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The object and strategy of the ground: architectural transformation in New York City housing projects

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Kenneth Frampton, in a 1973 *Architectural Forum* review of the 1968–1973 Bronx-sited Twin Parks Housing Development in New York City, asked: 'to what purpose do you assign the space under the pilotis? The problem posed by the pilotis […] is integral to the original model […] What would the inhabitants of the Ville Radieuse have done with these continuous arcades? […] This is the typological burden … '

The apparent banality of Frampton's observation obscures what is revealed in the lifting up of the building on pilotis: the ground itself. Rather than follow Frampton's use of typology as a descriptive tool in the service of a critical judgement, this paper will instead see the question of type as one involving a diagnostic and propositional gesture within the design process itself, and as part of an ongoing and critical questioning of the city. The paper will explore how the three-dimensional articulation of the ground level evident in a trajectory of projects in New York City has been a site of concentrated architectural research from the late nineteenth century through to contemporary approaches to urban intensification. Here the ground can be seen to be both an object of architectural investigation and spatial reasoning, and at the same time, to operate at a strategic intersection with the spatial politics of the liberal metropolis.

Introduction

In his 1978 essay *On Typology*, Raphael Moneo argued that architecture is not only described by type as a reference to precedent and as part of a critical descriptive project and process of judgement, *but that architecture is also produced through type* as part of the design process.[1] When Moneo was writing, the question of architecture's role and agency in transformation and change in the city was under review. The field of architecture and urbanism was dominated and partially paralysed by a perception that the Modern Movement had failed, particularly in terms of the deployment of the housing project and its relationship to urban renewal objectives.

This is evident in contemporary publications as diverse as Rowe and Koetter's 1978 *Collage City,* Venturi, Scott-Brown and Izenour's 1972 *Learning from Las Vegas,* and Koolhaas' 1978 *Delirious New York*.[2] It is refreshing then to witness the emergence over the recent decade of a whole catalogue of new publications specific to the housing project,[3] publications that have finally and resolutely begun to move beyond the paralysis in the field that characterised the late 1970s. From Hilary French's 2006 *New Urban Housing*,[4] to the DBook series that began as a

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set of a+t Journal special issues on collective housing;[5] Firley and Stahl's 2009 *The Urban Housing Handbook*;[6] *The Intermediate Size: A Handbook for Collective Dwellings* by Bijlsma and Groenland in 2006;[7] Gimenez and Monzonis' *Collective Housing* 2007;[8] or the *Floor Plan Manual* by Heckmann and Schneider.[9]

Each publication provides an edited collection of multi-residential housing projects drawn from throughout the twentieth century, and either side of this 1970s' divide. Organised by type and analysed graphically at multiple scales, these collections of projects are catalogued such that their principles are argued to be generalisable, that is, deployable by architects, urban designers and urban actors as tools to address specific sites, conditions and contemporary urban problems.[10] Central to the questions being asked by all of these contemporary housing publications is: how can multi-residential housing contribute to urban transformation in response to new demands on the city—shifting demographics, densities and population growth, changing work patterns, ageing populations, climate change and sustainability issues, in addition to the opportunities and demands of new technology in cities?

The paralysis of the 1970s, however, is not so neatly resolved. Some years before Moneo was writing on type, in an *Architectural Forum* review of the 1968–1973 Bronx-sited Twin Parks Housing Development in New York City, Kenneth Frampton also called on type. In the essay 'Twin Parks as Typology', Frampton uses type in two distinct ways.[11] In the first instance, type is both a descriptive tool and an organisational mechanism in the cultivation of a terrain of judgement. Here, Frampton deploys type in his review of the four projects that made up the New York State Urban Development Corporation (UDC) middle-income housing scheme, in the service of categorising and organising a critical description of the housing projects where type is understood as visible in the singular instance of the individual object.

But Frampton also used type in a second, quite different way. He asked of the Twin Parks Housing Projects (Fig. 1):

> to what purpose do you assign the space under the pilotis? The problem posed by the pilotis […] is integral to the original model. Even in Le Corbusier's idealized version of a city on piles floating above a continuous park space the problem remains. What would the inhabitants of the Ville Radieuse have done with these continuous arcades? […] This is the typological burden, so to speak […] Its corollary as far as pragmatic planning is concerned is that the designer can never find enough public program to occupy the volume created below the building mass.[12]

Here one might recall Moneo's argument for architecture not only described by type, but architecture that is also produced through type. The apparent banality of Frampton's observation, of the continuity of the existence of the un-programmed pilotis-flanked arcades in projects from the 1920s through to the late 1960s (and, one will add, into the present), obscures what the pilotis reveal in the lifting of the building above the ground: the ground itself. From Le Corbusier's early experiments with blocks in the Ville Radieuse, to the experimentations of the 1970s, the three-dimensional articulation of the ground level, a hallmark of contemporary

Figure 1. *Twin Parks Northeast*, Richard Meier and Associates, 1967–1973: view from under the pilotis (courtesy Richard Meier & Partners Architects).

approaches to urban intensification and compact cities, has established compelling relationships between housing and the surrounding urban fabric. In this trajectory of projects, one can recognise Frampton's 'typological burden' as the scene of concentrated architectural research since the late nineteenth century. Here, the ground and its 'liberation' has been a continual *object* of investigation and research in relation to architecture's discipline-specific material and organisational experimentation, a practice that has involved an 'erasure of the privileged status' of the ground.[13] But it is also possible to see at the same time, within the specificity of the Twin Parks development and in New York itself throughout the late-nineteenth and twentieth century, that the ground has played a critical *strategic* role within urban development and urban reform in the negotiation of the

Figure 2. *Twin Parks Northeast*, Richard Meier and Associates: view from Grote Street looking Southwest, toward raised ground as it moves under pilotis arcades at base of buildings (courtesy Richard Meier & Partners Architects).

competing demands of work, home, leisure and transport in the definition of the city (Fig. 2).

This paper will argue that, contrary to what one sees in the catalogue of contemporary multi-residential housing publications, what selects type is not the function or instrumentality that the specific building type and, it follows, the architectural object, has in 'completing' an existing urban fabric into which it is inserted. Rather what selects type is this capacity for material and organisational experimentation as part of a critical questioning of the city. In what follows, I will examine this capacity operating in the service of the object of the ground, a capacity that operates in the same gesture in the service of the strategic objectives of urban reform and renewal. Here then 'the typological burden' identified by Frampton isn't an aberrant failure of functionalism. Instead I will argue that the 'burden' is evidence of a sustained trajectory of experimentation operating through a process of repetition and transformation. Here type, unlike Frampton's first use of the concept, might be seen as a process of reasoning immanent to the design process of architecture itself, and dependent on architecture's graphic realm. Contrary to accounts of rolling ruptures in the field through the twentieth century, this then begins to suggest where the limited autonomy and agency of the discipline of architecture is to effect change.

Twin Parks and the City of New York

Kenneth Frampton's review of Twin Parks appeared in *Architectural Forum* in 1973, the same year that Rowe and Koetter published *Collage City* with its opening images of the Ville Radieuse juxtaposed to the image of an un-identified New York City housing project. Of all of the world's cities, New York has had during the twentieth century an enormous amount of intellectual and scholarly energy focused on recording and commenting on its urban and architectural development. It provides both the aspirational model for those striving toward its image of dynamic modernity; equally it is held up as the site of modernity's failure. In Rowe and Koetter's juxtaposed images, the reader is invited to see in this failure the inevitability of the un-built model of the Ville Radieuse in the built outcome that came to dominate the city. Equally one is asked to notice the already evident and inevitable tragedy of the built tower-in-the-park housing project in the original model.[14] In Frampton's review of Twin Parks, there is the same pervasive critical impulse both to read the trajectory of transformation as inevitable, and at the same time to define the city as the site of the Modern Movement's failure.

It is for this reason that Frampton's identification of the typological burden is curious, and, in my argument, it points to a different line of thought. The pilotis-flanked arcade seems to be free of presuppositions as to its function, which are in fact the very grounds of its criticism as un-programmed space. In other words, where Frampton saw failure, the questi[illegible] type as operational can also be seen to emerge.

Frampton did not develop the concept of the typological burden further, and following his review, the Twin Parks development was held up by Stuart Cohen as marking the first reactionary turn to 'the contextual'.[15] Critics and writers argued that Twin Parks was a return to a fine-grained texture and form of 'the existing and traditional city' marking, it was claimed, a move away from the low site coverage of the tower-in-the-park. If this site coverage typically sat around ten percent, the Twin Parks development returned its site coverage to around fifty percent. In total, the Twin Parks Housing Development was made up of four middle-income housing projects.[16] These were worked on by three architectural firms: Giovanni Pasanella (1975) at *Twin Parks Southwest (TPSw);* the two *Twin Parks Northwest (TPNw)* sites undertaken by Prentice and Chan, Olhausen (1973); and Richard Meier and Associates at *Twin Parks Northeast (TPNe) (*1973). The total middle-income Twin Parks development was comprised of 1858 units and was undertaken in conjunction with proposals for low-income housing to be sponsored by a non-profit housing organisation, The Twin Parks Association, a collective of various church and civic groups (Fig. 3).[17]

Before further consideration of *Twin Parks Northeast*, it is worth establishing a brief familiarity with these other projects in the Twin Parks development. *Twin Parks Northwest* was smaller than the other three projects in the group. It experimented with a perimeter-block type solution that had been common in the city of New York in the 1920s, although here it is deformed by Prentice, Chan Olhausen and used to negotiate the level change at Webster Avenue in conjunction with the curve of East 184th Street. *Twin Parks East* (TPE) on the intersection of Southern Boulevard, Prospect Avenue and East 187th Street in front of the Bronx Zoological gardens was the first of two projects in the Twin Parks development undertaken by Pasanella and Associates. It is composed of a pair of twin high-rise slab buildings, one of which, to the south, is raised up on a podium in which is situated a high school. On the opposite side of the street, the other tower is raised on pilotis. Both slab buildings are placed on a diagonal to Southern Boulevard and the park, and work to mark the entrance to the Bronx Zoological Park. The final project is *Twin Parks West* (TPW), also by Pasanella and Associates. It is situated further down Webster Avenue, and is constituted of five sites on which have been constructed a series of high-rise slabs.

Twin Parks Northeast by Richard Meier and Associates was built for 523 families. It is located across three irregular blocks between 183rd Street and the Bronx Botanical Gardens. With a site coverage of 53%, the project is composed of two L-shaped blocks and one U-shaped block of six storeys, anchored to the south and north west of the site by two towers of sixteen storeys.[18] The

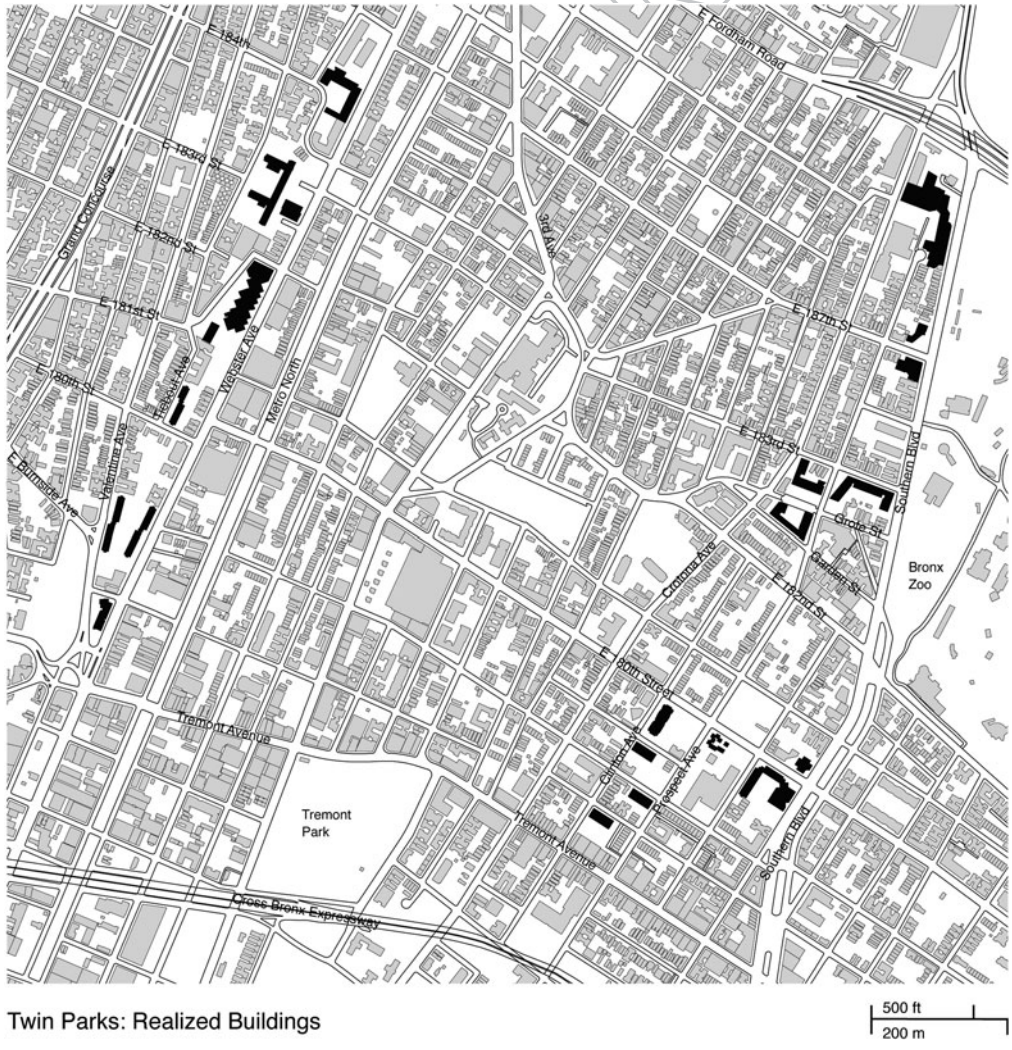

Figure 3. Total Twin Parks Development, distributed across the Bronx 1967–1973 (drawing by Susanne Schindler, 2013, on the basis of a 2010 base map).

first of these towers is on the corner of E183rd Street and Southern Boulevard overlooking the Bronx Zoo. The second tower is on the corner of Crotona and Garden Street, and overlooks the new public plaza space created within the arms of the blocks and with the closure of Grote Street. Between these towers, the six-storey infill slab blocks create a scalar and material mediation with the surrounding and existing tenement blocks and terraced houses, and are clad in the same kind of jumbo brown brick as much of the surrounding fabric. At the street, the blocks both follow and reinforce an existing street wall, but at times the blocks also break with the existing street pattern such as at the intersection of what was Grote Street and Prospect Avenue, opening up the site and its new public open spaces to the neighbouring fabric. Contained within the blocks are a series of new public plaza spaces flanked by permeable, pilotis-defined public arcades at the base of the blocks (Fig. 4).[19]

Historical writing and accounts of urban change

Following the initial account of Twin Parks in terms of an evolution of contextualism, later historians of housing in New York City such as Richard Plunz, writing in the 1980s, came to see Twin Parks as marking a formal break with the past.[20] Plunz includes in this category a whole series of buildings in the city: the *East Harlem Housing Competition* of 1963, *West Village Houses* begun in 1961 and finally completed 1975, *Riverbend Houses* completed in 1967, the development of *Battery City Park* completed in 1968 and an extensive plan for redevelopment of the west side of Manhattan which included Westway, 1969–1975, and the 1973 Roosevelt Island new town.

For Plunz, the account of formal change in New York's housing is made consistently through the biographies and predilections of the architects responsible for projects, organised in his narrative history into categories defined by periods of transformation and change. In Plunz's writing, the Twin Parks scheme is presented as evidence of a larger ideological struggle between the economic, political and social arguments understood to be reflected in the architecture of European Modernism which first appear in North America in the 1930s, marked out specifically by Plunz with the 1934 Brounn and Muschenheim (B+M) slum clearance proposal for fifty blocks of the upper east side of Manhattan. This scheme is argued to be the first incursion of the Modern Movement on to the terrain of New York. Muschenheim, educated at the Vienna Academy of Fine Arts, is argued to have come from the source of European Modernism with his Zeilenbau-inspired proposal, while in Richard Meier's office, Plunz describes how the project architect for Twin Parks North East studied under Colin Rowe at Cornell. This accounted for what Plunz describes as 'the formal composition of the site organization' of the project. Plunz argued that the lower density perimeter block type architecture of Twin Parks North East, a configuration that focused on local neighbourhood integration and material differentiation, the reversing of low site coverage and the production of a multiplicity of flat types, provided an answer to the problems raised by projects such as the B+M proposal and the intensifying

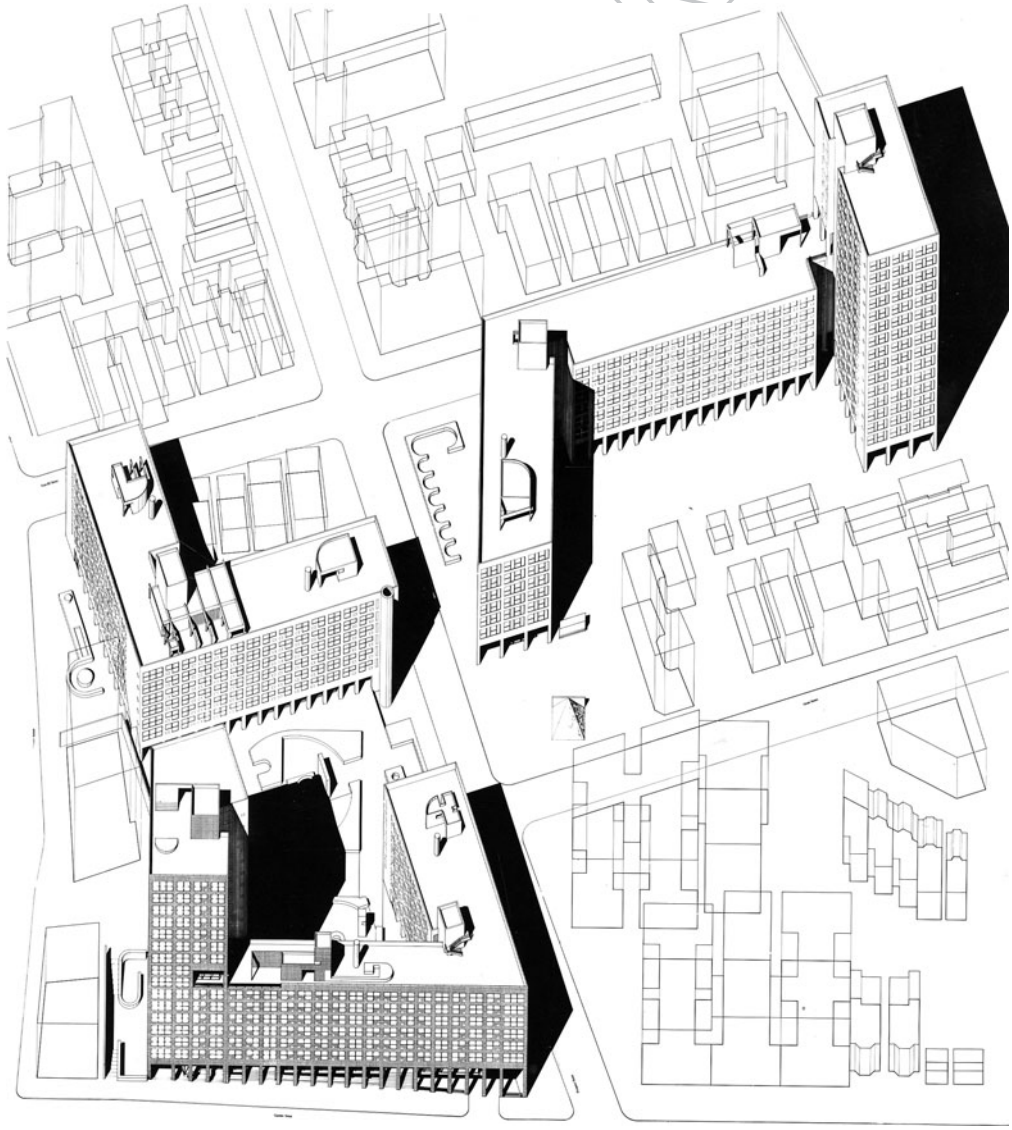

Figure 4. Twin Parks Northeast. Richard Meier and Associates, 1967–73: axonometric view to the North (courtesy Richard Meier & Partners Architects).

tower-in-the-park schemes that followed through the 1950s and 1960s (Fig. 5).

In *Modernity and Housing,*[21] Peter Rowe, writing only a few years later than Plunz, presents a general review of housing across the United States and Europe, focusing on its transformation during this period with a finely calibrated criticism of the 'reductive excesses of orthodox modernism'.[22] Rowe, in a very different account of change from that of Plunz, attributes the failure of Modernism's housing across three registers: the rise of a technical orientation and the resulting loss of a local and specific building practice; the use of abstract forms, the problem of representation and the perception of an absence of an 'authentic architectural expression'; and finally the problem of normative building programmes and mass housing, 'of designing for everyone but for none in particular'.[23] The central thesis of his publication is the question: 'if we are modern, as we otherwise seem to be, the question of the architectural accompaniment to this modern condition still seems conspicuously unresolved'.[24] Rowe's investigation concerns what seems to be the obvious relationship between architecture understood as completed object, and its representational source, in this case what Rowe refers to as the 'modern condition'. The objective of the publication is to clarify more appropriate architectural articulations of such a condition.

Despite their differences, however, what both of these historians of housing have in common is the presentation of transformation as a process of rupture and change, where the architectural object is understood as a reflection of a series of things external to it: political, social and economic, where change is always comprehended to be an answering of the problems raised by the building form or context that went before. The typological burden, however, suggests an iterative process of reasoning, where form precedes rather than follows programme or function. In this way, Frampton can be understood to suggest that the coming into form of the housing project has a more constitutive effect on both our conceptual understanding of the city, and equally, and at the same time, on our own understanding of ourselves as urban subjects: neither remains stable, the city or we who inhabit it. The typological burden points toward an operative understanding of type where each iteration of the housing project, as a diagnostic and propositional process on a trajectory of projects, asks anew: what is the city and who are we as urban subjects? This paper will now work to establish this operative idea through the concept of the ground.

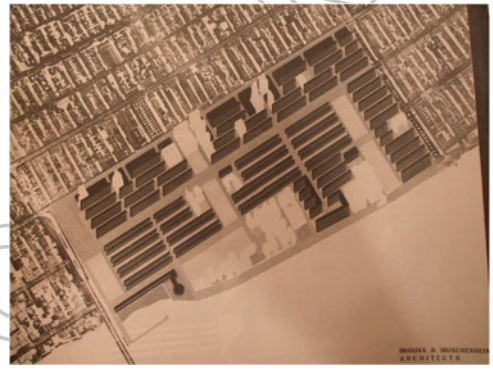

Figure 5. Brounn and Muschenheim: proposal for slum clearance of Manhattan, 1934 (Muschenheim Archive, Avery Architectural and Fine Arts Library, Drawings & Archives, Columbia University).

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Constituting the ground: urban authorities and the scale of governance

Prior to the B+M scheme and its lifting up off the ground of the proposed slab buildings—a move which would in turn open up the amenity of the huge fifty-block site on the Lower East Side of Manhattan to the density of existing tenements around it—the ground was already a strategy within urban reform in New York. This is evident through the operation of a constellation of agencies such as the new public authorities established as spatial and governance mechanisms by the 1920s, and through the new graphic plans published, for example, as part of the 1929 Regional Plan of New York and its Environs. [25] The opening up of the urban block was a key part of the process of reasoning set in train at this time.[26]

The Urban Development Corporation (UDC), the vehicle through which the Twin Parks projects were developed, was created by the New York State legislature in 1968 as a Public Authority. Yet it was in 1934 that the first public authority directed specifically at housing was established, the New York City Housing Authority (NYCHA). It was based on the public authority model established with The Port Authority of New York and New Jersey, itself set up around 1917. This first American Public Authority was an answer to the problem of how to govern in the face of a regulatory failure in the functioning of the railways and ports across the uncooperative jurisdictional borders and boundaries of New York and New Jersey. As a regulatory vehicle, the Port Authority emerged through a linking of a question of space with a question regarding the size of governance; it fundamentally asked the question: at what size should we govern? With the emergence of the public authority, the size of the scale of the metropolitan region was established as part of an ongoing question posed, in this instance on the occasion of the production of housing: what is the city? Such a question was always asked at multiple scales: the single-family unit and its animating condition of domesticity, that of the housing project itself, the neighbourhood, the city district, and, by the late 1920s, the generalised condition of the metropolitan region.

By the late 1960s and Twin Parks Northeast, the UDC had substantial power to bring to bear on the issue of design quality in response to issues of urban blight and decay, being able to override local zoning codes and government bodies. In addition to the power of eminent domain, it had the ability to condemn land for site acquisition. It also had a degree of financial independence. The authority could issue its own bonds backed by a 'moral obligation' from the State of New York to pay the debt service, and was therefore to a certain degree once removed from constant political scrutiny and accountability.

Constituting the ground: tenement building reform

Preceding this linking of urban governance with questions of space, the ground emerged as a strategy within urban reform in the city of New York through the rationalisation of the tenement building in the pursuit of production, construction and material efficiency. This occurred in tandem with a challenge to Manhattan's gridiron armature in the

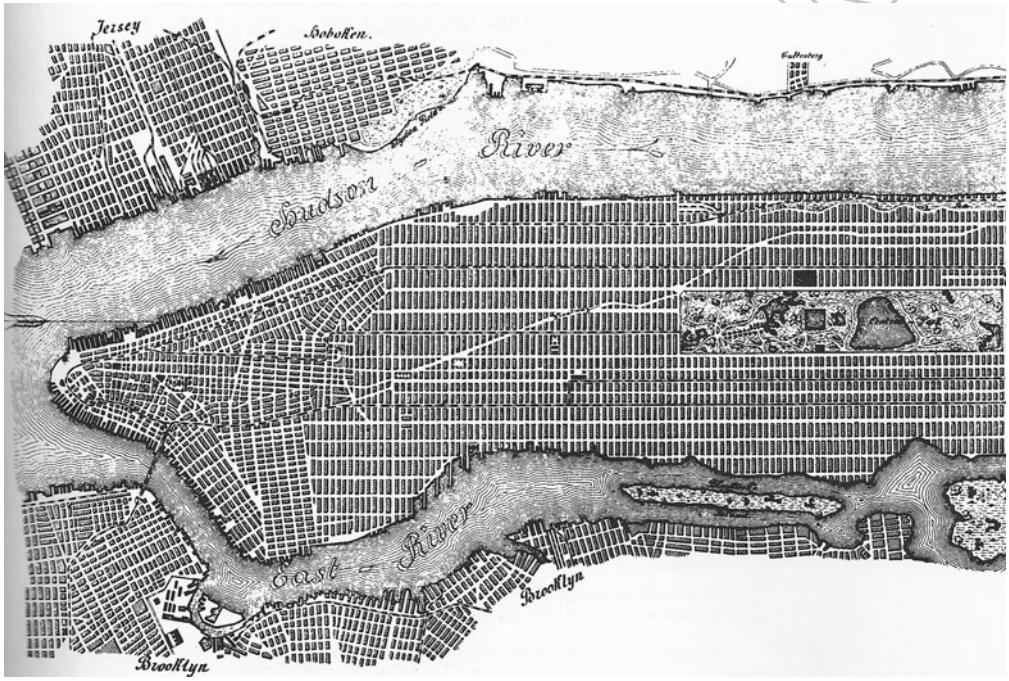

Figure 6. The 1811 Commissioners Grid with Central Park added in 1853; source: H. J. Stubben, *Der Stadtebau* (Wiesbeden, Friedr. Vieweg & Sohn, 1890), Vol. 9, Figure 574.

pursuit of rationalised and improved access to services, sanitation, light and air. The 1811 New York State Commissioner's Plan, the so-called 'Commissioner's Grid', had initially divided the island of Manhattan into 25×100-foot plots on typical blocks of 200×600 feet (Fig. 6). Unlike the later 1929 Regional Plan of New York and its Environs, the Commissioners' Grid had been less a set of instructions for building the city, and more a simple infrastructural statement of movement paths involving rivers, roads and goods, and an as yet undifferentiated urban population.

Experimentation around the strategic configuration of the tenements at a critical mass across a block was already well under way by the 1870s. For example, in 1877 Nelson Derby proposed a tenement using four adjoining 25×100 foot plots allowing for a building organised around a larger internal courtyard by combining all of the air shafts, making solar access and ventilation work harder (Fig. 7). In 1878, the influential magazine *Plumber and Sanitary Engineer* had already called for a tenement house design competition where competitors were asked to consider a repeatable

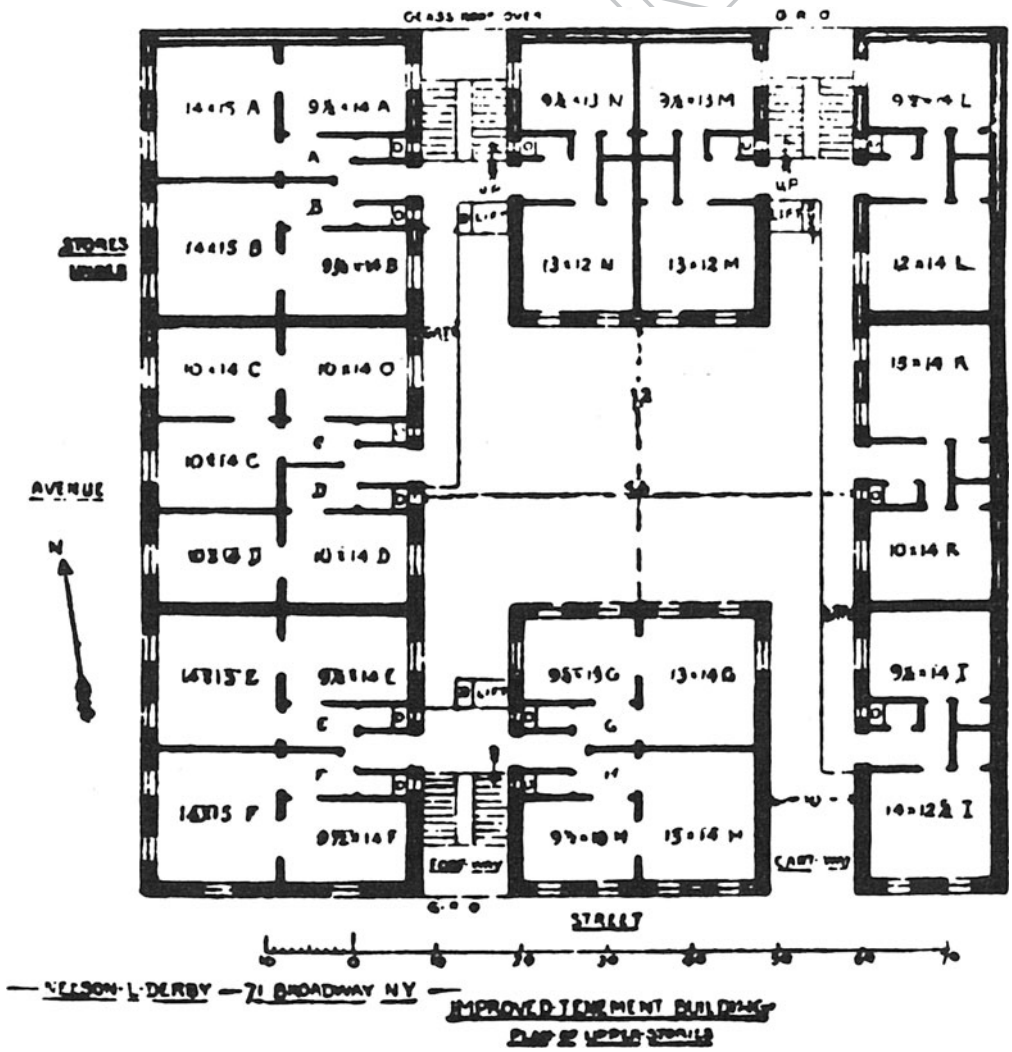

Figure 7. Proposal for a tenement made by consolidating four 25×100 ft plots to produce an organisation around a courtyard; source, *American Architect and Building News* (20th January 1877), 2:20.

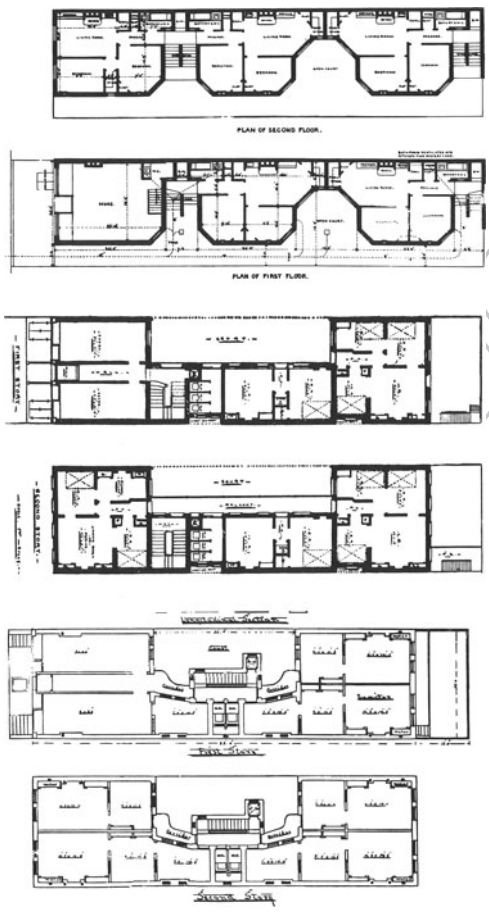

Figure 8. Placed entries in the *Plumber and Sanitary Engineer* magazine's Tenement House Competition: Robert G Kennedy; James E Ware; George DaCunha; winning entry by James E Ware and, far right, the final 'Dumbbell' plan enforced under the 1879 Tenement House Act. Sources: *Plumber and Sanitary Engineer* (April, 1879), 2:132; *Plumber and Sanitary Engineer* (May, 1879), 2:159; *Plumber and Sanitary Engineer* (June, 1879), 2:180.

25×100 foot plot with an emphasis on improving ventilation, sanitation and fireproofing (Fig. 8). By 1901 there were only a few efficient tenement plans remaining that worked in single-plot increments. Now only on triple plots could efficiency be obtained. This effectively eliminated the control of the housing market by small-scale developers who built at high density on a plot-by-plot basis (Fig. 9). By 1879, legislation required internal light wells in a plan configuration that became known as the dumbbell. The dumbbell was predicated on a reasoning at a scale larger than the individual plot. It is a repeatable principle in the constitution of the whole block, and therefore also across a larger section of the city.

At the same time the gridiron itself comes into question. From the 1870s there were many proposals to break up the grid to allow service alleys, mews and other access ways. Fredrick Law Olmsted and J.J. R Cross proposed the provision of service alleys, while Edward T Potter made several proposals in 1878 for the introduction of east-west mews into the gridiron blocks giving better light, solar gain and ventilation to dwellings, as well as addressing sanitation and hygiene concerns (Fig. 10). By 1917, the primacy of the gridiron itself was challenged with the placing of buildings off the geometry of the grid in the pursuit of light and air. With the wall of the street no longer maintained as a continual façade, the resulting 'saw-tooth' plan produced a multiplicity of entry spaces at ground level adjacent to the street, with space of the interior of the block pushed out to the street (Fig. 11). By 1919 the full urban block was called into the service of the development, and in a proposal for the New York State Reconstruction Commission, 14 U-shaped buildings were placed around the perimeter of the block, leaving a large communal interior garden between them (Fig. 12).

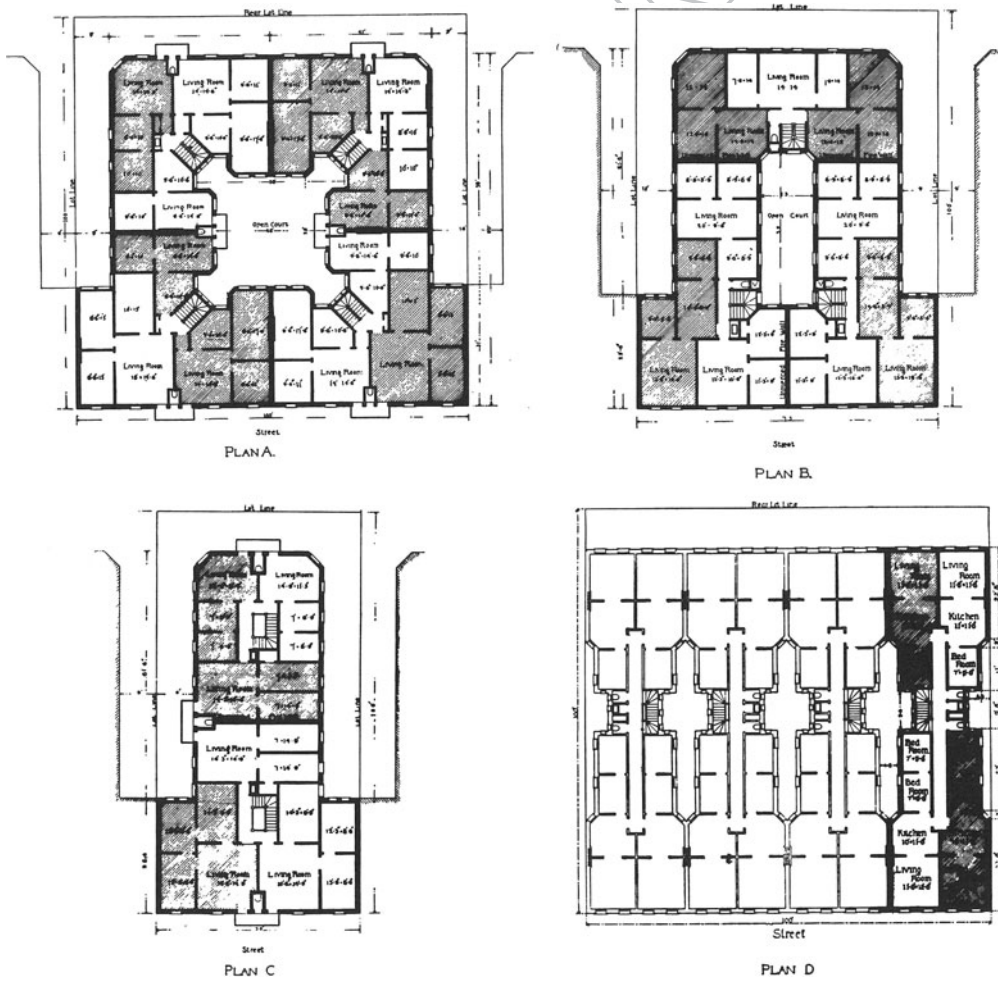

Figure 9. Typical outcome of dumbbell tenement repetition over a block: diagram of Dumbbell repeated as comparative model for tenement prototypes produced by Ernest Flagg for *Scribner's Magazine*. Source: *Scribner's Magazine* (July, 1894), 16:108, 112–114.

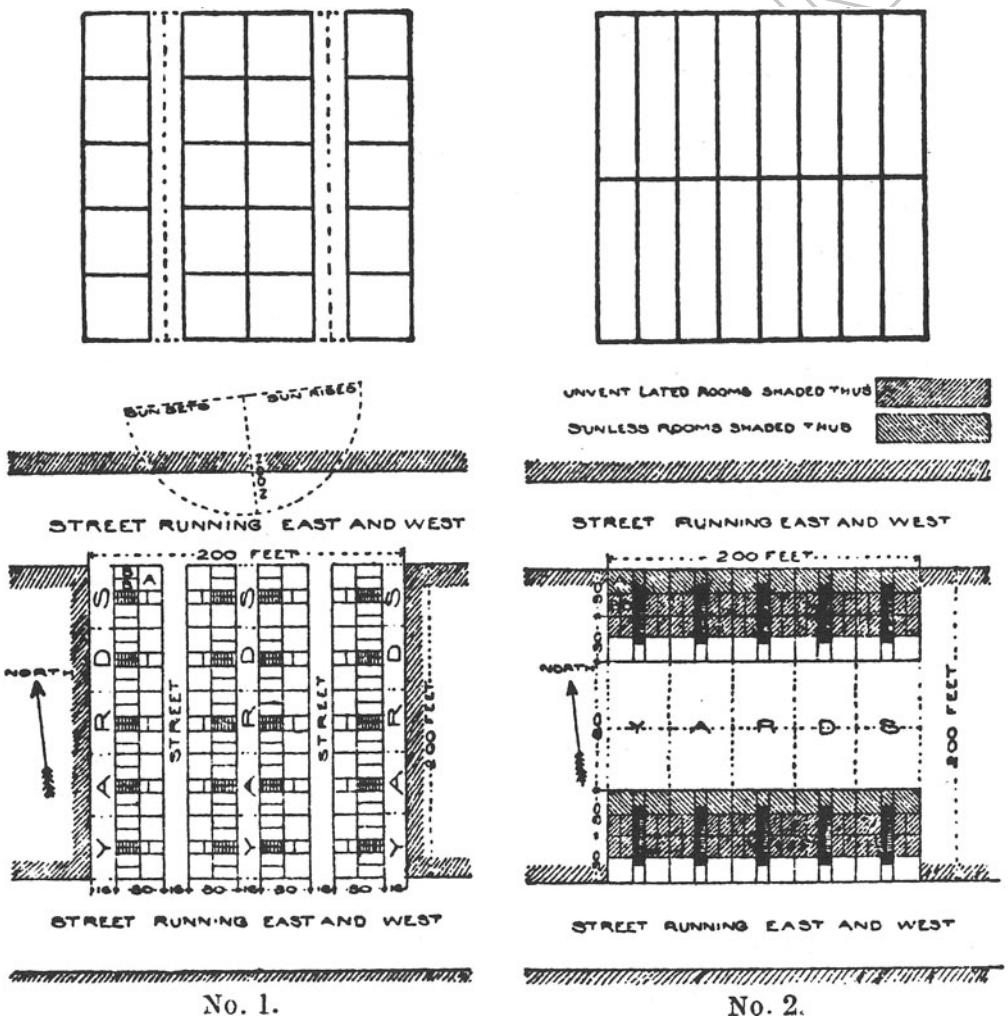

Figure 10. Proposal by Edward T. Potter for the reorganisation of the 1811 gridiron and its 25×100 ft plot with the introduction of a mews to facilitate service. Sources: *American Architect and Building News* (April, 1878), 3:92 and *American Architect and Building News* (May,1878), 3:175.

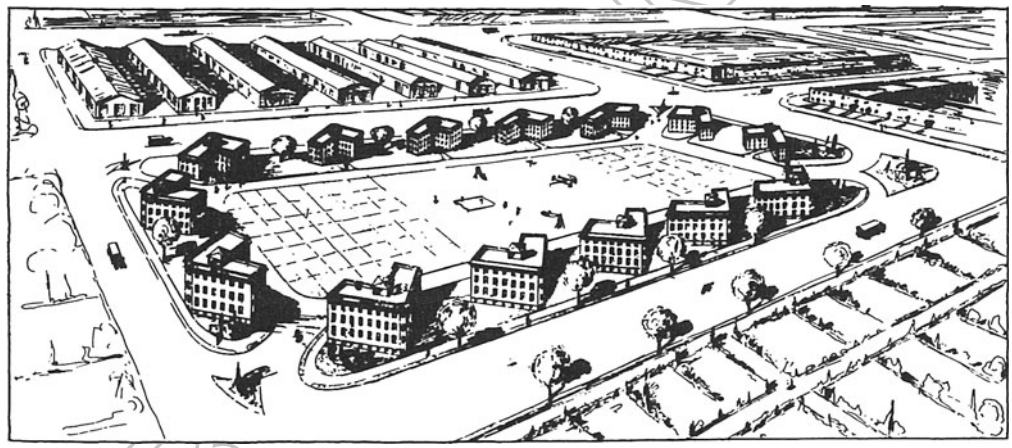

Figure 11. Henry Atterbury Smith's analysis of site using 'sawtooth' geometry to break the gridiron. Source: *Architecture* (May, 1917), 35:81–84

For urban renewal and reform advocates to make arguments about the health, sanitation and hygiene benefits, the economic benefit, efficiency and material costs of the tenement at the scale of the plot and block meant that a constellation of interests—property developers, economists, doctors, health workers, educationalists, architects and planners—was thinking about the complex economic, health and hygiene ecology of the metropolitan, regional scale of the city at the same time. To experiment with models for a replicable system for the tenement house that functioned beyond the scale of the single 1811 plot, and instead appropriating the entire block, was also always to ask, in the same gesture, questions of how such a system would proliferate at larger city-quarter scales. Through the emergence of this multi-scalar coupling, questions of space and questions of governance came together in the city through a strategy of the opening up of the ground. Critical to this of course is the architectural drawing itself, the transactional zone between architecture's experimental drive and these external knowledge sets.

Constituting the ground: architecture's disciplinary experimentation

In the same moment that the ground coalesces as a strategy within urban reform, it also becomes an object of architecture's disciplinary focus, of its material and formal experimentation. As we have seen, the plot and building block are re-organised and amalgamated into a unit that is thinkable at the scale of the urban block and at the scale of the city at once. At the same time it is also possible to see the interior of the dwelling itself differentiate. The 1878 competition held by the *Plumber and Sanitary Engineer* for the design of a new tenement shows not only a differentiation of the

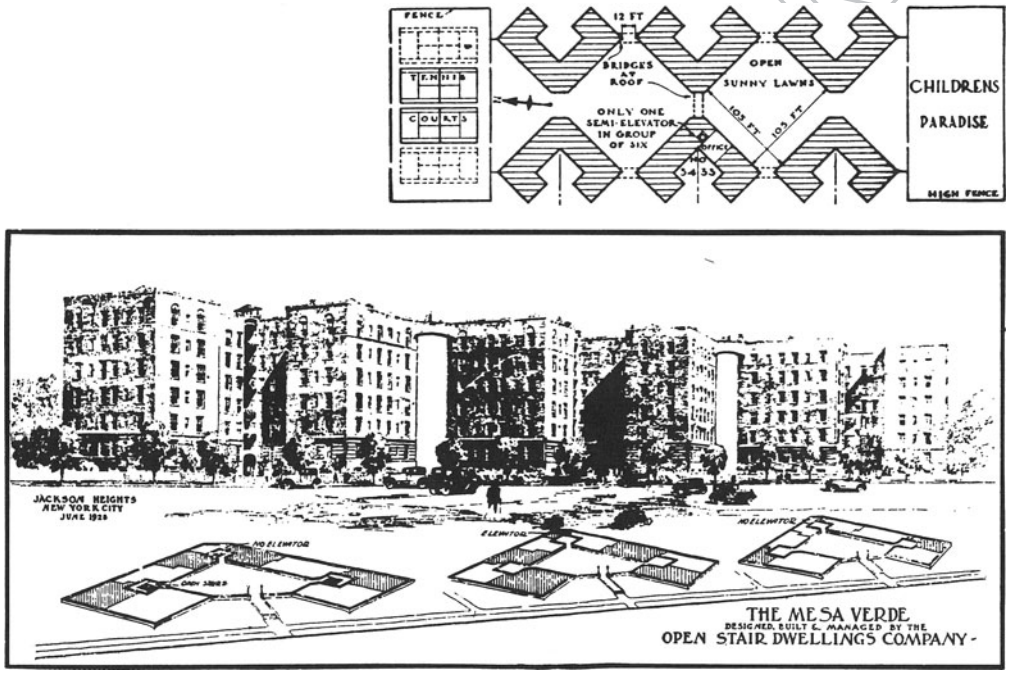

Figure 12. Henry Atterbury Smith's 1926 Mesa Verde Site Plan; philanthropic housing developed by the Open Stair Dwellings Company, Jacksons Heights. Source: James Ford, *Slums and Housing*, vol. 2 (1936), Plate 18A.

external envelope of the building and its relationship to the boundary of the plot, but equally the drawings from individual competition entrants begin to show a differentiation in the internal layout of the rooms of the dwelling spaces themselves—as the exterior envelope of the tenement begins to align itself with the internal layout of the flat, differentiating itself towards the hierarchies of domesticity: kitchen, internal bathroom, living room, child's bedroom and parents' bedroom (Fig. 13).[27]

Vertical circulation becomes an issue and is moved from the interior of the block to an adjacent position on the exterior of the building. The next question is to do with the centralisation of vertical circulation or its splitting. Does it sit next to a light well, or is it split to either of the short side boundaries? Efficiency dictates that, if the stair is split, flats have their own privy. If the stair is centralised, privies are shared by occupants on a floor, and centralised and rationalised around the vertical movement systems—thereby raising the question

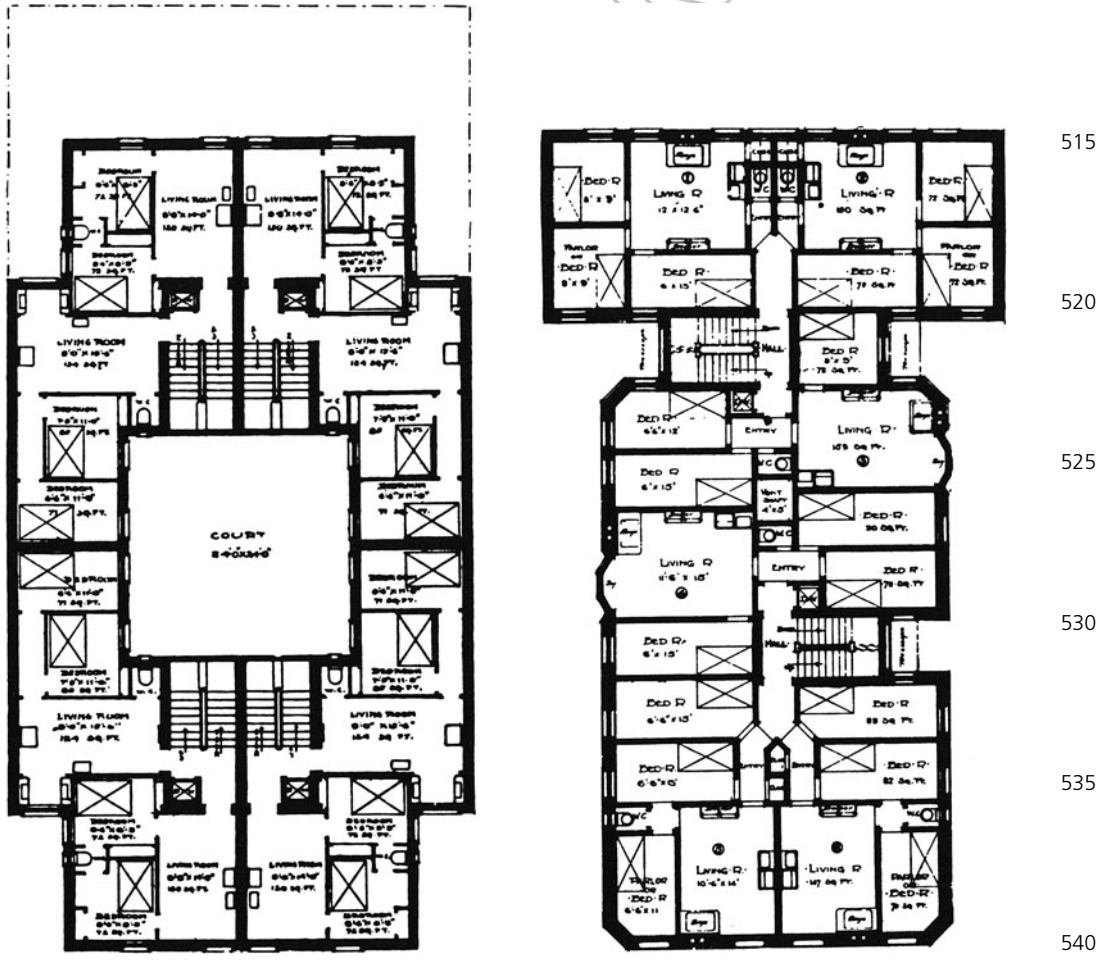

Figure 13. Tenement Plan proposal from 1900, submitted to the New York State Tenement House Commission showing a clear interior definition of domestic plan. Source: James Ford, *Slums and Housing*, vol. 2 (1936), Plate 10E.

also of construction and material efficiency. By 1901, the living rooms and bedrooms and, now clearly delineated in a hierarchy of size, the kitchen as a site of specific activity and function, are delineated in the plan, and it is clear where the limits of each self-contained flat are. For the

PERSPECTIVE OF OPEN-STAIR APARTMENTS ON WEST 146th AND 147th STREETS, NEW YORK CITY.

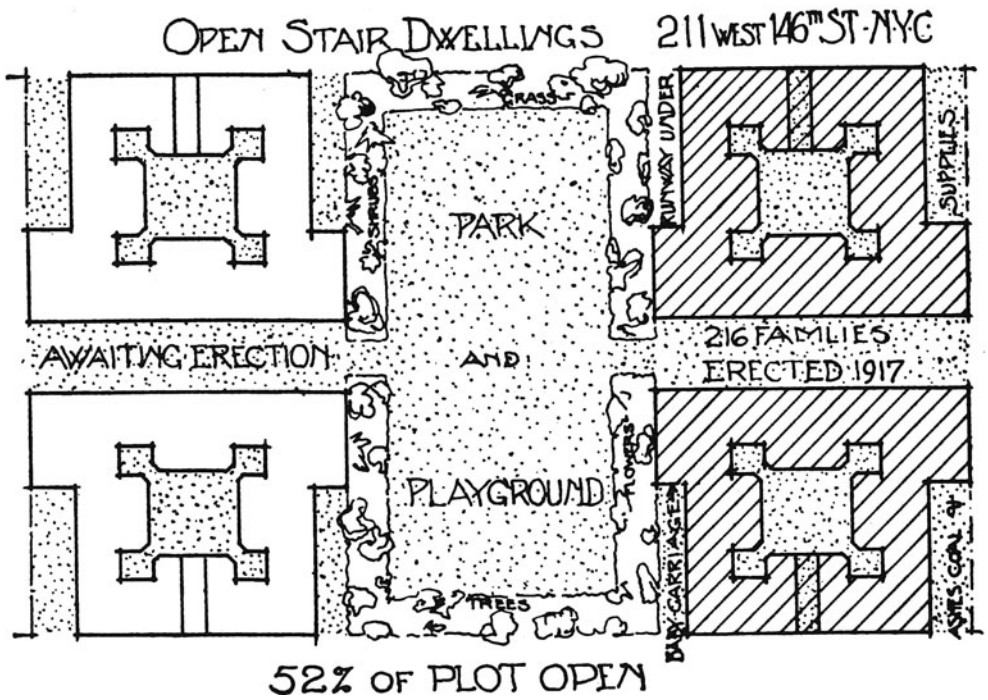

Figure 14. Philanthropic Tenement on West 146th Street and 147th Streets for the Open Stair Dwelling Company, 1917: 52% site cover. Source: *Architectural Record* (July, 1920), 48:67.

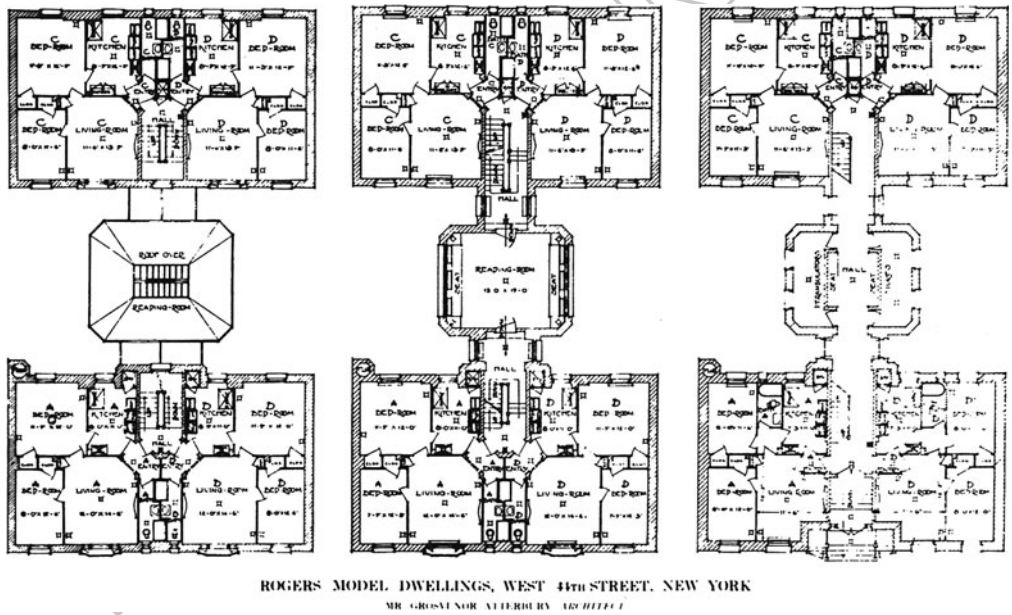

Figure 15. Roger's Model Dwellings West 44th Street, 1915: interior massing reduced to two levels which house a library. Source: *American Architect* (29th October, 1913).

first time, the modern family, as identified by Jacques Donzelot, is clearly outlined in the drawing and evident as an operative scale in what had been an undifferentiated urban field.[28]

In the first decades of the twentieth century, the internal park as open space or play paradise is common practice within the interior of the urban block, as exemplified in the 1917 project for housing on West 146th Streets of the Open Stair Dwelling philanthropic organisation (Fig. 14). Also significant is Hubert, Pirson and Company's 1890 proposal for a perimeter block with an entire ground floor devoted to commercial space, and the 1900 proposal for a perimeter block with the provision of an internal park to be bought and maintained by the City of New York (Fig. 15).[29] Rogers' 1915 proposal for Model Dwellings on West 44th Street shows the massing of buildings placed in the interior of the blocks reduced to two floors, which were to house a library to serve residents. While the perimeter block had existed for some time in the city, it is not until around 1900 that the now opened ground of the block becomes the site of architecture's organisational experimentations into collective life. As Katharina Borsi has argued in her review of the emergence of domestic space out of the undifferentiated urban block in

Berlin during the same period, once we have carved out the domestic realm of the modern family from what had been the undifferentiated interior of the building, it is almost as if we immediately turn our attention back to the issue of collective life. [30] Here the question of the spatial performance of the block and its internal differentiation becomes linked to questions of stable collective life at the scale of what becomes known by 1929 as the neighbourhood unit.[31]

Design process: the diagnostic and propositional gesture

By the early 1920s, the object of the ground is firmly established as a site of organisational investigation and experimentation in New York, a decade before the arrival of the Brounn and Muschenheim project in 1934. At this time the edge-forming building block leaves the perimeter of the urban block in search of alternatives (Fig. 16). Here, one can see that to strategise open recreational space and parkland at the scale of the urban block, one also had to have an understanding of how parkland worked at a city-wide scale. As the urban block emerges as a scale in the city, so too does the metropolitan region. It is established by the time of the publication of the decade-long research contained within the Metropolitan Regional Plan of New York and its Environs in 1929. With its publication of the strategic exemplar diagram of the neighbourhood unit, the constitutive elements of balanced neighbourhoods were established in a graphic dynamic tension between housing, work, leisure space and transport. The occasion of the housing project was the opportunity through the design process to add or subtract the elements required to create this.[32] As this paper has tried to show, the idea of community embodied in neighbourhood, which is generalised by the 1920s, was formulated as much by the typological transformations of the tenement and the gridiron through the late nineteenth century, as it was by the reform and urban development that sought cohesion and dynamism.

Figure 16. Brounn and Muschenheim: proposal for slum clearance, 1934. Source: Muschenheim Archive, Avery Architectural and Fine Arts Library, Drawings & Archives, Columbia University.

Colour online, B/W in print

And here we return to what prompted these investigations: Frampton's review of the Twin Parks projects. In one sense the review is simply restating Alan Colquhoun's challenge to the discipline of architecture in his 1967 Essay *Type and Design Method*.[33] Colquhoun argued that the Modern Movement's own account of architecture's coming into form was positioned uncomfortably between two equally inadequate ideas: as the outcome of

data or what Colquhoun called biotechnical determinism, or, when that failed, as shaped by the hand of the architect as intuitive genius. He thought that both accounts fell short, leaving the final account of decision making unresolved. He argued that it is architectural type, understood as a reference to precedent, that was at work in the design process between data and form, and that it constituted a reference to past solutions to similar problems in a process of repetition and transformation that is both diagnostic and projective of other possible futures within each move.

Writing a few years later, Colin Rowe reiterated the Modern Movement's account of its own design process, claiming that what such accounts obscure is the strange ground on which architecture stands, 'a claim to infinite transformation'. As he argues, one of the central tenets of the Modern Movement was that 'any repetition, any copying, any employment of a precedent or a physical model is a failure of creative acuity'.[34] Contemporary discourse still holds to the idea that repetition establishes convention, leading nowhere, and that contemporary architecture must be opposed 'to the dictatorship of the merely received'.[35] Yet what the contemporary housing manuals outlined at the opening of this paper show continues in to the present is in fact surprising amounts of repetition.

Given the longer trajectory of the problem of the ground we have just discussed, this raises two issues. The first has to do with continuity and the rareness of real transformation. This is clearly at odds with historical accounts of rupture and change. The second is the uncoupling of form and function evident in the typological burden, where architectural experimentation in fact precedes meaning.

In respect of the first issue, the very emergence of the spaces and processes of the city, the objects, strategies and concepts such as the ground and the housing project itself, are linked in discourse by what we might call 'the terrain of the urban' and what might be described as 'a vast dispersion with its own immanent laws and regularities'.[36] From this point of view, the very beginning of our conceptual understanding of what the city is, or what housing is, can be seen as having been established upon this discursive terrain. Here the process of formal and spatial exploration responds to, and at the same time cultivates the same terrain from which the reading of the city as the site of the Modern Movement's failure has emerged.

In respect of the second issue, the contingency of ground, visible through the 1935 Brounn + Muschenheim Slum Clearance project as it is in Twin Parks Northeast, is not a failure of functionalism. Rather, it is evidence of a sustained trajectory of organisational experimentation through a process of repetition and transformation. Central to this process is the simultaneous diagnostic and propositional or projective function of architecture. What Frampton's burden makes visible is a kind of directed material politics unique to architecture's disciplinary practice that is definitional of both our understanding of the city and subjectivity itself. This suggests that there is not a return to 'the existing and traditional city' with projects such as Twin Parks Northeast, but rather, there is transformation in our conceptual understanding of the city through the coming into form of the housing

project, and with it, a new understanding of who we are as urban subjects.

Notes and references

1. R. Moneo, 'On typology', *Oppositions*, 13 (1978).
2. C. Rowe, F. Koetter, *Collage City* (London, The MIT Press, 1978); R. Venturi, D. Scott Brown, S. Izenour, *Learning from Las Vegas: The forgotten Symbolism of Architectural Form* (London, The MIT Press, 1972); R. Koolhaas, *Delirious New York* (New York, The Monacelli Press, 1994). During this period, Venturi Scott Brown turned to Las Vegas in search of new tools with which to engage the city. In this instance, their work can be seen to leverage the disaggregation of signification from form. At roughly the same time, Koolhaas reviewed the sectional dynamism of Manhattan's 1930s tall buildings, in particular the Downtown Athletic Club, in his arguments for a different understanding of the value of the. Rowe and Koetter in *Collage City* make the clearest call for consideration of the 'traditional' city. In the chapter, 'Crisis of the Object: Predicament of Texture', they write: 'The traditional city is the almost opposite and inverse of the city of modern architecture … the two of them together might, sometimes, almost present themselves as the alternative reading of some Gestalt diagram illustrating the fluctuations of the figure-ground phenomenon. Thus, one is almost all white, the other almost all black: the one an accumulation of solids in largely unmanipulated void, the other an accumulation of voids in largely unmanipulated solid: and, in both cases, the fundamental ground promotes an entirely different category of figure—in the one object, in the other space.': *Collage City,* p. 62. The same page goes on to note the virtues of the traditional city: 'the solid and continuous matrix or texture giving energy to its reciprocal condition, the specific space; the ensuing square and street acting as some kind of public relief valve and providing some condition of legible structure; and, just as important, the very great versatility of the supporting texture and ground.'
3. In this research both terms 'housing project' and 'housing estate' are used with reference to large-scale urban interventions in the form of housing, and its associated cluster of concerns regarding work, home, leisure and transport. The term 'housing estate' is more commonly used in the United Kingdom and its former colonies, Australia and New Zealand, but because this research is concerned with examining this urban instrument through the specificity of New York, I use the term more typically associated with the American context: 'housing project'. Within the context of this work, no value distinction is made between the means of financing housing, or the occupants it is to serve, whether it is social housing that is funded publicly or through public-private initiatives, or privately developed market-driven housing. The housing project is a piece of urban fabric that is isolated and abstracted from the city around it, experimented on, and then replaced in an urban context to do its work and to have an effect on the city at multiple scales.
4. H. French, *New Urban Housing* (London, Laurence King Publishing, 2006).
5. Published in book form in 2006 and again with additional detail in 2007: J.Mozas, A. F. Per, *Densidad/Density: New Collection Housing* (Vitoria-Gasteiz, a+t ediciones, 2006); A. F. Per, , J. Mozas, J. Arpa, *DBook: Density Data Diagrams Dwellings: A visual Analysis of 64 Collective Housing Projects* (Vitoria-Gasteiz, a+t ediciones, 2007). See also A. F. Per, J. Mozas, A. S. Ollero, *10 Stories of Collective Housing: Graphical analysis of Inspiring*

Masterpieces (Vitoria-Gasteiz, a&t Architecture Publishers, 2013).

6. E. Firley, C. Stahl, *The Urban Housing Handbook* (West Sussex, John Wiley and Sons Ltd., 2009).
7. L. Bijlsma, J. Groenland, *The Intermediate Size: A Handbook for Collective Dwellings* (Uitgeverij SUN, 2006).
8. A. Gimenez, C. Monzonis, eds, *Collective Housing* (Editorial Pencil SL, 2007).
9. O. Heckmann, F. Schneider, eds, *Floor Plan Manual Housing* (Basel, Birkhauser Verlag, 2011; first edition 2002, updated 2009, 2011). More recent publications to add to this catalogue include: C. Broto, *Apartment Building: Plan Atlas* (Barcelona, LinksBooks, 2013 and one that begins to explore ground and façade in a much more productive way— U. Wietzorrek, *Housing + On Thresholds, Transitions, and Transparencies* (Basel, Birkhauser Verlag GmbH, 2014).
10. O. Heckmann, F. Schneider, eds, *Floor Plan Manual Housing*, *op. cit.* As this states in an introduction: 'While the Floor Plan Manual serves as a tool to research the latest developments in housing, it goes beyond that brief and also contextualizes these in comparison to examples from the past 65 years. The systematic typological presentation of the projects allows readers to utilize the knowledge and ideas of others.'
11. K. Frampton, 'Twin Parks as Typology', *Architectural Forum* (1973), pp. 56–61.
12. *Ibid.*, p. 58.
13. Kipnis writes of the 'liberation of the ground': J. Kipnis, 'Re-Originating Diagrams', in, S. Cassara, ed., *Peter Eisenman: Feints* (Milan, Skira Editore S.p.A., 2006), p. 194.
14. L. Barth, 'The Complication of Type', in, C. C. M. Lee, S. Jacoby, A. D., eds, *Typological Formations: Renewable Building types and the City* (London, Architectural Association. 2007).
15. S. Cohen, 'Physical Context/Cultural Context: Including it all', *Oppositions,* 2 (1974). 'The word "contextual" and even more, the word "contextualist" … In their origin I think they were Cornell Studio words, useful about 1966. Were they Tom Schumacher's words or Stuart Cohen's.': footnote in C.Rowe, 'Introduction', in, P. Arnell, T. Bickford, eds, *James Stirling Buildings and Projects* (New York, Rizzoli. 1984), p. 27. Schumacher writes that 'The term "contextualism" was first used by Stuart Cohen and Steven Hurtt in an unpublished masters thesis entitled "Le Corbusier: The Architecture of City Planning"': T. L. Schumacher, 'Contextualism: Urban Ideals and Deformations', in, K. Nesbitt, ed., *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965–1995* (New York, Princeton Architectural Press, 1971). 'Importantly, it was Schumacher, Cohen and Hurtt who extended the idea of context as a formal determinate beyond Rowe's graduate studio in urban design to the design of the individual building, "contextualism" a term they coined to describe the urban design strategies of the Cornell graduate studio in the late 1960s became one of the theoretical cornerstones of the architecture of the 1980s': A. Caragonne, *The Texas Rangers: Notes from an architectural underground* (London, The MIT Press, 1995), p. 359. 'Stuart Cohen's 1974 article, "Physical Context/Cultural Context: Including it All" described and promoted this inclusive contextual attitude. Thereafter contextualism descriptively captured the concern for the uniqueness of place and culture as a foil to the presumed universal qualities of modern architecture': from S. Hurtt, 'Conjectures on Urban Form', *The Cornell Journal of Architecture*, 67 (1982), p. 67.
16. For more details of the Twin Parks project, see S. Cohen, 'Physical Context/Cultural Context', *op. cit.*, p. 15; R. A. M.Stern, T. Mellins, D. Fishman, *New York 1960: Architecture and Urbanism Between*

the Second World War and the Bicentennial (New York, The Monacelli Press, 1995), p. 961; S. Stephens, 'Learning from Twin Parks', *Architectural Forum,* 138 (1973), pp. 56–61; R. Plunz, *A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis* (New York., Columbia University Press, 1990), p. 292.

17. See R. A. M.Stern, T. Mellins, D. Fishman, *New York 1960*, *op. cit.*, p. 956.
18. Typical post-Second World War 'Tower in the Park'-type site coverage was as low as 10%: see R. Plunz, *A History of Housing in New York City*, *op. cit.*
19. The UDC's jurisdiction as a Public Authority to override local zoning and planning laws enabled the project to be built right to the periphery of the site at E183rd Street, Prospect Avenue and Garden Streets.
20. R. Plunz, *A History of Housing in New York City*, *op. cit.*
21. P. G. Rowe, *Modernity and Housing* (London, The MIT Press, 1993).
22. *Ibid.*, p. 231.
23. *Ibid.*, p. 3.
24. *Ibid.*, p. 2.
25. COMMITTEE ON THE REGIONAL PLAN OF NEW YORK AND ITS ENVIRONS 1929. *The Graphic Regional Plan: Regional Plan of New York and its Environs*, Volume 1. New York: Regional Plan; D. A. Johnson, *Planning the Great Metropolis: The 1929 Regional Plan of New York and Its Environs* (London, E&FN Spon, 1996); C. A. Perry, *Neighbourhood and Community Planning: Regional Plan of New York and Its Environs* (New York, Committee on Regional Plan of New York and Its Environs, 1929). See also J. Schwartz, *The New York Approach: Robert Moses, Urban Liberals and Redevelopment of the Inner City* (Columbus, Ohio State University Press, 1993).
26. Several organisations in New York were making claims for plans during this period. Sutcliffe makes an argument regarding the opposition of the New York Regional Plan (NYRP) and the Regional Planning Association of America (RPAA), stating that the first made the argument for a metropolis, the second involved an argument for a Metropolitan Region: A. Sutclife, *Metropolis 1890–1940* (London, Mansell, 1984), p. 43. The metropolis argument involved the grafting of the Garden City movement onto the City Beautiful movement with Daniel Burnham's plan for Chicago in 1909 being its greatest triumph. It was an argument, so Sutcliffe writes, designed to 'restore to the city a lost visual and aesthetic harmony, thereby creating the physical prerequisite for the emergence of a harmonious social order'; P. S. Boyer, *Urban Masses and Moral Order in America 1820–1920* (Boston, Mass., Harvard University Press, 1992); A. Sutclife, *Metropolis 1890–1940,* above. The argument for a metropolitan region, however, involved a completely different set of motivators and constellation of actors. Its story began when Charles Dyer Norton, a key figure in the Chicago Plan, moved to New York in 1911 and began petitioning the City for a regional plan with the President of the Borough of Manhattan, George Mc Aneny. When Mc Aneny was defeated in 1916, Norton turned to the Russell Sage Foundation, becoming its trustee and treasurer in 1918. In 1921 the Foundation announced its support for a new planning study. Ten years and over $1million later, the ten volumes of survey and two volumes of plan were published, between 1928 and 1931. M. J. Bianco, 'Robert Moses and Lewis Mumford: Competing Paradigms of Growth in Portland, Oregon', *Planning Perspectives,* 16 (2001), pp. 95–114; H. A. Kantor, 'Charles Dyer Norton and the Regional Plan of New York', in, D. A. Krueckeberg, ed., *The American Planner; Biographies and Recollections* (New York, Methuen, 1983); M. C. Boyer, ed., *Dreaming the Rational City* (Cambridge, Mass., The MIT Press, 1983); J. Schwartz, *The New York Approach, op. cit.*, p.181. The NYRP was

New York's planning think tank during this period, supported by corporate funds: research staffing of 150 people studying patterns of regional growth to bolster Manhattan property, smooth interregional transport and foster stable neighbourhoods.

27. For more on the emergence of the modern family, see J. Donzelot, *The Policing of Families* (Baltimore, London, The John Hopkins University Press, 1977); J. Minson, 'Familiar Terms: Politics, the Family and History of the Present', in *Genealogies of Morals: Nietzsche, Foucault, Donzelot and the Eccentricity of Ethics* (London, Macmillan, 1985); J. Deleuze, 'Foreword: The Rise of the Social', in J. Donzelot, ed. *The Policing of Families*, above; M. Foucault, *The Will to Knowledge: the History of Sexuality Volume 1* (London, Penguin Books, 1978; 1976); K. Borsi, 'Drawing and Dispute: The strategies of the Berlin Block', in M. Lathouri, D. Periton, V. Di Palma, eds, *Intimate Metropolis* (London, Routledge, 2009).
28. J. Donzelot, *The Policing of Families*, *op. cit.*
29. R. Plunz, *A History of Housing in New York City*, *op. cit.*, p. 112: Plunz claims that this is the first suggestion of actual practical government involvement in the provision of housing.
30. K. Borsi, 'Drawing and Dispute', *op. cit.*
31. COMMITTEE ON THE REGIONAL PLAN OF NEW YORK AND ITS ENVIRONS 1929. The Graphic Regional Plan: Regional Plan of New York and its Environs, Volume 1. New York: Regional Plan; D. A. Johnson, *Planning the Great Metropolis*, *op. cit.*
32. In addition, as early as 1918 several proposals were made to challenge the prevailing new law tenement dumbbell plan itself, involving a shifting of courtyards and opening up of space for light, air and ventilation into individual flats. Here the courts are shifted from the edges running between plots to the centre front and rear of the 70×100ft plot. With only a slight reduction in site coverage, it achieved a significantly increased light and air access to the buildings. At the ground level the front courtyard is raised, and becomes a lightly planted amenity for the building occupants. With the pursuit of larger plot sizes, such exploration of the ground became more explicit: for example, Henry Atterbury Smith's 1917 'open stair' dwellings on a site between West 146th street and 147th street. It was comprised of four blocks, one in each corner of the plot, with a park and playground occupying a 100×200ft site between, running street to street with a 48% plot coverage.
33. Colquhoun, 'Typology and Design Method', *Arena*, vol.33 (1967).
34. C. Rowe, 'Introduction to Five Architects', in K. M. Hays, ed., *Architectural Theory Since 1968* (Cambridge, Mass., The MIT Press, 1972), p. 80.
35. *Ibid.*
36. This definition of urbanism as discourse follows Foucault's account of discourse in: M. Foucault, *The Archaeology of Knowledge* (London, Tavistock Publications Limited, 1972). While Foucault never writes directly about the urban, this reading was developed as part of a doctoral research group between 2004–2007 at the Architectural Association, London, convened by Lawrence Barth, with Dr Katharina Borsi and Dr Pavlos Philipou.