselves as being part of a geographical community in their roles as cultural practitioners.
In terms of display, it was questioned whether the creation of infrastructure is guided by scale of works of art themselves, or vice versa. The Tate’s Turbine Hall, for example, precipitated the creation of artworks at giant scales that could not previously be housed in a gallery space, rather than responding to a need for such space. In 1871 the Royal Albert Hall was created, with the Proms emerging as a mass form of classical music in response to the availability of such space. In other words, space often comes first, with production having to shift to fill it. When spaces are built at the scale of things like the Turbine Hall, there are two effects: artists working within the urban fabric around such infrastructures cannot produce work large enough to fill these spaces; and the space itself starts to become more powerful a draw than the work it contains. It is necessary, then, to think about whether mega infrastructures for display genuinely can contribute to the vitalisation localised flows of artistic production within London given their mismatch in scales.

**Culture in Infrastructural Space**

Finally, the relationship between cultural infrastructure and transport infrastructure was raised. Certain kinds of infrastructural space, such as railway arches, have proven to be invaluable infrastructures for all kinds of artistic production and display. Whilst Transport for London (TfL) have a successful arts programme, that includes commissioning, a further step would be to build spaces for production into transport projects from the outset. Along with the fact that budgets for cultural infrastructure are a tiny fraction of those for transport infrastructure projects, the space around transport infrastructure is often suited to making as an activity, providing a visual and acoustic buffer from residential space for noisy, messy fabrication processes. Cultural infrastructure should be planned into transport from an early stage, rather than becoming an add-on, both in terms of design but because of the synergy between mobility and employment, and the huge budgets that could become available if even 1% of transport spending was earmarked for this use, compared to the fairly small budgets that are raised from housing using the same model. Artists and artist studio operators, then, should start to act and think more like developers themselves, by

48 For example, the Tate Modern Extension cost £260 million to build
https://www.ft.com/content/039db282-3233-11e6-bda0-04585c31b153 while Crossrail is costing £202 million per mile
http://www.thisislocallondon.co.uk/news/13313717.How_much_is_Crossrail_costing_per_mile_to_build_.See_this_and_11_other_facts_about_London_rail_scheme/
proposing economic and spatial models that combine cultural infrastructure with industry and transport, and where appropriate with housing at a time when large amounts of public land (owned by TfL) is becoming available for development.⁴⁹

---
Infrastructures of the Virtual

15th December 2016
The Trampery, 239 Old St EC1V

Virtual cultural artefacts – texts, designs, illustrations, and so on – can be produced and viewed anywhere, meaning their makers are often extremely mobile. Should there be special places in the city for virtual culture or does it need a new kind of planning for infrastructure everywhere?

Unspecified Space

In this research, virtual cultural production is understood as a set of quite distinct practices of which the products are stored or encoded in media. Mediated content can generally be replicated, distributed across space, and accessed by any number of people simultaneously, meaning that their display does not require the co-presence of artists and audiences (as in the case of performance) nor of audiences and unique objects (as in the case, generally, of visual art practices). Media can, therefore, hypothetically be viewed anywhere, and do not require specialised spaces for display. With this definition, rather than one that necessarily involves the digital technologies often associated with the term, virtual culture is understood here to include such forms of production as writing (including journalistic, fictional, academic, and others), publishing, graphic design, web art, illustration, and so on. All these forms of production are linked by their ability, again hypothetically, to be produced ‘anywhere’ using media technologies that could be pencil and paper as much as computers and specialist software. So whilst the common image of virtual labour is a worker using some form of screen in a café or co-working space, non-digital media such as print and hand-produced text and images can equally be seen as media in their ability to be mobile and replicable. Writing was largely the focus in this roundtable, and could arguably be seen to analogise or stand in for a range of other cultural forms in which both production and consumption usually involves a one-to-one encounter with either screen or page.

As a general term, then, writing describes a particular relationship between cultural production and the city in which the volume of space required is low compared to making or rehearsal, and for which infrastructures could arguably have very low specificity, in that beyond the medium being written on there are no further technical or spatial structures
needed. As such, processes such as writing have received less attention than making and even performance in urban spatial provisioning. Writing, arguably, is a key aspect of artistic production that should be better incorporated into definitions of urban culture, given its important role, whether in the form of journalistic commentary or creative fiction, in shaping shared ideas of political, social, historical, architectural (and so on) reality. Where then, we asked, is the infrastructure for writing, and how do the conditions imposed by these infrastructures (or lack of them) impact the kind of writing that is produced? Because writing, unlike making and performance, is not to be found in specific spaces in the city, is it and are its practitioners relatively invisible? In planning for writing, should particular kinds of space be marked out in the city or should attention be paid to the possibility for any place to be a space for writing? If the latter, what would that mean in terms of infrastructure?

To further preface the results of this roundtable, it is worth mentioning two existing kinds of space for virtual culture, and the reasons they were not seen as infrastructures for virtual forms of artistic production. Libraries are and have long been repositories of virtual cultural artefacts: the move from the storage of print media to providing access to digital media does little to change this high level definition. However, though they may be used as such by many individual practitioners, libraries are not thought of in legislative terms as workspaces for virtual culture: they are rather statutory service focused on information provision, falling under the responsibility of local authorities rather than the Arts Council and as such are

---

50 The previous Mayor’s Artist Workplace Study (2014) does not make any reference whatsoever to writers or writing as a form of artistic production, or the kind of space it might require. Furthermore, Arts Council support for literature funds “projects presented through a variety of media including publishing, online platforms, live performance and broadcast” but beyond libraries does not include support for specific physical spaces [http://www.artscouncil.org.uk/supporting-arts-and-culture/supporting-literature](http://www.artscouncil.org.uk/supporting-arts-and-culture/supporting-literature). From a policy point of view, then, writing has not been seen as a spatial issue, constrained and shaped by its physical infrastructure in the way making is, but one of communication and access to mediated channels via which writing is distributed


52 Although the Arts Council makes some funds available for schemes combining the ‘arts’ and libraries [http://www.artscouncil.org.uk/supporting-art-and-culture/supporting-libraries](http://www.artscouncil.org.uk/supporting-art-and-culture/supporting-libraries) the core infrastructure itself is part of the educational and social remit of local authorities rather than the cultural one of the Arts Council
not seen systematically as spaces for writing or other kinds of virtual creation.\textsuperscript{53}

Architecturally, libraries are not generally set up for the kind of focused, private production that has been described in the previous sections as essential for artistic creation: they are by their definition public and shared spaces, so that even if they are being used for production, writers cannot take ownership over them as workspaces and this will only ever be a secondary function. The second form of existing space is the coworking facility, that has arisen to answer a demand for shared physical space and co-location for individual workers in knowledge-based economies, as part of the rise of the digital and creative industries.\textsuperscript{54}

Though many aspects of screen-based coworking may resonate with the experience of the producers of virtual culture, such as mobility and low spatial requirements, coworking spaces were assumed not to be acting as infrastructures for artistic practices such as writing, for both economic reasons and the very different spatial cultures of writing and commercial knowledge-based labour.\textsuperscript{55}

**Spatialised Value**

For virtual culture both economic and informational value are currently primary concerns,\textsuperscript{56} and this was immediately reflected in the roundtable. With reference to

\textsuperscript{53} Whilst many libraries offer creative writing workshops on an event basis, such as the British Library’s Write Here! [https://www.bl.uk/events/secondary-write-here](https://www.bl.uk/events/secondary-write-here), and many individuals may use libraries informally for their own writing practices, use as creative workspace is not systematically built into the legislative definition of libraries.

\textsuperscript{54} See Gandini (2015) for a thorough definition and brief history of coworking as a spatial model, as well as a critical discussion of its contribution to instability and inequality of labour conditions for knowledge-based workers.

\textsuperscript{55} As an illustration, the Writer’s Room in New York City (a model not, to our knowledge, replicated in London, and unique too in that city) provides a coworking style environment aimed at writers, with a focus on “solitude” and “quiet” [http://www.writersroom.org](http://www.writersroom.org) whereas the Trampery describes its environment as an “open plan shared workspace [that] houses an energetic community of emerging entrepreneurs and small businesses” [http://thetrampery.com/workspaces/old-street/](http://thetrampery.com/workspaces/old-street/). Commenting on the rise of the “writer’s space” Hughes (2015) also notes the contrast with coworking space, where “startups and entrepreneurs gather under the banner of cross-pollination and ideation and use whiteboards. My writers’ space, by contrast, sternly enforces silence in the main room.”

\textsuperscript{56} In the roundtable it was argued that the lack of access to a fixed location within an institutional framework, such as a university or a publishing outlet like a newspaper, was a spatial issue for writers that related directly to the degree to which their work could be remunerated and to which they could gain a reputation that conferred informational and cultural value on the content they produced. In the context of ‘fake news’ the reputational value of information has become a primary societal concern, whilst the decline in the
architectural journalism, it was argued that while the cost of buying access to architectural debate in print form has risen, making it harder to access for many people, remuneration for articles written specifically to be published online remains low, and sometimes non-existent. Print culture enables the remuneration of writing, through the availability of a physical product that enables information to be monetised, but raises the barriers to access that are often seen to be lowered by the internet. Meanwhile, the internet has challenged business models that reward those that produce information, redirecting profit to service rather than content providers. Clearly, there is no absolute divide between print and digital culture, with many newspapers successfully combining free and paid content online with print editions; print books returning to popularity over e-books; and many blogs being turned into either print newspapers or books. However, print can in general be thought to stand in for a traditional model of paid-for cultural or informational virtual content, somewhat similar to the paywall model employed by many newspapers, while the internet largely still operates on the basis of free-to-access information funded by advertising and paid for only by the consumer in the form of the internet connection itself. It was suggested, then, that the value of information for both producer and consumer depends partly on the platform via which virtual cultural products are made available, and that the structure of different platforms dictate their accessibility.

So where should rigorous, quality debate about things such as architecture take place? Low-cost, printed publications were seen still to be needed in the regime of devalued digital information and labour. As well as remunerating contributors, physical print confers perceived value on the content it carries. Low cost can be achieved by paying attention to infrastructural conditions of print and distribution: choosing a size and weight of paper that mean it can be sent via standard post rather than special delivery, for example. There is a chain of effects, then, from letterbox sizes to the proximity of specialist printers that make possible the diversification of professional journalistic practice, beyond the large newspapers and magazines. Arguably, such a diversification of print culture through low-cost publication is essential to provide virtual space for a broader range of voices to constitute economic value of information precipitated by the internet has challenged the viability of mainstream and institutional sources (Brevini et al., 2013, p. 39)

57 Fortunati et al. (2017), in a study surveying innovation in the newspaper industry, argue that we will see “a hybrid, multifaceted, enduring presence of print in the complex media ecology of the future” rather than its decline
debate and public storytelling, and this cannot be achieved only through the internet because of the issues of value it presents. As an illustrative contrast, the example was raised of an architecture website that bills itself as “the world’s most popular” and aims to provide information on new design to the widest range of non-specialists possible. In order to remain free to use and achieve the volume of publishing needed to retain its populist status, it republishes press releases rather than paying journalists for critical reflection, inviting users constantly to share its content. Such a comparison raises the question of what ‘democratic’ access to the culture of textual and visual discourse means, and subsequently what is the physical and economic infrastructure for a good quality public sphere. Is the democratic ideal embodied in the lack of barriers to access, both economically and intellectually, with the extreme volume of communication and breadth of reach that entails? Is the fostering of a more critical and challenging discourse worth, in democratic terms, the narrowing of reach and reduction in volume that is inevitably entailed by pay-walled print or online media?

**Itinerant Production**

What is the link, then, between the spaces in which such information is produced – architectural writing for example – and the kind of discourses that are given rise to? How do different spatial and economic conditions for the labour of writing, design, and image-making – that form the public sphere of media – shape the cultures of that public sphere? Large media institutions work in spatial silos, tending to develop institutional norms without the physical or temporal space for an internal culture of critique and review. Individual freelance writers or smaller publishing platforms tend to lack access to stable office space, meaning they also cannot build up a setting for peer review or develop the institutional stability that means their voices could have the weight to counter mainstream sources and diversify the public sphere. Like performers, the producers of virtual culture are highly itinerant. However, whilst performers may have to use rehearsal spaces on a temporal basis, these spaces are at least often designed for purpose and provide stability within the temporal frame within which they are occupied by the performer. Many writers work in extreme unstable conditions, even from hour to hour. In the roundtable, experiences were referred to of hunting cafés that would provide access to space and electricity for long enough to complete an assignment: an empty seat with a plug socket is not always easy to come by, and many businesses are now limiting the degree to which they allow the use of laptops.
There are also issues of security and comfort in using public spaces as the setting for such work. As a result, many producers of virtual culture work at home, which was felt to blur the boundaries between labour and leisure. This was seen as contributing to the devaluation of the products of this labour, and creating an isolation that prevents the build-up of institutional stability and its attendant authority. In common parlance, we tend to work ‘from’ home rather than at home, suggesting the wish on behalf of virtual workers to distance themselves from this devaluing effect, and in more practical terms perhaps a wish not to use a personal residential address as the publicly-accessible professional contact that is generally required within publishing culture as part of transparency, accountability, and reputation. Even if most people communicate with a publishing platform via email, the ability to self-present via a physical premises helps establish trust. Coworking spaces, it was argued, play on the combination of the freedom that home-labour supposedly entails and the reputational and economic value of a formal workspace.

As suggested above, though, the coworking model is business-oriented and tends to be unsuitable both practically and economically for individual literary or journalistic writing. It was reported that coworking space generates more rental revenue per square foot than conventional office space, explaining its rapid rise in recent years. Could this model be adapted spatially and economically as a new infrastructure for non-commercially led virtual cultures such as writing and artistic image-making? Given that the spatial requirements for screen-based work are much lower than those for making, shared spaces aimed at practitioners working in this way could be provide facilities for similar numbers of individuals in much smaller premises. However, would this prove a challenge to the future viability of material-based making and push artists into screen-based work? Would having access to a permanent formal workspace provide better economic and spatial stability for

---

Hughes (2015), in an article on writers’ spaces, describes the issues of both home and library as workspaces. The former raises largely cultural concerns: “there is something embarrassing about working from home… You worry that the prominent figure you are interviewing by phone can hear the refrigerator door or the neighbors’ kids upstairs.” As suggested in the roundtable, work seems to be devalued by having been produced within domestic conditions. The library brings with it logistical issues: “you have to pack up and leave to eat, and using the restroom raises security concerns”. The lack of privacy and safety in libraries makes them unviable for the full-time and long-term use that is needed to produce a book, for example.
itinerant virtual producers without undermining the freedom of mobility that technology-based work allows.

**Institutional Infrastructure**

Universities were described in the roundtable as providing both physical and organisational infrastructures that underpin the production of virtual culture with a strong focus on reputability and co-creation. Whilst it was not suggested that this would be a solution for all writers, their particular structure could be learned from in the development of new forms of space for virtual culture. Universities create a setting for the constant review of outputs both in person and anonymously through peer review (itself a mediated process), as well as an economic infrastructure for print publishing that confers authority on individual authors within the setting of journals and so on. They provide stable workspaces, but also stable professional addresses. The funded PhD itself was described as an infrastructure allowing individuals to dedicate time to the production of virtual culture without expectation of direct monetary gain. The flipside of this stability, it was argued, is that in the context of greater competition between universities for students and funding and as the employment structure moves from long-term stability to short-term contracts, faculty feel less free to forward radical politics and engage in controversy. Either way, a link was noted between conditions of economic and physical security and the level of challenge that can be raised within the public sphere through virtual culture.

Institutionalisation, seen as a process in which a group of colleagues oriented towards a particular ethos or aim become stable in a particular physical and organisational structure, could provide these conditions. It was felt that for the producers of virtual culture to share in this stability without losing independence, a diversification of the public informational landscape was needed through the fostering of new, small institutions. For example, groups of writers oriented towards particular issues could valuably occupy spaces in which peer review and sharing of knowledge could take place, building into authoritative institutional voices on these issues. Neither existing form of infrastructure for virtual previously defined – libraries and coworking space – are suited to this kind of occupation. Though libraries are freely accessible and have the basic infrastructure for writing, they are both anonymous and atomized: designed for itinerant individual use rather than the embedded forms of cooperation and use that are required for institutionalisation.
Where, then, can the producers of virtual culture claim physical spaces in which interpersonal responsibility and shared values are built up and become associated with a specific location? If universities made their spatial resources more easily available to local residents outside of teaching hours, and opened their libraries for non-students, could a wider range of people use this infrastructure for virtual production?

Claiming and Making Visible

It was argued that because, unlike spaces for making, the internal infrastructure of spaces for the production of virtual culture is relatively light and non-specific (broadband, desks, power, privacy) it should theoretically be easy for groups of virtual producers to take up stable residence in the many available non-domestic spaces in the city. The act of naming and marking a location, or “planting a flag”, was described as enabling that place quite easily to take on and be recognised for a new use. In this way, very simple spaces such as unused offices or shops, and community centres, can become the focal points for particular networks and practices, stabilising them. Unlike making, which requires the long build-up of tools and materials in a permanent space, virtual production could arguably lend itself well to the kind of temporary provision that has become common in cultural infrastructure.

Temporary use of empty office space, for example, could allow institution-like organisational and economic structures to be built up before moving on to permanent setups. There was also said to be a need for virtual culture to have a greater material presence and perform itself publicly to build trust. While not all producers have access to the means of producing print culture, which expensive and logistically demanding compared to online distribution, the making visible of practitioners within new or established institutional spaces might mitigate this. The producers of the public sphere of media are relatively invisible compared to other kinds of producers: makers, it has been argued, are rooted in a specific location, and performers are always on show at the moment of display. If there was greater possibility for groups of writers, for example, to claim and mark urban spaces in the way suggested here, could they and their forms of production also become more visible and thus more connected to and trusted by their audiences?

Thresholds, Specificity, and Value

Virtual production has come to be thought of as endlessly flexible and non-site-specific,
giving its agents total geographical mobility and giving us a new breed of multi-functional space that temporally and geographically co-locates labour, leisure, and domesticity. Many libraries have followed suit, de-specifying and opening up their interiors so that lounge, book repository, co-working space, and café occupy a single volume and become barely distinguishable from one another. The British Library was referred to in the roundtable as a case study in a very different approach: every space within it is highly specified for particular purpose, with space for private study strongly delineated from public parts of the building. Furthermore, each space is entered through a narrow threshold that “brings you to attention” through gradations of publicness from the ‘agora’ of the square outside, to the grand brick foyer, to the quasi-domestic environment of the reading rooms with the materiality of wood and leather. This highly conscious design strategy has a political analogy: architectural specificity engenders focus, care, and attention on particular forms of labour that take place within the library, delineates that labour from other forms of activity, and allows an appreciation of value in that labour. So whilst virtual work has been seen as an emancipation from specificity and fixed employment location, pure flexibility also works against value, and use of a private and highly specified space can also be seen as freedom from the distraction of the public realm within which much virtual labour is now assumed to take place.

There is an argument, then, for physical thresholds in the infrastructure of virtual culture, to allow communities of practice to emerge around colleagueship and peer review, new institutions to take root and diversify the mediasphere, and for virtual work to be properly valued and delineated from non-work. Within office design there is now a move away from the open plan. A 2016 Gensler study found that offices without a range of settings had the lowest levels of innovation and effectiveness, and that private and small shared offices were the most effective forms. The value of thresholds can also be seen in the infrastructure of the distribution of virtual culture: paywalls may be frustrating for some but have been successfully introduced by many large newspapers as a way to protect the monetary value of their informational products which in turn arguably could increase their cultural value,

59 Following Sennett’s usage again, as a space of multiple foci of dispersed attention
60 In both senses of the word: paying attention to and accruing
62 http://theconversation.com/are-paywalls-saving-journalism-53585
as the conscious crossing of a paywall threshold requires a willingness to pay attention on behalf of the reader. There is also a strong argument for thresholds between the products of virtual culture. The internet has been described as fostering a “remix aesthetic” that is “well entrenched in digital culture” and leads to an ethical stance asserting the availability for all forms of cultural appropriation and adaptation that has in recent years been criticised in the light of cultural appropriation, which is seen to devalue the traditional practices it draws from for popular cultures. Thresholds, as requirements to pass through barriers in to specific forms of space, or to pay for access to certain kinds of culture and information, then, could be said to protect value within the processes and forms that are situated behind them. So there is a cultural, economic, and political argument for better delineation and thresholds in both the physical spaces within which virtual culture is produced, and in the infrastructural conditions of the communication platforms used to distribute it.

There is, though, also a counter argument. Old Street, now the centre of London’s tech and creative industries, was once an area with very loose thresholds and low barriers to entry: many empty buildings were squatted or repurposed and provided cheap or free space for the emergence of new cultures that laid the groundwork for its transformation into a creative economic powerhouse. This transformation has led to the disappearance of the accessible space that underpinned it, with buildings now being ‘pay-walled’ via high commercial rental values and private use by individual companies. These thresholds are valuable and productive for those with the means to cross them (either wealth or specific sets of professional skills) but are suppressing the development of experimental cultures. Another example was given of neighbourhood community centres, which are often owned

---

63 Goode (2010) provides a sharp critique: “the remix ethic may lend itself well to certain cultural formations, perhaps especially the dynamic and prolific cultural codes that exude the self-confidence and reflexivity we commonly associate with globalization and de-traditionalization. But does this perspective necessarily sit well with all cultural formations, especially those perceived as being at risk and for whom rescuing, protecting and reclaiming stewardship of – rather than remixing – culture, may present itself as the more pressing goal?” Jaron Lanier (2010) has also criticised the anonymity that is afforded by crowd-sourced information with a critique of Wikipedia, pointing out that it rests on an assumption that volume of contribution will automatically lead to truth through a process of attrition, hiding the positionality and bias of the accounts that build up to form it whilst reducing each individual account to zero value. Lanier argues instead for an internet of thresholds, in which we pay for and consume the products of individuals, value individual labour, and hold individuals accountable for the work they produce.
and run by local authorities rather than residents, creating an impermeable threshold to unplanned and informal activities for those residents. It was argued that what whilst specificity is of value, it can be created with permeable thresholds, through small gestures such as the naming and identifying of accessible spaces for specific practices, or the introduction of things like micro-libraries into the public realm, which create small zones of specificity and possibility for communication around them.
References


