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**THEATRUM  
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# Introduction

Kiera Blakey

Theatrum Mundi is a professional network of urbanists and artists in different cities. The collective consists of academics, architects, planners, performing and visual artists, with the aim to stimulate discussion about practices spanning stage and street. The dialogue between art and society has long produced surprising results in both domains; we want to carry this discussion forward within the diverse contexts of contemporary urban life.

This publication brings together commissioned writing from the Theatrum Mundi blog. Leading thinkers, academics and practitioners write on topics arising from our workshops, salons and conferences. These include notes on public libraries, performativity in the public realm, to the concept of the city as a democratic space.

Theatrum Mundi's role is that of provocateur and enabler where ideas that link the arts and urbanism can be questioned, discussed and debated. Founded in 2012, the project is currently based in London and New York, with partnerships and projects in Frankfurt, Berlin, and Copenhagen. It organises workshops for small groups, salons which are slightly larger discussions, conferences for the public, exhibitions and research.



# **New Modern Ruins: A Brief History of Public Libraries**

Francesca Gavin

**Francesca Gavin is freelance writer, curator and editor at Dazed, AnOther, Sleek and Twin magazines. The following homage and history to local public libraries is intentionally factual and detached. Yet behind the story of buildings of books is the history of socialism, the power of education and a heartfelt desire that libraries should not become ruins in our increasingly digital world.**

I remember my first real library. I was five years old and had just moved and was not yet in school. It was a weekday and the wooden green library building was empty. My mother took me and we entered the children's room, which had a dusty wooden atmosphere. The books that stick most in mind from that day was a row of original L Frank Baum 'Wizard of Oz' books – turn of the century illustrated hardbacks that were prequels or sequels to the novel that was turned into the film. In the end I left with a copy of Andrew Lang fairy tales, 'The Yellow Book' to accompany the red that was already on my shelf at home.

Since that day, different libraries have always reminded me of specific books. An incredibly scary story of an Egyptian demon haunting museums that I used to hide under my bed the month I borrowed it aged 10. Anthony Burgess' 'A Clockwork Orange' on the wooden shelves of the Victorian library during my exams aged 17 – notoriously the most stolen book in school history. A hardback Italian tome on Bronzino at the Victoria and Albert Museum's stunning hidden reference library. Deleuze and Guattari's 'A User's Guide to Capitalism and Schizophrenia' in the concrete Brutalist library of the University of York. Battered copies of Jon Savage at the Westminster Reference Library at the back of Leicester Square in Soho.

Libraries and the books in them feel like memory. Something faded and in the past. The following homage and history to local public libraries is intentionally factual and detached. Yet behind the story of buildings of books is the history of socialism, the power of education and a heartfelt desire that libraries should not become ruins in our increasingly digital world.

There is evidence that scrolls were available for reference in Roman Bath complexes, though only to be viewed on site. One of the most notable libraries of the ancient world, however, was notably destroyed by The Romans. The Great Library in Alexandria was established by Pharaoh Ptolemy I after Alexander the Great's death. It was a centre for scholars in the 3rd century BC until it was destroyed in 48 BC. According to Plutarch, when Julius Caesar attacked Ptolemy, he set fire to the Egyptian fleet, which spread from the dockyard and destroyed the library.

Later in the 9th century AD halls of sciences in North Africa, libraries were open to the public but the books could only be consulted on site for reference. In Britain, many university libraries were founded in the 17th century. The most notable was the University of Oxford's Bodleian Library. It was formally established in 1610 by Sir Thomas Bodley to prevent the destruction of books during moments of political and religious upheaval.

Throughout the 17th century a number of public libraries were founded throughout Britain – Ipswich in 1612, Bristol in 1615, and Leicester in 1632. This echoed the increase in printing access and the translation of the bible from Latin into the common tongue. Booksellers would rent spare copies of books to the public, largely to landowners and the ruling classes who owned shares in the library. By 1790 there were an estimated 600 rental libraries in Britain.

The rise of the novel was one of the driving forces in the growth of public libraries. This was particularly due to the huge rise of female readers. Circulating libraries containing fiction were attached to milliners or fabric shops – existing as a shelf in a local stationer for example rather than a devoted building. Libraries were not just a result of these early examples in female emancipation but also linked to social changes as a result of the industrial revolution. In the north of England in particular, which was



the heart of British manufacturing with a large concentration of factories, libraries began to emerge directed at the working class, such as the Kendal Economical Library for tradesman which was established in the late 18th century. Manchester in particular became the focus for the library movement.

Liberal MPs William Edward and Joseph Brotherton join forces in the 1840s to establish a public library system. Their third partner in the fight for libraries was a former bricklayer Edward Edwards, who had educated himself at Mechanics' Institute libraries when he didn't work and became an assistant in the Printed Books dept. at the British Museum in 1839. The self-taught man was also a Chartist who fought for universal vote.

Their fight coincided with The Free Library Movement, which aimed (like many Victorian Christian paternalist movements) to improve the public through education. It was strongly linked to the temperance movement. Better to read than to drink. There was strong opposition in Parliament to the bill Ewart, Brotherton and Edwards proposed. The ruling classes did not want to pay taxes to educate the working class. There was a sense of Conservative fear towards the social transformation and radical politics of the mid 19th century.

The act however was successful, for boroughs with a population of over 10,000 people. After the 1850 Public Libraries Act was passed, public libraries opened in Winchester, Manchester, Liverpool, Bolton, Kidderminster, Cambridge, Birkenhead and Sheffield. The act was extended to Scotland and Ireland in 1853. Edward Edwards became the chief librarian of Manchester first public library – a library where Engels and Marx researched parts of Das Kapital. However Edwards was dismissed in 1858 for his radical politics.

Despite the penny tax to fund libraries, the cost to establish them was

too much. The system relied heavily on wealthy supporters including Henry Tate, the self-made millionaire who established the Tate gallery in the former Millbank prison, who established libraries in Balham, Lambeth and Brixton in South London. The journalist, owner of London newspaper 'The Echo' and Liberal MP John Passmore Edwards established 24 libraries amongst other bequests in the late 19th century. The most notable supporter of libraries was the Scottish-American industrialist Andrew Carnegie helped to finance libraries over 380 libraries in Britain.

World War II saw libraries at their most powerful and integrated into British life. Temporary branches popped up in pubs, shops and churches throughout the war. Loan times were extended to keep in mind travel restrictions. There was a huge boom in reading during the war, and libraries were also used as information centres, theatres and exhibition halls. Arguably the success of libraries echoed the positive intentions of the Welfare State, which was established after the end of the war – the start of government run unemployment and child benefits and the National Health Service.

In the 1970s writers threatened to remove their books from libraries in protest to lack of compensation. The Public Lending Right Act of 1979 provided a scheme to pay writers and artists for books in libraries. £7.4 million was provided by the British government between 2003-4.

In 2000 the Library Association stated that only 15 libraries throughout the UK were open more than 60 hours per week. Between 1993 and 2000, 203 libraries were closed in the UK, a trend that is increasing dramatically under the current coalition government and spending cuts. In 2010 the government abolished the Museum, Libraries and Archives Council, giving all responsibility of public libraries to the already underfunded Arts Council England in a bid to lower costs. Libraries are

increasingly focusing on providing digital access to the public for free in an aim to stay alive. There are 92 million books in UK libraries.

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# **The Philharmonie or the Lightness of Democracy**

Wilfried Wang

**Wilfried Wang explores the Philharmonie Berlin's entirely modern architectural language that is as direct in its construction as possible, non-orthogonally multi-faceted in its planar elements, socially integrated in an unprecedented way, and culminates in an unprecedented, thoroughly modern synesthetic perception of music, space and society.**

At the top of the Philharmonie's roof is a sculpture entitled Phoenix by Hans Uhlmann (1900-1975). It appears to be emerging from an undulating envelope. Hans Scharoun (1893-1972) designed this envelope in a quasi-textile, tent-like manner, whereas its structural frame consists of cast in-situ reinforced concrete walls and steel trusses. The winged figure of Uhlmann's Phoenix symbolically rises from the ashes of the Nazi past.[1] Uhlmann had remained in Germany during World War II despite his political opposition to the Nazi regime and the compromised life that resulted from his resistance.

Scharoun too had worked as an architect in Germany during World War II, realising some houses that on the exterior superficially conformed to the Nazi building codes, while containing more open spatial sequences on the interior. The work on these few small houses was augmented by many sketches and watercolors, a number of which show dauntingly heavy monumental syntheses of landforms and architecture, whereas others celebrate an idealised lightness. Some of these large-scale fantasies predate the flowing forms of international architectural designs of the early 21st century. During the last years of the war, Scharoun was charged to clear bomb damage. At the same time, Scharoun and a number of his colleagues were already thinking about town planning design principles and architecture they wanted to use after the war. Scharoun's Planungskollektiv was then commissioned by the newly installed, post-war Berlin magistrate in 1945 to undertake a structural plan for the war-ravaged city, laying the strategic ground rules that were to shape Berlin for the next decades.



The structural plan for Berlin and the new home of the Berlin Philharmonic Orchestra were elements at the extreme ends of Scharoun's design thinking. Both required significant political support by individuals and organisations that were ready to construct a new democratic culture.

In this context, the superimposition of a grid of roads on Berlin as suggested in the structural plan by the Planungskollektiv of 1946 is as diametrically opposed to the Nazi's axial planning as the Philharmonie's tent-like exterior—with its drooping skyline and its overhanging golden aluminum panel-clad walls, suggestive of a festive lightness—is opposed to the weighty permanence sought by the projects that were intended for this site only a dozen years earlier.

Only a very small section was built of Albert Speer's (1905-1981) proposal for the Welthauptstadt Germania (1937-43, World Capital Germania), the newly shaped capital of the Großdeutsches Reich, designed to extend along Berlin's north-south axis for 25 miles and implying the enforced "rehousing" of between 150,000 to 200,000 residents in 52,144 apartments, including members of the Jewish population (between 15,000 and 18,000 of their apartments were requisitioned from 1938 onwards; the residents were deported). To this small section belonged the Haus des Fremdenverkehrs [House of Tourism (1938-1942, incomplete, demolished 1964) by Theodor Dierksmeier], which remained standing a few yards to the southeast of the Philharmonie for one year after the latter's inauguration, reminding the post—World War II public of the Nazis' megalomaniac plans and destructive consequences. The co-existence of these two buildings for one year was only a brief moment in the long post—World War II process of democratisation.

A few hundred steps north of the newly designated Kulturforum (Cultural

Forum), which was conceived from 1959 to 1964 by Scharoun parallel to the design development and construction of the Philharmonie, a gigantic domed hall for 180,000 people was to have been built. In 1937 Adolf Hitler (1889-1945) had instructed Albert Speer to design the 290 m (950 ft) tall building.[2] The synchronisation of such a large number of people into an undifferentiated single mass within a neoclassical building served as a daunting foil against which post–World War II architects reacted; in contrast, Scharoun’s auditorium for 2,440 people is structured into 23 groups of seats, each numbering around 128, the size of the full Berlin Philharmonic Orchestra. Audience groups and orchestra are thus placed in a commensurate relationship. Moreover, rather than being focused on a single point as in neoclassical space conceptions, Scharoun was interested in notions of modern space with multi-faceted and multi-focal performances. Scharoun’s interest in multi-faceted perception can be seen as a corollary to multi-faceted Cubist painting.

### **Perambulatory circulation**

The entrance to the Philharmonie is located to the west of the building’s main volume; once in the auditorium, visitors notice its asymmetric placement. Scharoun deliberately chose to offset the entrance from the auditorium’s axis of symmetry so as to enhance the sense of excitement so often associated with a concert visit. The polygonal geometry of both the exterior and the interior gives few clues regarding the direction of movement. Signs with small capital letters referring to the groups of seats are admittedly not very visible. First- time visitors, especially, remain confused.

Flights of steps can be seen to the right of the ticket collectors’ line; they take members of the audience who have seats on the right side of the concert hall to the mezzanine level with the coat facilities and further

sets of stairs. Audience members sitting on the left pass by their coat facilities and move through the large foyer with its various columns, pillars, walls and circular stairs before they reach their flights of steps on the east side of the building. The visual impressions gained from the long views, unusual spaces and non-orthogonal alignments of circulation elements are varied, if not completely unrelated to the axial planning of the Nazi period just over a decade earlier.

Members of the audience may not easily find the next flight of stairs. However, as one moves upward, the range of options is reduced, the path becomes more evident, and the goal of the auditorium is within sight. The view through the vomitoria is tantalising; one senses the enormous volume of the hall beyond via the fragments of echoes emerging from the auditorium.

And then comes the moment of entry: at any one of these points is one of the most exciting synesthetic experiences that modern architecture offers. This passage from one cavernous space – the foyer – to another is entirely without precedent.

Importantly, while traveling the route from the street to the auditorium can be extensive and confusing, leaving it is self-evident and fast. During intervals and at the end of concerts, the hall empties within two to three minutes. One may wonder why leaving is so easy. The answer is as obvious as the flow of water down a valley: the next flight of stairs is always within one's cone of vision.

Beyond the internal circulation, the Philharmonie is directly connected to its two neighbouring buildings: the Chamber Music Hall to the south and the Music Instrument Museum to the north. On a few occasions, the three buildings host simultaneous musical performances in the auditoria as well as in ad-hoc spaces. In urban design terms, however, the entire

complex of the Kulturforum remains dislocated from its current larger fabric. Following German reunification in 1990, two areas to the east of the Kulturforum, Potsdamer Platz (Hilmer und Sattler, competition entry of 1991, 1993-98) and the Sony Center (Helmut Jahn, competition 1996, 1998-2000), were realised. Neither large urban development was able to create credible connections with the eastern sides of the Music Instrument Museum and the State Library (Hans Scharoun, competition 1963, 1967-1978). Moreover, Scharoun's master plan for the Kulturforum was never completed; in fact, following his death in 1972, successive decisions were made against the realisation of the centrally located Guest House (Hans Scharoun, projects of 1964 and 1967), thereby leaving an undefined expanse at the core of the forum. Thus the Philharmonie, together with its two connected neighbors, remains an island in a sea of islands, a characteristic quality of this larger stretch south of the Tiergarten.

As a result of this island condition, the two aluminum clad concert halls – the Philharmonie and the Chamber Music Hall – closely resemble Scharoun's Stadtkrone watercolors of 1919 and 1920. Lit at night, the golden roofs, alluding to the use of gold-painted façades in Prussian palaces, become beacons at the fulcrum of two major Berlin thoroughfares, the Potsdamer Strasse and the Leipziger Strasse.

In earlier projects by Scharoun, the underlying composition of the circulation sequence, spaces, galleries and formal elements used in the Philharmonie can be seen as part of a distinct architectural conception that Scharoun was able to develop in the years after World War II; this is distinct from the white architecture of the International Style to which Scharoun's earlier buildings had also adhered.

The first key project is the design for the Galerie Gerd Rosen (1948), the

foremost Berlin gallery for modern art.[3] Arguably continuing from the compositional studies as seen in the Schminke House (1932-33), Scharoun introduces a number of stairs in the Galerie Gerd Rosen: one at the center with a double flight of steps, as seen in a larger version on the western mezzanine gallery in the Philharmonie, with the effect of a mixer; and two at the short ends of the double height building. The latter stairs can be said to resemble the triple flights that are found at the Philharmonie's ground floor. The two exhibition gallery wings were to have walls arranged in a radial pattern, with the upper gallery even consisting of different levels. The resultant effect of the series of non-orthogonal exhibition spaces would have been a concentration of diverse spatial experiences at the building's core and a drawing out of the visitor's views and movement patterns towards the double height glazing (which can also be found at the Philharmonie). The Philharmonie's foyer is effectively a larger version of the Galerie Gerd Rosen: the design of the latter is stretched and docked to the underside of the auditorium.

The distribution and orientation of staircases are a major theme in the two projects for the Liederhalle in Stuttgart (1949) and Kassel State Theatre (1953-55), both with symmetrical auditoria. The asymmetries of the foyers and stairs appear forced in relation to the more orthodox auditoria, a compositional problem that is on its way to being resolved in the Philharmonie and fully integrated in the Wolfsburg Theatre (1965-73) with the promenading foyer that passes almost unnoticed underneath the raised banks of seats in the auditorium itself.

Scharoun's development of a distinct architectural language – the self-evident positioning of structural elements in a manner that happened to be non-orthogonal most of the time; thereby defining contemporary interpretations of processes in space – had found a mature culmination



in the Philharmonie.

## **Multi-faceted interconnection**

One of the origins of a multi-faceted and multi-focal space conception can be found in Berlin's theatre productions of the 1920s. The German theatre director Erwin Piscator (1893-1966) had used synthesised projection systems (film and lantern slides), elevators, travelators and multiple frames on a single stage in various Berlin theatre productions, collecting his experience in his treatise entitled *Political Theatre* (1929). Together with Walter Gropius (1883-1969), Piscator sought to realise a new type of auditorium, leading to the *Total Theater* (project of 1927) with numerous options for stage locations and sizes, audience numbers and orientation. While audience orientation was still recognisably related to the horseshoe auditorium with a single focus, Scharoun's post-World War II competition entries for theatres demonstrate a line of thinking that culminates in the radical break from this single focus with the use of radial seating (see particularly his competition entry for the *National Theater in Mannheim* of 1953, and the rudimentary realisation of these principles in his *Wolfsburg Theater*), which gives rise to the multi-perspectival auditorium and stage. Notably, this principle had been put into practice a few years earlier by Rolf Gutbrod (1910-1999) in the *Mozartsaal* of the *Liederhalle* complex in Stuttgart (1951-56).[4]

In Scharoun's *Philharmonie*, the principle of multi-focused seats goes further and follows two compositional rules: first, parallel rows of seats arranged as groups so as to create a perpendicular focus; second, the outline and orientation of these groups in such a distinctive relationship to each other that each group attains a sense of identity and a number of foci are created. All the same, the most "traditional"

blocks are those in the area in front of the orchestra (blocks A, B and C) with their axis of symmetry and their clear focus on the orchestra stage. Blocks D to G create noticeable counterpoints to spatial orientation. Their seat rows are slanted and face in several directions, thereby enhancing the effect of a spatial thrust towards both the direction of gravity and different centers of the orchestra stage. It is these blocks of seats on the inclined planes, together with the faceted walls and angled bulkheads that dominate the audience's perception of the architecture.[5]

Syntactically too, Scharoun's layout of the 23 seating groups is such that it allows members of the audience to move unhindered from any one seat of the auditorium to another, all within the auditorium. For habitués of the concert hall, moving to an empty seat closer to the orchestra just before the beginning of a concert is thus a relatively easy sport. It is a type of permeability that marks an open society. The same principle of equal access to all facilities can be found in the foyer. The mezzanine gallery circumscribes the auditorium, offering a variety of views outwards across the Kulturforum on the south side of the building and inwards on the north side. Before the concerts and during the intervals, members of the audience can thus experience the underside of the auditorium, and, taken with the vistas from the foyer into the auditorium's interior through the vomitoria, the two main spaces of the Philharmonie can be fully experienced in their multifacetedness.

Compared to other concert halls, before and after the construction of the Philharmonie, the absolute and relative social status of the individual audience member can be measured by these syntactic and semantic values as constituted in the given architecture. The

Albert Hall in London (1853-71), for example, perfectly maps the social status of English society even as it exists in the 21st century. There are separate entrances from the outside to separate staircases connecting to segregated foyers and bars and terminating in the separate seating areas (be they boxes, paid for by subscription ahead of the building's completion and held in family trusts, stalls or the upper tiers). With the balustrades and changes in levels, none of the seating areas are interconnected. The union of the audience is visual only. Moving from one foyer or bar to another is not possible. Thus a mapping of English class structure exists to this day. The Philharmonie, by contrast, is more than a conducive hall with music at the center. The Philharmonie extends the notion of harmony to the complementary integration of that segment of society attending its concerts.

Although Scharoun referred to urban phenomena such as people gathering around music even in ancient times,[6] the orchestra itself does not completely take command of the auditorium's center; the center in terms of the plan is more closely located at the conductor's podium. Seen in connection with the ceiling's apex, however, which is above the center of the orchestra, the auditorium's heart oscillates in space between the conductor as one evident focal point and the high fault line of the merging convex ceiling planes. The architecture thus could be said to express the tension between orchestra and conductor. In this way, post--World War II German society's attempts at shaking off the legacies of the fascist past find a continuation in this tense relationship between the authoritative figure of the conductor[7] and the orchestra. The later Chamber Music Hall [Kammermusiksaal designed in 1971-74, completed by Scharoun's collaborator Edgar Wisniewski (1930-2007) from 1984-88] was more literal in the realisation of Scharoun's interpretation of "music at the center". At the

same time, this concert hall shows the dilemma of an omnidirectional space: the logic of the geometry becomes more insistent, the asymmetries more circumstantial.[8]

The way that the Philharmonie embodies multi-focal seating in a multi-faceted set of sloping seating tiers and angled balustrades, reflective planes, combined with the possibility of egalitarian perambulation within and outside the volume and body of the multi-faceted auditorium itself: Scharoun's chef d'œuvre is the first three-dimensional fulfillment of the promise of Cubism.

The corset of Cartesian rationalism, so admired by Swiss modernists and their English apologists,[9] could only give rise to an intellectual version of transparent "depth". Real depth and the compression of space-time cannot be expressed in an architecture with an orthogonal geometry that is dependent on a dominant or preferred direction of perception (that is, notions of front and back with sides). The architectural corollary of two-dimensional cubism is the phenomenon's three-dimensional unfolding, an unwrapping that the observer experiences in perambulating in real time and space. In this manner, the observer takes advantage of the three-dimensional spatial nature of architecture, a quality that distinguishes architecture from all other arts. It is this spatial nature that the Philharmonie explores to the fullest degree.

## **Construction details and process**

The result of the 1956 competition for the new concert hall[10] was met with scepticism. Some commentators questioned the feasibility of Scharoun's design for the Philharmonie. Even the Berlin Senator for

Building and Housing, Rolf Schwedler (1914-81), suggested early in 1957 that Scharoun should avail himself of the assistance of a contact architect so that the design could be redeveloped to stay within the budget of then seven million Marks.[11] Only two years earlier, in 1955, Scharoun had lost the commission for Kassel State Theater partly as a result of the rumors that were spread by opponents of his design, suggesting that the building could not be constructed. Until the Philharmonie's completion, the project was subject to the usual range of public outcries regarding rising construction costs and calls for public enquiries. Given the fact that the project was moved from its original site on the Bundesallee, there conceived as an extension to the neoclassical school building (Joachimsthalsche Gymnasium), to the site south of the Tiergarten and now as a free-standing building, the net useable area increased from the initial 1,975 m<sup>2</sup> to nearly twice the area at 3,787 m<sup>2</sup>. One of the reasons for the increase in area was the elimination of the spaces in the existing school building.

The call for budget savings to the project subsided with the shock of the construction of the Berlin Wall by the German Democratic Republic (East Germany) in August 1961. Now the political dimension of the Philharmonie, directly next to the Wall, was cast into sharp relief. Thus, together with higher quality finishes [adjustable orchestra rostra, parquet flooring in the auditorium, carpet instead of linoleum flooring on the upper levels, natural stone instead of artificial stone on the ground floor with the art work in stone by Erich F. Reuther (1911-97)] the total budget was permitted to reach 17,5 million Marks. The cladding to the building's upper part was omitted so as to stay within a politically acceptable figure. Instead, the exposed reinforced concrete was painted golden ochre to simulate what was to come two decades later (1978-81) at a cost of 6 million Marks. It was a belts-



and-braces solution using golden anodized aluminum panels with pyramidal indentations and a translucent polyester panel system.

Many comments on the completed building were still colored by a tone of incredulity regarding its construction. The Philharmonie's geometric system, with its absence of recognisable right-angles, was associated with negative connotations. Scharoun's approach to detailing becomes clear and self-evident in the construction drawings published in this monograph. To ensure that the multi-faceted nature of the building would be achieved in as precise a manner as possible, a straightforward positioning system with the x, y and z coordinate system was used. The origin of this coordinate system was determined by the two axes, themselves at right angles. The major axis runs north-south and the minor axis runs east-west. They cross above the apex of the orchestra's second tier. In the design development drawings, these axial lines are indicated throughout. From this origin then, all corners of polygons in space were fixed.

The perimeter walls are all vertical with the exception of the symmetrical pair of walls facing north. In their unclad state, these two north-facing walls allowed a view into the building from the outside through the tall slot between the two wall planes. The slot accentuated the reading of the envelope as a cladding.

Set within the tops of the north-south aligned walls are vertical steel trusses running parallel to the minor axis. The different roof and ceiling skins are supported on or off these trusses, leaving a service space that is conveniently accessible for lighting and maintenance. The undulating, convex-shaped ceilings that are set back from the walls so as to underline their floating character fulfill their function

of deflecting the orchestra's sound throughout the hall. This set of undulations is repeated on the exterior roof profile, expressing the tent-like character. The original claddings details, and to some extent the realized cladding system, further enhance the quasi-textile or even woven nature of the cladding system (see drawing no. 122 of 1960).

The external base walls were originally covered with external plaster and painted white. Subsequently, a new layer of thermal insulation was added, creating deeper window reveals and thus giving the building a more substantial character. The differentiation between a mineral base and a metallic (plastic) top with glazed prisms and horizontal louvered bands clearly expresses the individual program elements: foyer and auditorium. Scharoun adhered closely to a configurational conception of architecture from the early 1920s in his later work. That is, buildings would have the potential to have an overall sculptural presence. For example, strong formal parallels can be seen between the watercolor for a cinema – Kino II (ca. 1922) – and the realized Philharmonie. The principle difference between these two lies in the curvilinear geometry of the cinema as opposed to the essentially planar geometry of the Philharmonie.[12]

Also characteristic of the planar geometry of the Philharmonie is the direct, exposed construction, clearly readable on the interior. The entire construction approach is guided by the display of visualizing the hierarchy of layers. The white-painted primary structural elements, walls and columns, pillars, beams and ceiling slabs all exhibit board marks of the in-situ reinforced concrete shuttering.

Secondary elements such as the porous acoustic plaster surfaces are clearly set in between the ceiling elements in an off-white

finish. On the stairs precast terrazzo panels are laid on top of the reinforced concrete, and on top of these is laid a seemingly seamless, monochrome carpet. The edges of the floor screeds are terminated with wooden boards. The balustrade system is made of vertical rectangular hollow sections that support metal grilles of flat sheets into which a small-dimensioned grid of semi-circular punches are cut and angled. Along the flights of stairs these angled half circles catch the light from fluorescent tubes. Where the purpose designed pendant lights [designed by Günther Ssymmank (1919-2009)] with their 72 pentagonal petals are connected to the ceiling, five circular dimples are marked into the plaster, taking up the pentagonal theme.

The floor of the foyer is clad in a mixture of natural stones and mosaics, part of which is the work of the the sculptor Erich F. Reuther (1911-97), who is said to have been inspired by the work of Johann Sebastian Bach. Most importantly, the different grains of the floor cladding point the visitors to the main sets of stairs and the neighboring Chamber Music Hall.

In the auditorium, the approach to direct detailing and construction can be seen only in the foldable seats with their profiled plywood seat panels and superimposed upholstery and in the black-painted, single- tube balustrade. Elsewhere, the wooden floor, the cladding to the seating tiers and the drooping acoustic ceiling are all cladding elements entirely covering the primary structure.

Taking all the architectural elements together, the Philharmonie succeeds in creating a festive venue without recourse to neo-classical traditions. In very broad terms, the use of remarkably tall volumes, generous circulation areas and a spatially dazzling, magnificent

auditorium continue the concert hall typology of the 19th century. However, Scharoun casts this typology into an entirely modern architectural language that is direct in its construction as possible, non-orthogonally multi-faceted in its planar elements, socially integrated in an unprecedented way, and culminates in an unprecedented, thoroughly modern synesthetic perception of music, space and society. Most importantly, Scharoun's design achieves this with a nonchalance, a seeming lightness that both overcomes the weight of the immediate past and sets an example of how the newly won democracy can be celebrated with a modern architecture of and for an alternative Germany.

The Philharmonie or the Lightness of Democracy was originally published in O'NFM\_5: Philharmonie, Wasmuth, Tübingen/Berlin ISBN 978-3-8030-0758-2, 256 pages, numerous drawings from the Scharoun Archiv of the Akademie der Künste Archiv and photographs, € 39,80.

[1] Uhlmann was imprisoned for 18 months in 1935 for distributing anti-fascist leaflets.

[2] The project was never realized; however, numerous studies were undertaken as to its feasibility, including several tests on the construction of foundations. In this connection, Speer had been personally in charge of ensuring the supply of quarried stone, for which forced labor was used. The Nazis' selection of sites for the concentration camps close to quarries was also made with the supply of stone in mind.

[3] The gallery's first show opened in August 1945, 3 months after the end of World War II. Amongst the advisors was Hans Uhlmann (1947-48), the sculptor of the Phoenix on top of the roof of the Philharmonie. Alexander Camaro, the author of the colored glass blocks on the Philharmonie's north elevation, had an exhibition at the Galerie Gerd Rosen in 1946, as did Bernhard Heiliger, the artist of the sculpture in the Philharmonie's foyer.

[4] Adolf Abel (1882-1962) and Rolf Gutbrod were one of the twelve practices that participated in the limited competition of 1956 for the original competition for the Philharmonie on the Bundesallee site.

[5] A superficial similarity between the interior of the Philharmonie and some of the scenography seen in Robert Wiene's "Das Cabinet des Dr. Caligari" (Germany, 1920) cannot be entirely dismissed. However, considering slightly earlier post--World War I correspondence between the members of the Gläserne Kette (Glass Chain) of 1919 to 1920, often with the subject of buildings representing the new democratic "Stadtkrone" (crown of the city), the origin of this multi-faceted, occasionally biomorphic or geological formal language rests in the tradition of the romantic ideal of a new society in search of its own communal architectural icons.

[6] Hans Scharoun, "Musik im Mittelpunkt", 29 Jul 1957, in Hans Scharoun – Bauten, Entwürfe, Texte, ed. Peter Pfankuch, Schriftenreihe der Akademie der Künste, vol. 10, Berlin 1974, p. 279.

[7] Herbert von Karajan (1908-89) was chief conductor of the Berlin Philharmonic Orchestra from 1955 to a few months before his death. Not only did his early membership of the National Socialist Workers Party of Germany (Nazi party or NSDAP) give rise to the sustained criticism of his person in the post--World War II years, but also his conducting manner was subject to dissenting comments. Karajan was one of the most loyal supporters of Scharoun's design for the new concert hall. The conductor's location at the center of the hall is thus a general homage to the significance of the conductor in classical music and in particular a tribute to Karajan as a person. The sublime sound that Karajan sought in his performances implied the calibrated, homogenous equivalence of individual instruments. In this regard, it is telling that the orchestra podium follows a radial geometry, treating the orchestra as an undifferentiated mass, in distinction to the auditorium as a whole.

[8] This dilemma was particularly clearly visible in Herman Hertzberger's Vredenburg concert hall (opened 1979, demolished 2007), which was based on a regular geometric

system. Were it not for the specified stage, the auditorium's rotational symmetry would have given rise to a set of equivalent seats.

[9] Chief apology for Swiss modernist rationalism by Colin Rowe and Robert Slutzky, (written while both were teaching at the School of Architecture at The University of Texas at Austin in 1955-56) "Transparency, Literal and Phenomenal", in *Perspecta*, no. 8, Yale 1963, pp. 45-54. This form of depth and transparency is dependent on the traditional orthogonal, single viewpoint mode of perception, or preferably, the cerebral axonometric version. In three-dimensional reality, such notions of depth and transparency evaporate in space and time, the very categories that modernist architecture sought to reform.

[10] Originally, the new concert hall for the Berlin Philharmonic Orchestra was to have been constructed as an extension to the Joachimsthalsche Gymnasium on the Bundesallee, in the western part of Berlin.

[11] Rolf Schwedler (member of the Social Democratic Party) quoted in *Tagesspiegel*, no. 3448, Berlin, 10 Jan 57, p. 9.

[12] Almost a century later, the curvilinear type of architecture is being realized. See for example the work of Zaha Hadid.



# Trading Perceptions in a Post-Ethnographic Museum

Clémentine Deliss

**Clémentine Deliss is Director at Weltkulturen Museum. Faced with the legacy of the Weltkulturen Museum in 2012, the central questions may be as follows: Is it possible for ethnographic collections that once offered a scholarly parallel to imperial trade to become relevant once again as reflectors of today's routes of exchange and changing patterns of citizenship?**

Frankfurt has been at the centre of international trade for over nine hundred years. Fairs, which functioned as a junction for the foreign traffic in goods, featured ahead of the banks and as early as the eleventh century. In the sixteenth century, Germany set up trading posts or 'colonies' in Ghana, Venezuela, and the Amazon region. Trade colonies and protectorates grew in scale towards the end of the nineteenth century with the official entry of the German Reich into European imperialism. Mercantile incentives intersected with scholarly research such that one is tempted to ask whether the museological assemblage of ethnographic objects was ultimately a side product of commercial interests.

Founded in 1904 on the 'geography of trade', the Weltkulturen Museum in Frankfurt houses over 67,000 objects from Africa, South-East Asia, the Americas and Oceania, a media archive with 120,000 photographs and films, and a research library with 50,000 books and journals. Speaking in 1904, Bernhard Hagen, the first director of the museum, emphasised the relationship between commerce and knowledge. He writes: "Our German Fatherland has evolved from a major power into a world power, and German trade and commerce now has large, indeed massive interests in all five continents. What did China, let alone Japan mean to a German merchant only 50 years ago? Today, every large manufacturer or merchant must bear these empires in mind, not to mention the Australian and African markets... A slight upset in a remote corner of East of Asia may trigger the most severe stock market crisis here. Now this is a gap not yet filled by the geography of trade. This is where the new science of ethnography comes into play."

Faced with the legacy of this museum in 2012, the central questions may be as follows: Is it possible for ethnographic collections that once offered a scholarly parallel to imperial trade to become relevant once again as reflectors of today's routes of exchange and changing patterns of citizenship? How does a museum of anthropology – or world cultures – create presence for people who have no national, colonial, or historical connections to those cultures that are featured in its collections? How do we contend with the complex mismatch between so-called 'source communities' from the original, historical locations of ethnographic research and the hybrid heterogeneity of citizenship and audience that we find in our cities today? Can we solder new perceptions through innovative educational alloys and shift these anachronistic material objects onto a dialogical middle ground that is politically and socially sensitive to both past and present conditions? To do this requires finding methods of working with these artefacts and presenting them anew. The relationship between rhetoric and display is the final sticking point: for it is the feedback loop between text and object for which the tropes of ethnographic narrative are proving insufficient today. In short, this exercise in remediation requires one to critically engage with orthodoxies of different schools of anthropology, and to counteract the continuing desire to preserve the logos of ethnos.

In order to accompany the shift into this post-ethnological context, the Weltkulturen Museum in Frankfurt has created a workshop-laboratory to undertake fieldwork on site in the archives and depots of the museum. Domestic in scale the workshop-laboratory generates a new contextualization of one's own research as well as enhancing a sense of shared histories and cultural exchange.

This process takes place through analyses and experiments that position artefacts from the collection at the centre of all inquiries. Guest artists,

designers, writers, architects, film-makers and social scientists live and work in the museum for several weeks at a time and have the opportunity to develop their own unique take on the collection, creating tests-works based on these historical artefacts and documents. As such, the museum's trade in perceptions operates through in-house production, though the practical application of concepts and the construction of new material objects. The aim is to find forms of representation that extend beyond the academic appraisal of past histories and enable one to view the objects in the collection as prototypes for different futures, and to develop situations that interpellate today's communities without obfuscating the colonial past. If this dialogical approach is successful, then the original collection is expanded through new works in a variety of media.

If one assumes that underpinning all collections are the traces of former trade routes, and if one takes the metaphor of tracking and mapping one step further, then it is curious to consider how historical collections today may come to represent either a continuing flow or an impasse. For how should we treat those areas within colonial or imperial collections that we do not update? Are these precisely the artefacts whose public exchange value, visibility, and presence-engendering capacities are being repressed?

An example of such a collection may be found in the armouries of 18th and 19th century universal or encyclopedic museums. How does one bring up to date this assemblage of weapons to include the kind of warfare technology (including food security measures) that we hear about through the media, that is purchased through middle-men (both public and private), and that constitutes a commercial enterprise, which is neither discussed nor exhibited for the cultural edification of the wider public? Similarly, collections that reflect highly nationalist identifications

such as those found in folklore or 'Volkskunde' museums in Germany or Austria have become redundant as reflectors of national or urban-rural identities in today's worlds. The trade routes and civic identifications that underpinned their reasoning have shifted. The mediating role of the museum operates today within a different dynamic.

Let's assume, following a conversation with Richard Sennett in London this summer, that a person who moves from one part of the world to another – a so-called migrant – brings with them a set of objects in their suitcase. The transition to a new environment alters and shifts the architectonic frame within which these things once found their place. Their owner has to renegotiate the presence of these goods within a new experience and spatial practice. This is an activity of adaptation and adjustment, which helps to re-signify meanings and affect between people, objects and places.

An ethnographic museum introduces a further dimension of agency in this relationship, one that is incorporated in the person of the anthropologist or collector. Between the movement from there to here, from say the Amazon to the city of Frankfurt, ownership has altered from one of reasonably straightforward personal possession (as above) to one of ambivalent custodianship. The object is no longer housed in the home, on the market stall, or placed on the ritual altar relative to its faith of origin, nor is it transported in a suitcase as a personal souvenir. Instead, it passes through a process of reconstruction that involves internment, administration, assessment and conservation. The ethnographer as collector is now in the middleman position and turns out to be the person who generates history around an object or chooses not to, denies presence or seeks to enhance this potential. In short, there are institutions, which act as trading posts and there are the middlemen or brokers, who negotiate exchanges of knowledge

between groups and individuals. The rules of the game may vary. The scale of trade and exchange will reflect different economic and political incentives related to state, national, municipal or private ownership or custodianship. Visibility is not always guaranteed – the middleman may be illegal, or the institution may wish to obfuscate its engagement with regard to this transaction.

If we take on the possibility that individuals and groups from 'dense, working-class neighbourhoods' (Saskia Sassen) can and wish to 'make presence' (Sassen) in the cultural centres of the city, then the position of the middleman raises interesting questions. For there is no sole legitimate trader of perceptions. There is also the itinerant hawker whose method may be chaotic, informal, part of a non-accountable administrative activity and most probably linked to a complex set of aesthetic practices and stealth architectonics (see Markus Miessen). The middleman may also be rethought within cultural centres as an artist, an architect, a designer, a visitor, but also as a building: a museum with a collection, a house that can engender intermediation. As Philippe Descola writes (2004, *Musée du quai Branly*): 'Le musée un grand trafiquant d'agences' - the museum is a huge trading post of agencies.

For historical collections have an anthropomorphic even fetishist feel to them. They evoke relations between people, things and ideas, between failures and successes, between the inheritance of meanings and their erasure over time. The ethnographic museum represents the survival of a particularly obsessive form of cultural and scientific institution, one that is simultaneously local and diasporic, possessive and rehabilitating, familiar and feral. To attempt to remediate its collections today is to engage with discomfort,



doubt, and melancholia, but also to activate a necessary process of revitalization in the urban context.

To conclude, I would like to make a proposal: that the museum building has the potential to provide the space for these objects to produce presence once again, to act as points of departure in future dialogical acts of trade. Here I do not intend a focus on corporate-run, large cultural centres. Instead, the intention is to recast the scale of the museum both conceptually and physically as a domestic operation. Here research, production, and exhibition-making take place 'in-house'. The education that is mediated through the historic collection of objects is produced in a temporary home, a sheltered space, a maison de passe, or a half-way house with all the shades of activity one might associate with this nomenclature, locations which can be usurped by visitors and citizens without entry or exit examinations.

# **Learning From Athens**

Ioanna Theodoropoulou

**Ioanna Theodoropoulou is Architect and Architectural Historian at Parsons The New School for Design. The (European) fantasy of Athens as the “cradle” of Western civilisation, rarely fails to elicit unfavorable comparisons between the contemporary city and the majesty of the classical ruins.**

Athenians will be the first to tell you that their city is a disaster compared to other European metropolises. Characterized by sprawling, monotonous, aging, buildings, overwhelmed by traffic and pollution, the city is almost completely lacking in the symbolic order of other European capitals, so prized by architects and planners. Although not a “shantytown”, Athens is in large part “informal”, an example of “urban non-planning” as Noo Saro-Wiwa wrote recently of Lagos.[1] The many and ongoing failed attempts at formal planning, are still part of Athenians’ daily conversations, whose city, the prime example of these failings, is generally considered chaotic and debased, a sorry testament to the inability of the Modern Greek state to regulate all things, not least construction. To add to that, the (European) fantasy of Athens as the “cradle” of Western civilization, rarely fails to elicit unfavorable comparisons between the contemporary city and the majesty of the classical ruins.

In truth, in its brief and turbulent modern history, (Greek Independence from the Ottoman Empire began in 1821, the State was founded in 1834), Athens experienced successive bursts of rapid expansion and “informal” design, alongside key political and economic events. The earliest of these informal settlements was founded by the builders of the nineteenth century urban monuments, (the National Library, the University, the Old Parliament, etc.), who came to Athens from the Aegean islands, bringing with them knowledge of working with marble. Their little makeshift houses, right in the foothills of the Acropolis, resist demolition to this day. There was massive and rapid expansion again in the early 1920s when the city flooded with refugees following the war and population exchanges

with Turkey, and again in the early post-World War II decades.

Why should the example of Athens be important or interesting at this moment? Because as we have shifted to being predominantly urban rather than rural, “informality” is the dominant trend in cities all over the world. In fact according to the U.N., by 2030, one in three people will live in informal settlements. This does not mean that the world will look like Athens, but that by studying the history of the “informal” in specific geographical and cultural contexts, we can achieve a richer understanding that will help us see both its limitations and potentials. For instance, it is becoming clearer to us that unlike the planned paradigmatic European cities of the nineteenth century which we know so well, as my research on postwar Athens suggests, cities today mostly grow in rapid and very often unplanned ways. Yet we have few “tools” with which to explore this different “chaotic” informal development beyond the stereotypical “favela” images we see repeated again and again.

The Athenian polykatoikia, from oikos = house, dwelling + poly = multiple, i.e. multi-story apartment block, can be such a tool for us today. The most innovative and least understood of the bursts of informal urbanism in the context of 20th century Greece, polykatoikia urbanism emerged in the early post World War II decades in response to the need for domestic space following war and civil war that had destroyed much of the Greek countryside as well as most of the country’s vital infrastructure. A small-scale apartment block, never taller than six or seven stories, it is a version of simplified modern architecture that existed more-or-less before the war, and that has interesting links to both the rural “vernacular” tradition, and to the European avant-guard.

Via the facilitation of a special financial arrangement, in Greek called

antiparochi[2], that favored small scale development without the help of mortgages and banks, the ubiquitous polykatoikia scaled up and multiplied to create a fully-formed modern city. Postwar Athens was built by a multitude of teams of builders and small-scale developers; the success of the polykatoikia enabled the rural migrants who poured into the city to become urban citizens. Even as there was lack of innovation in a formal sense, which meant that the building type and the city it generated was —and is—unloved by architects and other intellectuals, on a level of design, it was not without intelligence. In my analysis I identified a series of practices, ways of managing knowledge, consisting of an aggregate of small gestures, that were dependent on incremental, often marginally legal or even illegal practices particular to this specific historical and geographical context.

These include metis, an ancient sense of resourcefulness as well as economy of means; simplification; addition; repetition; accumulation. Most of all I found a performative element that I believe has to do with how knowledge is transferred in non-literate groups: through memorization and repetition of certain themes with few variations each time. I relate the processes I found at work in postwar Athens to the prevalence of oral rather than textual culture in late 19th and early 20th century Greek society, particularly in literature and in popular theater, that resulted in a specific kind of built improvisation, local to place and time, where certain things or themes stayed the same, and others were improvised and negotiated each time.

The episodic, repetitive, accumulative, structure of oral literature might correspond conceptually to processes of addition, repetition and accumulation, evidenced in postwar urbanism. As in oral literature, elements of the polykatoikia gradually became reduced to a group of “essential ideas” or “fixed expressions”[3] that were then combined as

if to create a simplified pattern rather than a typical professional plan. Standardised, formulaic themes appeared: the reinforced concrete frame, the horizontal flat façade, the flat roof, a pilotis of sorts. I see this not so much about the “vernacular” as it is usually understood by architects, but rather more akin to the age-old processes of song, oral narration and popular art.

Although not democratic in any conventional sense since they also involved small scale speculation and opportunism, these processes can equally or paradoxically be thought of as a form of civics.[4] Invented or developed at a moment of rapid social change, they collectively allowed the built environment to absorb change as well as political instability. Furthermore, due to the aftermath of the Civil War (1946-1949), you could not get a government job if you had a record of belonging to the Left, but you could make a decent living as a builder, and no one cared about your political affiliations. Most of all, postwar Athenian development was instrumental in the transformation of rural migrants to citizens, and in this sense was productively and creatively civic, despite being architecturally uninteresting. The small scale repetitive gestures and processes by the many small builders and developers who created the postwar city, invented or collectively developed a building type that was rich enough and flexible enough to enable the transition from rural to urban, thus making a significant social contribution.

In my current research, I have started to see interesting overlaps between the historical example of Athens and the work of certain architects and designers today[5]. I wish to end this short piece by suggesting that the most interesting and innovative current design practices who see themselves taking an activist role and want to engage with the dynamic of citizenship, are starting to learn from informal practices. Professional designers, architects –and historians and critics– are self-



consciously looking at urban informality and coming up with educated and technically superior processes for many of the challenges we are faced with today. These often embrace low-tech Innovation, resilience, adaptability, all qualities that were there in postwar Athens, but are now updated for the twenty-first century.

In conclusion, I would like to suggest that beyond a one-way relationship with history, we can use the insights gained by studying specific histories of cities that grew informally, not only in Latin America and the Indian subcontinent where our focus has been up to now, but also in places such as Southern Europe and the Middle East, as well as Africa, to produce new, critical re-conceptualizations of how we view the ever-expanding cities of today, in terms of design, planning, and sustainability.

[1] Noo Saro-Wiwa, *Looking for Transwonderland: Travels in Nigeria*, Berkeley: Soft Skull Press, 2012, 10.

[2] The term *antiparochè*, translated as “part-exchange” in English, worked by trading an existing one-family urban home and the land on which it stood, for a *polykatoikia*, with the promise of one or more apartments to be given to the land owner. It favored small-scale developers because there was no need for vast sums of money to change hands. Even though *antiparochè* as a concept is not exclusive to Greece, the particular conditions of the real estate market especially in cities in the first postwar decades, characterized by extensive fragmentation of ownership, unclear titles, no public land registry, high interest rates, and absence of secondary mortgage markets, rendered the scale of application of this concept wholly pervasive and unprecedented at that time. Since everyone profited, the builders, the owners, and the state, in my analysis the *antiparochè* worked to render the *polykatoikia* a mechanism for creating and sharing wealth. It is noteworthy that the *antiparochè* has persisted in Greece to this day.

[3] This phrase is from the work of classical scholar Milman Parry (1902-1935), whose work

on epic poetry and oral literature revolutionized Homeric Studies, as quoted in Walter Ong's *Orality and Literacy: The Technologizing of the Word*, London and New York, Routledge, 1982. Ong writes: "The greatest awakening to the contrast between oral modes of thought and expression and written modes took place not in linguistics, descriptive or cultural, but in literary studies, beginning clearly with the work of Milman Parry on the text of the Iliad and the Odyssey." (6)

[4] I am thinking in particular of the work of sociologist Patrick Geddes (1854-1932) who is also considered a founder of the discipline of Planning. Geddes used the term "civics" in a variety of ways, one of which was a kind of social activism in relation to cities, that I feel is again apt today.

[5] I have been writing about this topic in forthcoming publications; I have also been involved in curating public events that have featured some of this new work, particularly in the Ecogram Conferences at the Graduate School of Architecture, Planning and Preservation at Columbia University, which are all available online at: [www.events.gsapp.org](http://www.events.gsapp.org)

# **Beyond the Public Commonsense in Fawaar Refugee Camp**

**Sandi Hilal and Alessandro Petti**

**Sandi Hilal was born in Bethlehem, Palestine. She is an architect and researcher in trans border policies of daily life at the University of Trieste, also working with the United Nations Relief and Works Agency for Palestinian refugees. Alessandro Petti is a research architect based in Bethlehem and is co-director of the Centre for Architecture Media and Politics at the Bard/Al-Quds University in Abu Dis-Jerusalem. The Decolonizing Architecture Institute (DAi) was founded by Alessandro Petti, Sandi Hilal and Eyal Weizman in 2007.**

In Western political tradition, the public has always been associated with collective interest. The public has been the space where the rights of the citizens have been inscribed and represented. The very idea of the city as a democratic space has been measured by the degree of inclusiveness and values expressed in the public space. Today, however, public spaces throughout the world are being “occupied” by institutional powers obsessed with security, surveillance and control. Defending the public against the massive privatization imposed by the neo-liberal regimes has been the only way to preserve a minimum sense of collectivity and the common good. The ongoing attack on the public has left little room for a critical understanding of the very nature of contemporary public space. In colonial and post-colonial contexts, the public has more clearly shown its ambiguous and controversial nature. Massive expropriations of land and house demolitions have often been legitimized by a presupposed “collective interest”. The public, hostage of state authorities already undermined in their powers by emerging transnational bodies, seems to increasingly operate for the interests of the few. In the name of the public, common spaces that are not mediated by state apparatus have been expropriated and placed under the control of the few.

Traditionally in Palestine there have been several categories of communal land. These lands not only existed as legal categories of communal ownership but also as forms of communal life. The Israeli state has leveled the different categories of communal land into one single category, state land. Manipulating the legal basis of Ottoman Land Law, Israel has nationalized Palestinian land. Today 90% of the

land in Israel is, in fact, state land and the state prohibits ownership transfer[1]. The Israeli appropriation of these territories led to the transformation of communal land into public state territory for the exclusive use of the Israeli Jewish population, entirely excluding Palestinians. This expropriation is evident through the establishment of Israeli settlements, the majority of which are built on what was once communally used land. Consequently, colonization brought on not only material expropriation, but also imposed changes to the forms of communal land use, relegating Palestinian land to private use.

We would like to propose a critical understanding of the contemporary notion of the public by re-imagining the notion of the common. Rather than the term “commons,” more familiar in the Anglo-Saxon tradition, we prefer to use “common” in order to refer to its Latin origin *communi*. The latin *communem* is composed of *com=cum* “together” and *mòinis*, originally meaning “obliged to participate”. This fundamental aspect of the common, a demand for active participation, is also present in the Arabic term *masha*, which refers to communal land equally distributed among farmers. This form of “common land use” was not fully recognized under Ottoman laws – for this reason, *masha* was not acknowledged under a written title in the Ottoman Code – and was dismissed by colonial authorities for its supposed economical inefficiency, yet it surprisingly still exists today in much of the West Bank. Colonial regimes, interested in territorial control, see in *masha* land a collective dimension beyond state control. Consequently, *masha* have been transformed into state land and therefore fall under the control of public land managed by state apparatus. *Masha* is shared land, which was recognized through practice in the Islamic world. It emerged as a combination of Islamic property conceptions and customary practices of communal or tribal land. *Masha* could only

exits if people decided to cultivate the land together. The moment they stop cultivating it, they lose its possession. It is possession through a common use. Thus what appears to be fundamental is that, in order for this category to exist, it must be activated by common uses. Today we may ask if it is possible to reactivate the common cultivation, expanding the meaning of cultivation to other human activities that imply the common taking care of life (cultivation from Latin *colere*=taking care of life).

## **Reimagining the Common**

The Arab Revolts since December 2010 have shown various ways in which the common can be reclaimed and reactivated. In the Arab world, what is defined as public has always been regarded with suspicion; the public often has been associated with repressive political regimes and colonial history. Rarely have people felt fully represented by the public, never really owning it.

During the weeks following the Egyptian revolt that began on January 25, 2011, we observed a public plaza transform into a common space owned by the people themselves. Tahrir Square became the political space where new claims were invented, represented, and translated into political actions. The day after President Hosni Mubarak was forced to step down, protesters began cleaning the space, an act that highlighted the end of a regime and the beginning of a possible new era for the Egyptian people. The space was no longer perceived as public—the space of authority—but rather as the space of the people. Owning the space implied owning the future of the country. Cleaning the square was a gesture of reappropriation, ownership, and care. In fact, this apparently banal act demonstrated a sense of reconstituted community and collective ownership.



The power of people gathering and transforming public space into a constituent common space manifested itself in other places throughout the Arab world. In February 2011, people began assembling around the Pearl Roundabout in Manama, Bahrain, converting the anonymous infrastructure into a political arena. As in Cairo, this roundabout became a constituent assembly capable of undermining the political regime. Consequently, on March 18, local authorities brutally intervened, completely destroying the roundabout. This demonstrates the importance of a physical space where people can assemble and assert their rights—without it, the virtual space of social networks is ineffective.

The ambiguous nature of contemporary public space can also be observed in Western society. During the summer of 2011, a group of protesters tried in vain to assemble and camp out in several public spaces of New York. Paradoxically, their attempts were limited by regulations and curfews imposed on these spaces. Only on September 17 were the protesters able to set up camp in Zuccotti Park, a privately owned public space. This crack between the public and private perhaps represents all that remains of a shared collective space, what we call a common space, nether public nor private.

## **The Refugee Camp as Site of Political Invention**

Refugee camps are definitely sites where the categories of public and private no longer make sense. Within camps, neither public nor private property exists. After sixty-four years, Palestinian refugees still cannot legally own their houses (though in practice they do) and the camp is a space carved from the territorial state. Though states and non-governmental organizations are actively participating in conceiving and managing camps, we are still struggling to fully comprehend how the camp form has contaminated and radically transformed the very

idea of the city as an organized and functional political community. Thus, the birth of the camp calls into question the very idea of the city as a democratic space. If the political representation of a citizen is to be found in public space, in the camp we find its inverse: here, a citizen is stripped of his or her political rights. In this sense, the camp represents a sort of anti-city, but also a potential counter-site in which a new form of urbanism is emerging beyond the idea of the nation-state.

Despite the fact that the camp form has been used as an instrument for regulating the refugees' "excess of the political dimension", the camp, as an exceptional space, is also a site for political practices yet to come. Similarly, although more recent scholarly work highlights the refugee figure as a central critical category of our present political organizations, these very conceptualizations have reduced the refugee to a passive subject, created by the exercise of power and lacking an independent and autonomous political subjectivity.

By investigating emerging social and political practices in West Bank refugee camps, we would like to challenge the idea of refugees as passive subjects[2]. We aim to invert the conceptualization that sees refugees' everyday practices as, at best, a reaction or resistance to a sovereign power. We argue that the everyday political dimension of refugees comes first, followed by the military, control and disciplinary apparatus built by authorities in order to repress and expropriate what is produced or lived by refugees. These practices in Palestinian West Bank refugee camps are emerging under specific and historical conditions.

The Palestinian refugee camps, which first appeared after the 1948 Nakba, were conceived as emergency assistance to the massive expulsion, operated by Jewish militias, of almost the entire Palestinian population of that time. The first pictures of these camps, in Jordan,

Lebanon, Syria, West Bank and Gaza, showed small villages made of tents, arranged according to the same regular grids used for military encampments.

As the years passed, and no political solution was found for the plight of the displaced Palestinians, tents were substituted with shelters in an attempt to respond to the growing needs of the camp population without undermining the temporary condition of the camp, and therefore undermining the right to return. However, with a growing population, the condition in the camps worsened. The terrible situation in which Palestinian refugees were forced to live was used by the Palestinian political leadership to pressure Israel and the international community in terms of the urgency of the refugees' right to return. The precariousness and temporariness of the camp structure was not simply a technical problem, but also the material-symbolic embodiment of the principle that its inhabitants be allowed to return as soon as possible to their place of origin.

Most refugees' stories hinging on the process of replacing tents with houses begin with the description of an extremely rigorous winter that obliged them to think about substituting their tents with concrete walls. After erecting the four walls, they realized they were constructing something tangible: they were building a camp. Hence, the roof, the last architectural element defining "a home", gained importance. The refugees recognized that the process of building the roof introduced the fear of tawtin (settling down), incorporating the camp into the city and transforming refugees into citizens of host countries.

The state of Israel denies the internationally recognized right of return of Palestinian refugees. Consequently, Palestinian refugee camps have become magnetic force fields in which competing and unequally

matched political entities – the host states, international governmental and non-governmental agencies, and the refugees themselves – attempt to exercise influence. Every single banal act, from building a roof to opening a new street, becomes a political statement concerning the right of return. In the camp, there is nothing that can be considered without political implications.

However, during the Nineties and within the framework of the “peace process”, which subsequently led to the creation of an interim Palestinian Authority, the right of return was increasingly marginalized under the pressure of the unwillingness of successive Israeli governments to acknowledge Israel’s responsibility in the Palestinian Nakba. At the same time, the withdrawal of the Israeli army from most Palestinian urban areas created the conditions for some West Bank camps to become relatively autonomous and independent socio-political communities.

For decades, the political discourse around the right of return, and the associated imperative to stagnate living conditions, imposed by different political actors in order to reaffirm the camp’s ephemerality, forced refugees to live in terrible conditions. From 1948-49 to the present, official political discourse has sought to prohibit any development in, or formalization of, the refugee camps. The fear was that any transformation of the camps would bring about an integration of the refugee community with the local environment and thus the political motivation for the right to return would be lost. This discourse was also based on the assumption that as long as refugees were living in appalling conditions, their suffering would pressure the international community to enact their right to return. Thus, any improvement to camp infrastructure and housing was seen as jeopardizing the right to

return.

Today this imperative is being reconsidered: the latest urban transformation have demonstrated that improved living conditions in refugee camps do not necessarily conflict with the right to return. No longer a simple recipient of humanitarian intervention, the refugee is seen as an active political subject, through his or her participation in the development of autonomous governance for the camp. Today, refugees are re-inventing social and political practices that improve their everyday life; the refugee camp has been transformed from a marginalized holding area to an interconnected center of social and political life. It is however crucial that this radical transformation has not normalized the political condition of being exiled.

### **A Common Space in Fawaar Refugee Camp**

More than sixty years after the ‘roof debate’, or rather, whether building a roof implies blurring the distinction between the camp and the rest of the city and, consequently, normalizing its exceptional political condition –and its embodiment of the right of return– a somewhat similar discussion took place in the Fawwar refugee camp in the south West Bank. However, this time the discussion did not revolve around the replacement of tents with walls or the construction of a roof, but rather around the meaning of a public space within the camp.

This discussion was initiated by a UNRWA Camp Improvement Programme[3] proposal to create a common space in the camp. The team organized numerous assemblies with the camp community in order to discuss the implications and possibilities of such a transformation. In the beginning, the very idea of creating a “public square” was outright suspicious for the people of Fawwar. If the camp

is the testimony of over sixty years of exile, would the “public square” signify that refugees were giving up the right of return and accepting their life in the camp? Would the “public square” create a distance from the classic image of a camp constituted of miserable living condition? Or, on the contrary, would a “public square” create a physical space where public issues can be more openly represented and discussed?

Over five years have passed since the UNRWA camp improvement team based in Bethlehem, partook in numerous assemblies with the camp community. What follow is a brief account of problems and opportunities arisen during the meetings. Among the participants were Abu Rami and Abu Rabiah, considered to be the living memory of the evolution and transformation of the camp. They are among those who saw the tents of Fawwar replaced by concrete houses and were now witnessing the inhabitants beginning to consider the transformation of the spaces between the houses as well. The decision to do so evidently was not so easy. Abu Rabih’s preoccupations concerning the very idea of the “public square” and its possible social implications were expressed as follows:

“If you think that this plaza would be open to anyone, whoever he is, to come and bring his chair and sit, or to have fun or to stay during the night, you are absolutely on the wrong track. This is unacceptable in Fawwar camp. Mixing between men and women would be unacceptable, especially mixing between young ladies and young men”

These words were followed by those of another elderly man who described the way the plaza should look:

“This plaza should be organized. We should have a guard on duty at all times because our kids will not be able to take care of it without

supervision. If this plaza were to be open for people to come and go as they pleased, it would never work. People would steal and destroy everything. They would rip up the pavement, they would take the ironwork, and nothing would stay put. The plaza needs to be organized and official. It has to have a door, it has to have a lock, it has to have a key and it has to have a guard”

These statements touch upon the limits of notions of private, public and common that are nearly impossible to clearly define in the realm of the camp. What is the public in a temporary camp? After all, what is claimed to be private is not really private since homes are not registered as private property. Likewise, what is claimed as public is not really public either. The host government does not have sovereignty in camps and the UNRWA mandate is to provide services to the camp inhabitants, not to administer its population. Therefore, the public in camps does not have a political body responsible for the collective interest.

Different generations perceive the public in different ways: the younger generation see the public as an opportunity for expanding their social interaction beyond the private space of their congested and family controlled houses. The “public square” being discussed has become the physical site for the young generation to negotiate their rights with the older generation, the place to discuss what is right and what is wrong, what is possible and what is not. A young man reacted to the suggestion made by the elderly to close in and lock up the public space as follows:

“I don’t think that the idea of enclosing the plaza is a very good one. I am against keys, I am against locks, I am against doors, I am against the idea that this plaza would open and close at certain hours. How



could we feel that we own this place? I am not against having a guard to take care of this place, but no keys, no locks, no closing time. Because if we use it this way, we will cancel out any idea of a common plaza and it will function like a private space.”

A more traditionalist-oriented elderly man would interpret the public space as posing the risk of “losing control” of women who are relegated to the home and family. Meanwhile, some women would interpret the new public space as an extension of their domestic space, therefore not open to all members of the camp, but only to their neighbors. This is the way one woman described the plaza:

“There is no problem with building a plaza for our neighborhood. But it has to be only for the people of our neighborhood and not for all the people of the camp. Casual passersby cannot use this plaza. Young males that have nothing to do can’t just come and hang out in our plaza. Yes for the neighborhood, no for the all camp”.

Younger members of the community supported the position of the women. One young man claimed:

“This plaza will serve this neighborhood very well; here the kids will play, here we will have our important occasions, here we will have our weddings and funerals. It is the only open space in this big neighborhood: how come you think that we will not take care of it? This plaza will be a treasure for all of us.”

In an attempt to understand the difference between a public square for a neighborhood and a public square destined to an entire camp, the question was posed as to how women imagined they might use the space. Would they ever come to the plaza and have morning coffee

together in the sunshine? The answer, though expressed by one, was fully agreed upon by most of the others:

“What woman would leave her home, her kids, and come to drink coffee in a plaza? It would be a shame for a woman to leave her home without a proper reason. Do you want us all to come here in the plaza and have coffee and tea? Do you want them to write about us in Al Ah’hiram newspaper? We already cannot deal with our husbands; never mind us going out and having tea and coffee in the plaza! “

After several meetings and discussions, we began designing the form of this “public square”. The essential element emerging during the discussions was the definition of the “borders” of the space, interpreted as a home without a roof, made of four walls clearly demarcating its limits. In this way, passersby should feel that entering the plaza was like entering someone’s house – entailing the same sense of respect and responsibility – rather than a space that does not belong to anyone. Each household located in front of the plaza decided the height of the walls and the permeability. The result is a variegated limit, sensitive to the different desires of privacy or publicness of its inhabitants. This also creates pockets of private life between the walls of the homes, as one woman pointed out:

“Thank God the wall in front of our home is the highest of them all. It gave my husband and me the chance to create a private terrace in front of our home where we can sit outside without being seen. You didn’t just create the plaza, but you also created very small plazas in front of all of the homes that flank it! Now, we can be outside in the sunshine and still enjoy some privacy. If the wall were not so high, my husband would not have let me come out and get some sun and have coffee outside while the youth are playing nearby. Also, for me, it’s not at all a closed

plaza – why are we speaking about closed plazas? It has entrances and exits. We can easily come and go.”

Paradoxically, the reactivation of a shared place, so problematized in the beginning, was then considered connected to old communal camp life. In the words of Imad, a man in his forties:

“The habit of sitting out of doors is not new for us in Fawwar. On the contrary, it is an old tradition that all of us used to do when I was a kid: we would sit outside our small homes and have a bit of fresh air. I think that the main reason that this habit faded is the crowdedness of the camp. As people expanded their homes, the streets became narrower and narrower, until they became very tight alleys. If I were to take a chair outside and sit in the alley, I would block the entire street. This is why I think we lost this tradition, and people became unused to taking leisure time and having activities out of doors. For me, the main reason is therefore that we didn’t have any adequate space where we could sit without feeling that we are basically sitting in the streets and blocking traffic. I think that the plaza is giving us the possibility to recreate that culture of using outside spaces, especially because, if you look at us as a society, we are a society where the relationships between neighbors are very close.”

Built as a house without a roof, the “public square” embodies the fertile ambiguity between public and private space within the camps. Conceived as an enclosed space protected by four walls, it is dedicated to the surrounding neighborhood. Through direct participation from the refugee community, the space has already been put to use even before its completion, inundated with a range of new activities.[4]

[1] Basic Law: Israel Lands, July 25, 1960

[2] [www.campusincamps.ps](http://www.campusincamps.ps)

[3] See [www.unrwa.org/etemplate.php?id=31](http://www.unrwa.org/etemplate.php?id=31)

[4] see <http://www.campusincamps.ps/en>

# **LightBridge: Embracing the Messiness, Exposing the Analytics**

Susanne Seitinger

Susanne Seitinger is City Innovations Manager at Philips Color Kinetics. Different from many other infrastructures like the electrical grid or data networks, lighting systems have a noticeable impact on what spaces convey to people on an informational and a visceral level. Susanne Seitinger created LightBridge with Pol Pla (MIT Media Lab) for the MIT 150th Anniversary Festival of Art Science and Technology (FAST).

Different from many other infrastructures like the electrical grid or data networks, lighting systems have a noticeable impact on what spaces convey to people on an informational and a visceral level. With the proliferation of LED-based functional illumination, ambient effect lighting and display systems, more and more points of light can be recruited into responsive networks that visibly transform people's experience of the city. These systems' inherent programmability enables links between data collected about the city's metabolism like traffic, weather, or people's movements to drive different settings for lighting behaviours. The more real-time data is used to initiate changes the tighter the feedback loops between urban data and public spaces becomes. A simple example of negative feedback in a real-time traffic management system might be a sudden red light at an intersection. Other lighting effects might be more subtle and ambient like the weather vanes on the tops of skyscrapers. The less defined and more open-ended the relationship between collected data and corresponding lighting behaviour the more other forces play a role. Economic, socio-political and cultural processes become central to regulating the meaning of a responsive or interactive system. This essay reports some reflections from the field on one attempt — LightBridge — to link people's movement patterns to a direct-view installation that blurs the boundary between media facade and lighting infrastructure.

## **The Characteristics of Urban Lighting Infrastructure**

Light is an enabler. It allows people to use city environments at night

which would otherwise be inaccessible. Without the sun or the moon, citizens are dependent on artificial sources to extend human activity into the night. Geographers like Melbin (1987) aptly characterize this fact in territorial terms as a kind of “colonization”. Insofar as light is regulated according to data collected about the city, public spaces become a function of those data via our lighting infrastructures.

However, the colonisation of night time is neither even nor is the distribution of illumination equal across the entire city (Otter 2008). The regions of better (or worse) lit spaces reflect the forces at work in a particular city that find their outward expression in particular illumination choices. Interestingly, these night time interventions are also spilling into daytime as an increasing number of systems remain switched on 24-hours a day. (Amengaud 2008)

Whether by day or by night then, the distribution of light impacts a person’s ability to generate a reading of the city at the individual scale and at the global scale. In transforming lighting conditions, the impact of any changes on the “image of the city” (Lynch 1960, 1972) should play a central role. Not only perceptual factors (Lam 1965, Schielke 2005), but also cultural and social ones can influence how any changes are choreographed.

## **Building a Responsive Infrastructure**

When dynamic effects are clearly linked to people’s presence or absence the role of lighting infrastructure also changes. Rather than fading into the background, dynamic lighting continually impacts the perceptual affordances of people’s surroundings. These cycles of change may be linked to real-time data which by itself does not deliver the qualitative settings for triggering particular lighting conditions.



The many dimensions of illumination — physiological, emotional, cultural and socio-political — require city builders to be particularly sensitive and strategic in their implementation of new infrastructures.

Technical and popular literature have promulgated the notion of an ever-present infrastructure of sensing and monitoring for controls for decades. For urban spaces, this vision has been translated into a mapping of real-time data flows that reflect the metabolism of the city. In building responsive infrastructures the question arises how these data can be used to control systems to create fine-grained urban design interventions.

If someone's presence on a city street is detected we can readily imagine a simple control loop that triggers three street-lights ahead of her. As soon as more people are in the street with crisscrossing paths the question of which light to turn on when becomes more complex. The degree and rate of change in the infrastructure needs to be linked to the impact lighting has on the perceptual awareness for the city. Exploring rates of change is essential both to exploiting the potential of programmable systems and to creating comfortable, safe environments for citizens. Interactive systems present even greater challenges because there are so many possibilities for structuring the relationship between users and their environment.

## **LightBridge**

By combining sensors and programmable lighting, LightBridge illustrates the potential for user-driven urban screens and new configurations of low-resolution displays. An urban screen differs fundamentally from its small counterparts on our desktops in that its sheer size, unbounded nature and visual impact transform the

city skyline. Because of its scale, LightBridge is considered a lighting infrastructure in this discussion to break out of the dominant image of urban illumination as light poles.

In celebration of the MIT 150th anniversary, LightBridge animated the railing of the Harvard Bridge. The bridge between the cities of Boston and Cambridge presents a symbolic link between MIT's first campus in the Back Bay (1861) and the riverfront campus on the Charles (1916). As a result, the railing on the eastern side of the bridge provided the ideal location for a dynamic display that reflects MIT's historical and contemporary connections between people and places on both sides of the river. LightBridge consisted of a 9,600-pixel display activated by 400 proximity sensors that are triggered by the movement and activities of viewers in the area.

The interactive and responsive goals for LightBridge were two-fold. On the one hand we imagined a simple presence on the bridge. An element in the environment that signals a reflection of the city's activity with the urbanistic goal of enlivening the Charles River waterfront. On the other hand we wanted to provide pedestrians with an experience on their walks back and forth between Cambridge and Boston. These goals led to our design criteria which included a 360-degree visible display, a focus on pedestrians (as opposed to passing vehicles or other data) and a low-resolution display with texture.

## **Reflections**

Collecting the appropriate data at the right resolution to support interactive installations presents a challenge. LightBridge required an additional network of 400 proximity sensors approximately every four

feet to glean the patterns of motion across the bridge. When working at a large scale outdoors the deployment of these additional sensors is no trivial matter. The ever-recurring discussion of city governments around repair and maintenance of public infrastructures is an essential element of any responsive and interactive system. Almost all media facades promise open access and ease of programmability, but those capabilities are rarely exploited or supported over a long period of time. Simple maintenance questions like water ingress and power are challenging enough. Acknowledging these barriers, however, does not detract from the magic of media facades or the aspiration for transformable responsive environments. In fact, confronting the material difficulties involved in creating installations ground the discussions of ubiquitous computing and responsive environments.

LightBridge was centrally controlled in that the aggregated sensor data were used to derive lighting effects for the entire bridge. We could have also subdivided the bridge into segments and only enabled localized interactions or some combination of the two approaches. Changes in lighting patterns were driven by aesthetic and interaction design principles (as well as some concerns for roadway safety keeping the transitions on the bridge relatively gentle). Different factors can be used as criteria for change in an infrastructure, but these criteria — like the infrastructures — may not be readily available (Amengaud 2008).

How much and whether these rules are exposed is a fundamental question the operators of infrastructures must consider. In an artistic intervention the rules are linked to an artist's vision. Not all lighting installations are linked to individual interaction they need to be more generally controlled based on the season, time of day and of course

real-time data. Predictive models based upon these collected data will play an ever increasing role in controlling more complex assemblages of infrastructure.

With most outdoor lighting infrastructures, safety considerations and energy management goals dominate the conversation. The more fine-grained the potential for control and responsiveness becomes, however, the more context and use play a role. Safety can no longer be equated with the mere presence or absence of light. Rather questions like rate of change as described above become central. The more LED lighting coupled with computer-based, real-time controls enable fine-grained transformations of the visual environment the more these relationships must be designed and choreographed.

People are always in a dialogue with their surroundings only nowadays their influence extends to the dynamic and otherwise hidden aspects of the environment. LightBridge illustrates just how messy and piecemeal the trend towards responsiveness can be in the real world. We are far from a holistically responsive lighting environment outdoors at night. This article seeks to recall the challenges in creating dynamic environments that contribute to cityscapes. Simple problems such as usable and reliable sensor data or fresh content to maintain relevance and interest. Through the messiness and the grittiness involved in building infrastructures in real places these issues must be solved creating a wealth of knowledge from the field to be shared and exchanged across places and among different communities. All stakeholders involved in city-building thus become engaged in a debate around appropriate dynamic lighting that should allow for new and unexpected public spaces to emerge.

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# Contrapuntal Thinking

Matthew Skjonsberg

**Matthew Skjonsberg is Architect at collab architecture, Laboratory Basel of the École Polytechnique Fédérale de Lausanne. Counterpoint composition is based on the cantus firmus, a fragment of existing music taken from elsewhere – providing a holistic conceptual model for designing urban and rural systems in relation to their regional context, enabling ecological, social and economic equity.**

Music is among the earliest and most enduring of architectural analogies. Pythagoras' observations of harmonic resonance led him to speculate about ideal architectural proportions, an initiative furthered by Vitruvius, and from the Middle Ages until the 17th century music was one of the four mathematical disciplines of the quadrivium along with geometry, arithmetic and astronomy. The term contrapunctus, from the Latin punctus contra punctum ('point against point'), initially appeared around 1300. In 1412 the Italian theorist Prosdocimo de Beldomandi wrote that rather than dealing with note against note individually, the composer was actually concerned with the problem of cantus contra cantum – one complete melody against another. This required a new integration of vertical (harmonic) and horizontal (melodic) concepts, which eventually led to the creation of the tempered scale (de Beldomandi 1984). It is interesting that just one year later, in 1413, the architect Filippo Brunelleschi established the geometric method of perspective drawing. Indeed, both counterpoint composition and perspective drawing illustrate the emergence of multi-dimensional thinking – the composer dealing with multiple voices in time in a manner very similar to the architect's newly contextual conception of buildings within a multi-layered landscape. It is as though both architect and composer sought to find a vantage point from which to subject their discipline to the laws of proportion, and to imbue it with a new awareness of the dimensionality of time and space. Both disciplinary innovations involved hard-won insights into proportional physical principles, and both resulted in strict rule-



based design methods (Fux 1971). In perspective drawing this was a system of proportions on paper that accurately related to actual sizes and distances, while counterpoint composition addressed resonant harmonic phenomena and the means of engendering it – namely the simultaneous interactions of voices and instruments.

One of the most interesting rules to have developed in counterpoint, insofar as it provides a direct connection back to contemporary architectural discourse, is the use of the *cantus firmus* as the basis for composition. A *cantus firmus* (fixed song) is an existing melody taken from elsewhere and used as the basis for the composition, with each additional voice composed firstly in harmonic relation to it, and then in relation to one another. It becomes the site of interpretation, the *terra firma* of the composition, as it were, making the entire compositional procedure explicitly contextual and integrative.

Contemporary recognition of the importance of context is again broadening the conceptual scope of architecture. To harness urban acceleration and to mitigate ecological degradation, empirical metrics are increasingly relied upon to provide a framework for multivalent design, and to inform computational (or parametric) design methods. Music is an activity involving the patterning, reordering and displacement of energy through sound (the result of periodic pressure waves propagated through the air), and polyphonic music like counterpoint is only conceivable when that order is based on metrics derived from physical principles of harmonic resonance: the tempered scale. Architecture, too, involves the restructuring of existing materials, an activity Cicero described as the creation of civilization's urban/rural second nature (Cicero 2008) – but while we might expect contemporary innovations like high-resolution satellite imagery and

data rich Geographic Information Systems (GIS) to provide a perspective from which to finally view our architectural efforts holistically and in context, architects have yet to establish multivalent, integrative metrics comparable to the tempered scale.

Applying the counterpoint analogy to architectural methods, existing environmental conditions can be seen as the *cantus firmus* upon which two contrapuntal ‘voices’ – the dual networks of rural and urban infrastructure – are established. Seeing urban and rural as polar phases of second nature broadly coincides with the oscillating nature of periodicity, the energetic principle underlying all phenomena – from subatomic behaviour, to respiration, to the circuits of the stars. Whether addressing the polarities of economic inequity, of urban and rural regions, or of climate change induced sea-level rise and desertification, contrapuntal thinking can provide a conceptual framework for architecture yielding insights into periodic principles, and informing the integrative design of more equitable systems.

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# **Mobile Sound**

Frauke Behrendt

**Frauke Behrendt is Senior Lecturer in Media Studies at University of Brighton. Behrendt examines how the sound of a smartphone app can help us to understand how we experience physical and digital urban spaces.**

As a participant of Theatrum Mundi, my work shows how practitioners and theorists working in sound and in urbanism might collaborate, and how re-thinking the boundaries between sound and urban space opens up an arena not only for debate but also for intervention – in physical, digital, sonic and social urban spaces at once.

Our physical context determines increasingly the type of information we receive on our laptops (for example Google results) and on our mobile phones (apps for local weather reports, geo-located marketing, etc.) We inhabit physical and digital architectures at once, what some call net locality. I believe that an auditory approach is fruitful for understanding these mobile and locative media experiences.

The National Mall is an iPhone app (released in 2011 by musicians Bluebrain) where users listen to specific music depending on their location. This particular app has been designed for a specific location that also gives the app its name – The National Mall, a park in Washington DC. The musicians have attached each of the songs and sounds they composed to a specific area in the park. When you walk around the park with the app running, and headphones on, or using the speakers on your phone, you will experience the soundscape curated for this particular park, remixing it with the choice of your path.

A Washington post article describes the experience as follows:

‘If you stay put, the song remains the same—music will loop in

intervals that last two to eight minutes, depending on your position. The point is to keep moving. Approach the Capitol dome, and you'll hear an eerie drone. Climb the steps of the Lincoln Memorial, and its twinkling harps and chiming bells. As you wander from zone to zone, ambient washes dovetail into trip-hop beats and back again. The music follows you without interruption, the way a soundtrack follows a protagonist through a movie or a video game. When you leave the Mall, the sound evaporates into silence'.

Despite all the rhetoric of how 'new' a locative album is – artists, musicians and designers have engaged in the area of locative and mobile sound for more than a decade with their practices rooted in a rich history of sound art, urban art, and interactive media art. Now these developments are moving into mainstream culture – app culture. Based on an extensive review of hundreds of examples, my taxonomy of mobile sound art, under four categories – 'placed sounds', 'sound platforms', 'sonifying mobility' and 'musical instruments' – explores the relationship between mobile devices, sound, urban context, and the listener /user.

In a recent article I argue that The National Mall:

'Can, then, be understood as an example of the locative/ mobile media category 'placed sounds', where the distribution of sound in space is pre-curated, and users create their own version or remix of the service by choosing their path through the sounds. The sounds and their locations are chosen by the designers of the application and the participants experience – or co-create – their own version or remix of the piece, depending on their path and the time spent with the service. Movement – often walking – acts as remixing. In locative media, all sorts of media are distributed in space – in 'placed sound'

the main or entire focus is on sound. Although many set-ups are possible, most work with GPS to locate sounds in space’.

In relation to The National Mall app, the body of the listener could be likened to the needle of a record player, each path in the park the groove of a record, the route of the listener then, becomes a remix – the pace of walking, the choice of path, the overall time spent listening, make up a personalised experience of this geo-located album. This illustrates how our media experiences become increasingly amplified – from a record into a park, from computer screen to city, for example.

In my recent journal article on this topic I argue ‘the visual focus in the media world often implies a distant observer – this does not work for sound and locative media as these rely on immersion, not distance. In locative media, users are immersed in sound and media while at the same time they are busy navigating their urban environment and experiencing their surroundings’.

‘Sound places us at the centre, and this is reinforced when we listen with headphones, surrounded by sound, embedded in media experience. The spatial qualities of sound explain how sonic media immersion operates differently to visual and screen-focused interactions with locative media. Understanding sonic media immersion then allows us to place the locative media experience of users centre stage, focusing on their situated experience. This situated experience is framed by the various contexts locative media are used in, including the social, physical, media and sound context, and our embodied interactions with these. We are remixing The National Mall and other locative sound apps by walking – an embodied, spatialised and temporal way of interacting with media.

While the role of walking is often overlooked in screen-focused analysis of locative media, a sound-focused analysis allows us to pay close attention to the way walking operates in engaging with them’.

My focus on the perception of sound highlights ‘how crucial the temporal dimension of locative media experience is, adding to the common focus on ‘location’ in analysing locative media. This focus on the temporal dimension plays out in multiple ways, as it is not only the sound of the app that unfolds over time, but also the walking of the participants. A focus on sound highlights how problematic it is to reduce locative media experiences to a point or line on a map, a link, or a database entry’. An auditory approach to analysing mobile media experience allows us to understand how locative media interactions are always immersive while unfolding over time.

Apps such as The National Mall are also highly problematic in terms of who gets to experience them (e.g. iPhone owners only) and how they organise the social and public space – what I call ‘the sound of exclusion’ – See The Sound of Locative Media for a more detailed analysis.

Theatrum Mundi is an arena to further develop these debates around sound and urbanism, and to consider interventions into urban spaces – interventions that engage with the various layers of physical, digital, sonic and social spaces that make up contemporary urban space.

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# **Performativity in the Public Realm**

Matthias Sperling

**Matthias Sperling is Dancer and Choreographer at Dance4.  
Sperling discusses the self as mobile and porous in  
performativity in the public realm.**

The bridge that seems apparent between the *Theatrum Mundi* discussion and my current work is my particular interest in embodying an understanding of the boundaries of the self as mobile and porous rather than fixed, with the movement of those boundaries emerging from a constant process of negotiation and exchange with others. Extending from my own questions about how such movement can become the visible content of choreography, this discussion prompts a curiosity about how the organisation of the street or the cultural centre might shift when conceived as spaces for exercising the mobility and porosity of the self.

As a result of this area of interest, I am increasingly working on creating choreographic frameworks for noticing the richly complex relationships at play within even the simplest interactions. Most relevant, perhaps, is my recent installation performance *WalkingPiece*, in which a large group of volunteer performers created a single-file loop circumnavigating the interior and exterior spaces of Siobhan Davies Studios, along which route I mapped performative tasks playfully relating the performers' own awareness with the ambulatory audience and the architectural space. I would enjoy considering *Walking Piece* as a starting point for potential performative interventions in other spaces relevant to this discussion. A further question I would be interested to find a forum for pursuing early on is: Given the project of bringing a dramaturgical approach to the organisation of contemporary street life, what do we mean by dramaturgy? According to one prominent dance dramaturge:

“Dramaturgy is always concerned with the conversion of feeling into knowledge, and vice versa. Dramaturgy is the twilight zone between

learning to deal with complexity. This management of complexity demands an investment from all the senses, and, more especially, a firm trust in the path of intuition”, M. Van Kerkhoven

Could this kind of description of a dramaturge’s mode of engagement in a creative process usefully inform an engagement with the street? The Turbine Hall commission by Tino Sehgal offers many parallels to this discussion of performativity in the public realm and seems a significant resource to draw on, link with, or distinguish from.

# Ways of Hearing

Andrew Todd

**Andrew Todd is Architect at Studio Andrew Todd. Very active in building culture venues, Andrew Todd notably worked with Peter Brook on writing the book *The Open Circle: Peter Brook's Theatre Environments* (Faber & Faber, 2003). This Paris-based architect takes a critical look on the treatment of acoustics.**

I am not an acoustic specialist and I have no technical knowledge of the subject. I do, however, possess a very sophisticated piece of equipment – a pair of ears – which tell me, even before my eyes have registered a space, how big it is (including parts behind or above me), what it is made of in terms of mass and texture and how open it is to its context. I have dedicated most of my life as an architect to the question of spaces for performance; I am also a musician.

Along the way I have confronted many self-declared sound specialists, and I have noticed that we, as a profession, tend to lend our ears to them, to capitulate to their superior knowledge, to such an extent that we have forgotten how to talk and think about sound for ourselves.

The aim of this article is to suggest a range of approaches towards recovering and opening our ears. The situation I am describing is not anodyne in its implications. Over the last 10 years, more than 1.5 billion euros have been spent on the Rolls-Royce of sound space, namely the circa 2,000-seat symphonic concert hall, and – in nearly every case – one hears the architects and clients talking of a search for perfection in acoustics as being the driving force of the design. I am immediately suspicious when this “perfection” starts to become orthodoxy. If one looks at the very similar halls (either built or being built) in Rome (Parco della musica, 2002), Los Angeles (Walt Disney Concert Hall 2003), Copenhagen (Koncerthuset, 2009), Hamburg (Elbphilharmonie, opening planned for 2014) and Paris (Philharmonie de Paris, delivery planned for 2014), all by big-name architects, one could think that musical history has ended and the answer to all

problems has been found, sitting on the edge of the former Berlin Wall, built shortly before it, to be precise. Hans Scharoun and Lothar Cremer's Philharmonie represents a dangerously appealing cocktail of mould-breaking technicalchutzpah and extremely bold spatial design; it is a seductive model for any contemporary architect. Added to this, it houses the greatest orchestra in the world, and therefore can't help sounding good.

The Berlin club (as we may call it) is all the more elite for being (in the case of four of the five halls cited above) the work principally of one acoustician, Yasuhisa Toyota. All of the architects involved are distinctive and highly intelligent, but have chosen to wriggle within the same very tight straight-jacket. The club rules do not permit open debate and discussion: the vast amounts of money in play generate a kind of omerta; no-one dares speak openly – although musicians I know all have very precise and sharp off-the-record opinions. Spaces for sound generate silence rather than conversation and exchange; lessons are not expressed and therefore not learned.

Even among the priestly caste of professional acousticians there is no consensus: scratch the surface and you will find muttered dissent about the "vineyard" hall, which, despite its merits of openness, density and proximity for the audience, is often felt to favour a certain clarity of sound, resembling high definition, studio-style recording to which our ears have become culturally accustomed. It is worth stating that our ways of hearing (to recoin a phrase of John Berger) are not stable, and have degraded from the warmth and richness of vinyl to the compressed, isolated experience of an MP3 on earplug speakers. The vineyard form is also – by its nature – rather quiet and unbalanced, with the audience set behind the orchestra hearing much less of the

brass and hardly any of the piano (and lots of the percussion...). It is fine for dynamic, detailed sounds such as those of Stravinsky, but can be cold and impersonal for Mahler, Beethoven and Mozart.

We should remember that the latter two composed for “found space” auditoriums in palaces and for small theatres a fraction of the size of Berlin. The acoustics they generated would have been far more lush and enveloping than the dry halls advanced as exemplary today, and closer to another (currently unfashionable) paradigm, the incredibly rich and warm sound of the Vienna Musikverein.

I have spent a thrilling evening within reach of the double basses in Berlin, and a transcendent one in Los Angeles (Keith Jarrett solo, with an absolutely electric atmosphere, decidedly an outcome of the auditorium shape). I am not debunking the Berlin form, but suggesting that our failure to hear it correctly can be a costly one; musical history is immensely rich and varied, and we should expect to be able to hear it in a variety of halls, particularly smaller ones. This problem is extended when we consider that the symphonic form is not the only program offered here: these halls serve up to 30% of the time for amplified music (mostly middle-aged rock and jazz), which rarely sounds good (I have heard Roy Haynes’ cymbals echo around a famous hall, and Keith Jarrett’s trio unbalanced, whereas they sounded perfect and close in an open-air Roman theatre – apparently his favourite venue). Moreover, when artists move, express and engage with the audience, it is hard to do this through their backs, so plenty of people lose out in vineyard auditoriums (I hope very much that the costly metamorphoses proposed for Jean Nouvel and Brigitte Métra’s Paris hall will overcome this successfully).

The quest for perfection often entails missing the point in other ways. Jazz music has thrived – has written its history, in fact – in a collection of



imperfect small-size venues, where background noise, poor ventilation and improbable levels of audience density might be thought to be antithetical, uncondusive to good music. Open your ears to musicians and a different picture emerges: a great European pianist, showing me around the Rome hall prior to a concert, complained that it drained him of energy, feeling like an airport: “I play best”, he said, “when I am in a tiny club and the people are close enough to touch me, I can feel their breath.” A supreme American pianist once complained to me that a brand-new hall, while apparently having great acoustics, had an icy visual atmosphere which he could not equate with the sound; he felt off-kilter and played badly. Jazz at Lincoln Center in New York – the music’s grown-up, Sunday-best “proper” venue – feels like a tomb or museum rather than a dirty but fertile garden where sounds can grow. There is another fertility question engaged by the search for perfection: our multi-billion euro concert halls are full of people in their sixties, unable to reproduce into a younger audience. Who will be filling these vast halls in 20 years?

What can we do about this? I suggest we talk openly, and listen. Theatrum Mundi’s aim is to do exactly this, as heterogeneously as possible, and thereby change the paradigms inquiry is into sound; we create collisions between people who control traffic noise as well as composers, performers, political activists and architects. Two of our fellows – composer/producer Brian Eno and tenor Ian Bostridge – might never meet, other than to exchange pleasantries. With us they are engaging in dialogue about their respective – and, at times, surprisingly similar – sound universes, and they have contributed the thoughts included here, which can be a point of departure.

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# **Sensuous Society**

Gry Worre Hallberg

**Gry Worre Hallberg operates in the intersection of performance art, research and future studies, recently crystalized in the project In100Y facilitated by House of Futures and funded by the VELUX foundation.**

There is an overarching issue that I continuously associate to *Theatrum Mundi*. The root of it is the idea that we are moving toward what I call a sensuous society. In this society the general mode of being is defined by the aesthetic dimension, that has exactly the sensuous experience at its core (according to Baumgarten and the aesthetic philosophy following him). That means that the current economic rationality that dominates all spheres of societies today will be replaced. So, it is a very radical idea. But the basic principles of societies have changed several times. As Joseph Campbell points out, one can tell which dimension has dominated at a given time by looking at the tallest building in the city. Up until the Middle Ages – The church (and the basic premises of the religious dimension: to transcend, a relation to a god/the gods, spirituality...), and now (since the industrialization) - The financial centres (and the basic premises of the economic dimension: efficiency, duty, discipline, consumerism...). I think most would agree that we are still living in the economic dimension and it determines our fundamental mode of being in the world. But a new time, allowing for a more sensuous mode of being in the world, seem to approach. It is possible and it is happening as I see it. It will affect all the societal institutions and elements. Art is at the centre of this change and to me, *Theatrum Mundi* could be a city in a sensuous society.

The notion of a sensuous society further more reshapes the role of art and artistic practice. The exclusive autonomous art system is also a result of the dominance of the economic dimension. Within

this autonomous zone the art genius is a celebrated figure, which is conceived as someone with a very special (transcending) intelligence. In a sensuous society however, I believe that this will be a more common intelligence, as for example Joseph Beuys points at - simply, because we all have this creative potential within us, and if our outset and mode of being in the world is the sensuous, this potential will be released. Of course, there will be some, who are better at navigating in the sensuous society, those with special artistic talents. We should pay a lot of respect to that craftsmanship and continuously refine it – But much more people than those crystallised as artists today have artistic talent that will be discharged and cultivated in a sensuous society, which it would never have been in the economic.

In the artistic practice I work with – intervening performance art, there is really no distinction between artistic practice, research and activism. My cause is the movement toward a more sensuous society and allowing for a world where more people can liberate their creative potential – to be expressive, exactly as Richard Sennett puts it. My tool is my artistic practice and the research.

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