# Fast Building: Money, Management and Risk at London's Chelsea Harbour Development

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### **Abstract**

Linking the financialization of architecture to commercial property development in the context of deregulation, this article examines the case of Chelsea Harbour, a seventeen-building mixed-use development completed in 1988 on the banks of the River Thames in West London. Ray Moxley, the architect who brought the project to fruition, was a proponent of what became known as fast building, a practice that used speed in the design and construction process as a means of holistic project control. In the 1970s, Moxley had developed what he called the Alternative Method of Management (AMM), an approach to project management that positioned the architect as the lynchpin of the construction process, directing all work on site and producing detailed construction drawings 'just in time' as projects progressed. The article examines the fast-building practices Moxley instituted at Chelsea Harbour and situates them relative to larger shifts in planning and regulatory frameworks in the United Kingdom. The article argues that speed worked as a means by which the architect could negotiate these large-scale changes. In particular, the spatial innovation of Chelsea Harbour's two centrepiece atrium buildings repositioned the architect as the manager of risk.

#### Introduction

Upon its completion in 1988, Chelsea Harbour, a seventeen-building mixed-use development on the banks of the River Thames in West London, was recognized in professional journals as one of the most rapidly constructed developments of its kind in Europe. In just two and a half years, a twenty-hectare contaminated former industrial site was transformed into an exclusive London address with four thousand people living and working there. The architect who brought the project to fruition was Ray Moxley, a proponent of what became known by the late 1980s as fast building, a practice that used speed in the design and construction process as a means of wholistic project control.

Still prominent in the landscape of West London today, the development contains over four hundred apartments, a hotel and marina, bars and restaurants, office accommodation, as well as retail, trade and studio spaces, all underpinned by a four-hectare carpark. [FIGURE 1; FIGURE 2] Punctuating the site are the landmark

Belvedere Tower with twenty storeys of luxury apartments, and two buildings featuring full-height atriums. [FIGURE 3] One accommodates the Design Centre London under three enormous, glazed domes. [FIGURE 4] The other, Harbour Yard, was proposed with a mix of uses unique in the United Kingdom at the time: apartments, offices, studios and restaurants. Stylistically, Chelsea Harbour's buildings are diverse—one commentator called them "dissimilar"2—with several of the apartment buildings and Harbour Yard tending toward historicist postmodernism. [FIGURE 5] Moxley himself called the overall style "inclusivist"3 [FIGURE 6] and was reportedly very pleased when the local Civic Society complimented him on the "sensitive restoration" of buildings that were entirely new.4

Chelsea Harbour offers perhaps one of the clearest examples of the way in which architecture gave itself up to financial imperatives in the 1980s: built on land that had once been publicly owned, it created an enclave of consumption, commerce, luxury and leisure. Style eased the bewilderments of this intensification of capital, the development appearing as if it had always been there. It leveraged and mirrored a broader political condition that it presented as given and natural, with architecture licensed to explore the pleasures and playful contradictions inherent in the way it produced meaning and value.<sup>5</sup>

The problem in being lured into critiquing Chelsea Harbour in this way is that the critique itself risks becoming normalized, repeating critical tropes that emerged at the same moment as Chelsea Harbour itself. In this respect it is worth recalling the role architecture played in Fredric Jameson's attempt to outline what he called the 'cultural logic of late capitalism', when, in the mid-1980s, he wandered through the atrium of John Portman's Los Angeles Bonaventure Hotel (1977). Losing his bearings, he penned what would become a key passage that recognized architecture's mediating role with respect to late capitalism. Jameson's inability to find his way was a function of a "mutation in space – postmodern hyperspace". He thought that the "alarming disjunction point between the body and its built environment ... can itself stand as the symbol and analogon of that even sharper dilemma, which is the incapacity of our minds, at least at present, to map the great multinational and decentred communication network in which we find ourselves caught as individual

subjects." Suddenly an exuberant, developer-led architecture had become a symbol, and, in some senses, an experience, of the ungraspable connection between the abstractions of capitalism and the material transformations of the city. Yet, as this critique began to gain traction, Jameson was accused of being too focused on architectural effects, too immersed in the spatial delights of the atrium, however bewildering they may have been. For someone like Mike Davis, the Bonaventure Hotel was not a figure for understanding, however negatively, a higher stage of its integral functioning. Rather, it symbolized a capitalist system in crisis: the product of speculative investment practices that fundamentally shifted relationships between large-scale financial investment in the city and the urban role of the resulting built forms.7 In this debate, architecture—as profession, as process, and as material object—drifted further away as a focus of critical concern, being seen as only symbolic of processes and structures whose logic lay elsewhere.8 Recently Kenny Cupers, Catharina Gabrielsson and Helena Mattsson have recognized the problem of formulations such as these, in that they arise from "a common misunderstanding that architecture (unlike the city) is a phenomenon set apart from policy, regulations, and processes of governance."9 Their project has been to marshal a range of studies that attempt to establish concrete, localised and historically specific relationships between the processes that bring architecture into being, and the larger-scale political and economic forces—financialization prime among them—that have more recently been described in terms of neoliberalism.<sup>10</sup> This article aligns itself with this methodological project, choosing perhaps the most blatant example of architecture's financialization as the basis to investigate its *architectural* consequences.

At Chelsea Harbour, speed characterized the way in which architecture negotiated a rapidly changing political and regulatory environment that actively promoted speculative development. While, historically, speed of construction had largely been understood as a consequence of technological advances, including material innovations or new processes of building, <sup>11</sup> Chelsea Harbour's speed encompassed all aspects of the project from design development, planning approval, construction, and occupation, and it was a particular function of the way in which the entire project was managed. In the 1970s, Moxley had developed what he called the Alternative Method of Management (AMM), an approach that positioned the architect as the lynchpin of the construction process, directing all work on site and

producing detailed construction drawings 'just in time' as projects progressed. Chelsea Harbour offered a context where that method could be applied and refined as a way of repositioning the architect in the midst of significant change to the regulatory environment. Moxley demonstrated how architects could take charge of all aspects of the development and construction process at a time when professional specialisation was seen to be the way in which architects should respond to the increasingly competitive and financially lucrative field of speculative development.

And in a nod to Jameson—and to Portman, whose architecture and business-minded persona would have impressed Moxley—the atrium was the material instantiation of what this taking charge meant. The regulatory and engineering problems presented by Chelsea Harbour's atriums—their spatial and functional arrangement presented significant fire safety issues—meant that the architect had to take on the professional risk associated with their design, assuring their safety as regulatory approval lagged construction. Far from being an impediment to fast building however, the active taking on of this risk enabled Moxley to demonstrate a new kind of architectural expertise.

# "Streamlining the Cities"

Ray Moxley and his colleague Peter Bedford hatched the idea for Chelsea Harbour in 1981. They approached British Rail with an idea to develop a wedge of disused land buttressed on one side by a railway line, and on the others by the River Thames and the small tributary of Chelsea Creek. The site was contaminated by prior industrial uses and its inclusion as part of wider transport development plans had recently been abandoned. By the mid-1980s British Rail, then publicly owned, was selling land and beginning to operate on a commercial footing as part of Prime Minister Margaret Thatcher's policies of privatisation. The British Rail Property Board decided to investigate the merits of Moxley and Bedford's idea and launched a design-and-build competition for the site under the auspices of local borough Hammersmith and Fulham. The scheme was thus launched as a competitive tender to which Moxley and Bedford submitted a proposal. Having initially teamed up with developers Rosehaugh, the architects ended up winning the competition with a consortium comprising cruise line P&O, its wholly owned subsidiary Town & City Properties, and Globe Investments. The consortium's scheme, which also included input from

Chamberlin Powell and Bon, well-known as architects of London's Golden Lane and Barbican developments, was endorsed in 1985.<sup>16</sup>

At this point, an overhaul of building and planning regulations had a significant effect on the overall shape of the Chelsea Harbour development and the way in which speed would be deployed as its key strategy. In 1979, Michael Heseltine, Secretary of State for the Environment in Thatcher's newly elected government, announced the principles that would guide a review of building regulation in England: "maximum self-regulation; minimum Government interference; total self-financing; and simplicity in operation." As a result of this review, a new *Building Act* was legislated in 1984, coming into force the following year. An accretive, legalistic, and prescriptive set of codes was replaced by an overarching *Act* that governed building regulations and their enforcement. Crucially, the new *Building Act* made provision for what were known as approved documents that would provide guidance on how compliance with building regulations could be achieved. This structure promoted a performance-based approach to compliance, the approved documents allowing for alternative ways to achieve it.

At the same time, Heseltine wanted to see what one commentator called 'a proper investigation of the speed and ease of procurement of new industrial and commercial building in the UK.'18 The resulting report, published in 1983 under the auspices of the National Economic Development Office (NEDO),19 analysed 56 case studies of industrial buildings and concluded that there was "substantial scope for improving the general pace of construction of industrial buildings without sacrificing quality or increasing cost."20 The report found that what it called a "separate management function" led to the fastest projects within the sample, regardless of the specific way in which a project was structured, whereas traditional methods of contracting and construction were the slowest. The report didn't recommend any specific structure for obtaining greater speed, except to emphasize the crucial importance of project management in liaison between the client and the building contractors. This role could be taken by any of the major players in the process: architect, main contractor, engineer, quantity surveyor or the newly emerging design/build firm.21

A further major regulatory change announced by Heseltine in 1983 would completely alter how planning worked in England. His white paper titled "Streamlining the Cities"<sup>22</sup> set the stage for the abolition of the Greater London Council (GLC), the body responsible for strategic planning, development approvals and the enforcement of building codes across London.<sup>23</sup> Under the changes proposed, the power of development approval and code enforcement would reside with local borough councils and a new planning commission would be set up for London that directly advised the Secretary of State for the Environment. Strategic planning would thus sit at a central government level, divorced from actual decision-making regarding developments, the consideration of which would be localised.

These regulatory and policy-level changes presented challenges as well as opportunities for the Chelsea Harbour scheme. The first issue had to do with the timing of its planning application. The GLC was due to be abolished on 1 April 1986 and local borough elections would be taking place on 8 May. A key part of the planning application was the scheme's 1800-space carpark. This was not likely to have been approved by the GLC, as it was responsible for integrated road and transport planning in greater London and would not have allowed for such an increase in car usage in central London. There was also a fear that the local Borough of Hammersmith and Fulham would be controlled by the Labour Party after the upcoming local election, potentially hindering a smooth planning approval process for the project.<sup>24</sup>

Given these factors, the developers were keen to take advantage of the small window that would open between the abolition of the GLC and the local borough election. Rather than a reasonable timeframe for detailed design development, which would have been about two years, the Chelsea Harbour consortium took only six months from the approval of their competition design to submit the scheme for planning permission. Approval was given by the Borough of Hammersmith and Fulham at 11pm on 15 April 1986, three weeks before it became Labour-controlled. Work on site to pile footings began at 8am the next day. <sup>25</sup> This was reported to have been, in the words of John Anderson, the director of Town & City Properties, "nine hours behind programme". He went further, saying that 'This attitude, that speed is not only everything but the *only* thing, was to prevail for the next 2½ years'. <sup>26</sup> The ambitious

timeframe was a commitment made during the competition process, replacing what would usually have been a four-year construction period for a project of this scale and complexity.<sup>27</sup> As one commentator remarked, the working understanding of such a fast track development was that "design and construction proceed hand in hand".<sup>28</sup> Anderson's definition was blunter. For him it meant "building with the planning drawings".<sup>29</sup> Anderson's deputy, Graham Torode, explained that "there were enormous problems finalizing the designs … but as long as they were finished five minutes before work started, we were ok. Otherwise, we were not."<sup>30</sup>

## An Alternative Method of Management

It is important to see this approach to the Chelsea Harbour development not simply as an opportunistic response to regulatory and policy change imposed externally, even though, at the heart of Thatcher's approach to (de)regulation was the idea that speculative development would respond to the conditions set for it. However, the way in which such an approach to development could be achieved professionally and industrially is equally important to understand, as it gives specificity to what are otherwise abstract sets of relationships.

For more than a decade leading up to the Chelsea Harbour development Moxley had been developing an approach to the delivery of projects that positioned the architect as the manager of the entire process. This approach was articulated through what he called the Alternative Method of Management (AMM). He argued that "conventional methods of management used in the building industry fall short of a reasonable level of service in terms of cost control, quality control, and speed."31 AMM dispensed with the convention of having a main contractor. Effectively, the architect would be in charge of the project from accepting the client's brief to delivering the finished building. The architect would be responsible for running the site and would be resident there full-time together with the engineers, quantity surveyors and specialist building contractors, producing detailed drawings and specifications collaboratively with this team as the job progressed, rather than in advance: "In effect the site architect/manager replaces the main contractor's site agent and provides the site with direct and constant designer supervision."32 This meant that the architect could liaise directly with the client about all matters of the project—the client, too, ought to be visiting site regularly—and effectively pushed the finalisation of the design well

into the construction of the project, with the aim of allowing the architect to work more closely with the construction trades in sorting out issues of detailing and buildability. Moxley also referred to AMM as "architect directed design/build",<sup>33</sup> distinguishing it from a standard design/build approach, which he thought "regards design as a subsidiary function subject to economic pressure."<sup>34</sup> While the architect would be bearing more responsibility and professional liability, Moxley claimed that this collaborative approach would ultimately lead to fewer conflicts and, therefore, less litigation. Problems or variances could be dealt with as they arose, on site.

Avoiding a main contractor also avoided the issue of an overall construction tender. Moxley felt that the conventional tender process meant that prices often came in low with the idea that costs could be claimed back later in the process through variations. In AMM, this whole-of-project approach to tendering was avoided. The quantity surveyor had the role of taking bids from different specialist trades with reference to a basic schedule of quantified items (BSQI) that divided the whole project into different zones of construction that packaged together structure, services and final finishes. This effectively meant that all the costs for each zone of the project could both be separated out and also seen together, an advantage, Moxley thought, for the client in keeping track of expenditure. It was also advantageous in terms of the tender process itself. Each zone could be separately and individually tendered, with packages able to be prepared in much shorter timeframes and begun in parallel. For Moxley, under AMM, competitive tendering was simply "the summation of the tenders of groups of reputable specialist contractors for each element of the job",35 and, notably, wouldn't include the overheads charged and profits typically expected by a main contractor.<sup>36</sup> Legally, AMM used a modified contract from the National Joint Consultative Committee for Building (NJCC), with a special clause added "empowering the specialist team to remove or duplicate any specialist contractors who fail to work to program at the agreed strength. This power of duplication is far more effective in ensuring prompt and adequate service than the threat of liquidated damages."37 A 'live' study of one of Moxley's projects undertaken by the UK government's Building Research Establishment (BRE) found that the overlapping of activity that was normally sequential was the key to AMM's speed.<sup>38</sup> Because of duplication, tendering for and completing work became a competitive process on site, during construction.<sup>39</sup> This need for speed was justified in terms of the

client/owner reducing their overall borrowing costs during construction, avoiding the potential costs of inflation and being able to occupy (and profit from) the building more quickly. Moxley believed that under AMM, renovation projects could be completed in a quarter of the usual time and new buildings in half the time.<sup>40</sup>

Variability, which normally sees construction costs blow out, became an asset under AMM. This was because it used a minimum of drawn documentation in advance of construction starting. Moxley thought that what he called the "system of documentation" required in a normal construction process—specifications, detailed drawings and the bill of quantities—was not readily understood by the trades that needed to implement it, and actively worked against communication and feedback between builders and architect.<sup>41</sup> The BRE study argued that: "drawings are a means to an end—a communication not a product. Full pre-planning is not the best means of control because changes are inevitable and as more time is spent tying up details, there is more chance of changes".42 Communication, rather than complete sets of drawings, was therefore vaunted as the particular skill the architect needed to deploy under AMM. While planning consent was necessary for construction to commence, "even this can be expedited by making the effort to meet with the planning authority", such that "building regulations' approval may be anticipated, and the risk of minor changes accepted."43 This approach might seem to fly in the face of accepted methods of quality assurance, usually managed by a comprehensive specification and complete sets of detailed drawings. AMM was structured opposite to the way in which the construction process was defined in the National Building Specification, an overhauled version of which was released by the Royal Institute of British Architects (RIBA) in 1973. This version shifted what had been a description of the process of building, organized according to different trades, to an abstract arrangement ordered according to the different parts of a building. This effectively specified the finished product, the attempt being to position the architect, via the instrument of the specification, as the coordinator of a building's component parts, many of which would be industrial products.<sup>44</sup> Ignoring these changes, Moxley believed that it was the architect's constant presence on site that meant that communication could take place directly between architect and tradespeople as work was being planned and completed, without any intermediary.<sup>45</sup> Summarizing AMM, somewhat grandiosely,

Moxley thought that this direct approach to maintaining quality on the construction site "was the way in which, in the great ages of architecture, we built our buildings." <sup>46</sup>

On this basis Moxley campaigned against the RIBA's professional code of conduct and made a direct appeal for the lifting of the restrictions on the profession of architecture. He argued that if all design/build contracting had the high standards he was used to as an architect, "then the RIBA would have no hesitation in permitting architects to be directors of building companies."47 That change, which had been fomented from the late 1960s through the Monopolies and Mergers Commission's investigation into restrictive practices,<sup>48</sup> would finally be enabled in the early 1980s, with the profession of architecture effectively being deregulated. Under new codes of conduct ratified by the RIBA and the Architects' Registration Council of the UK (ARCUK), adherence to fixed fee scales would be abandoned, architects could promote their services, were free to form publicly tradable companies, and could enter the development and construction business.<sup>49</sup> Where this would lead to the need for architectural firms to develop and market increasingly specialized services,<sup>50</sup> Moxley's claim was for a repositioning of the architect as leading expert across the entirety of the design and construction process. What he was articulating in this was a distinct and new capability for the architect—project management which was itself a newly emerging role within the building industry by the early 1980s.51

## **Management Speed**

The twinned design and construction process of Chelsea Harbour showed what these changes meant on the ground. However, Moxley's somewhat romanticized repositioning of the architect at the centre of the construction process, pursuing quality above all else, obscures the specific work practices, labour arrangements and financial processes used on the project.

The development consortium set up its structure in a particular way. Moxley, Jenner and Partners, a limited liability company, were the nominated architects, retaining input from Peter Bedford and the firm known from 1985 as Chamberlin Powell Bon and Woods. P&O and Globe Investments became the client, with Town & City Properties (later named P&O Developments) as project managers. Because they were

part of the initial consortium bid, they essentially acted as a 'sub-client'.<sup>52</sup> Bovis Construction were the construction managers, with American firm Lehrer McGovern Inc. retained as a partner to deliver specialist construction knowledge based on their experience driving fast building practices in the United States. They were described as "facilitators", playing a liaison role between the architects and the construction managers, "intercepting design and construction problems before they become a problem on site."<sup>53</sup> Added to this team was the firm Johnson, Jackson & Jeff (JJJ) as project control consultants. Their task was "to offer an independent assessment during design, procurement and construction, and to chivvy up the flow of information and decision making."<sup>54</sup>

Perhaps surprisingly, given the central role Moxley held for the architect, and architectural expertise, there was little innovation in the working practices of the architect's office. When it won the design competition for Chelsea Harbour, Moxley, Jenner and Partners had only 20 employees and the project was three times bigger than any the office had tackled before. The office doubled in size to cope with the work and were aided by input from Chamberlin Powell Bon and Woods. At the peak of the project's construction 71 architects were employed. To manage its expansion, the office negotiated monthly fee instalments (handily, Moxley had written *The Architect's Guide to Fee Negotiations* in 1984). Interestingly, however, they did not invest in computer aided design equipment—then entering the market—and production drawings were still completed by hand using manual overlay. Moxley found this method "extremely cost-effective and it doesn't tie us down to a huge investment in hardware that we may not have enough use for after this job." In a way that echoed the often-romanticized understanding of how (and why) architects do their work, it was reported that "evening and weekend work was commonplace".

Within this complex structure, knowledge, oversight and decision making were held in management functions to which architectural processes—defined as the manual production of drawings on demand—were subject.<sup>58</sup> The way this management function worked became particularly evident in the project's tendering processes, which were based on competition and the continual assessment of performance. The construction of each of the seventeen buildings at Chelsea Harbour was awarded as a separate contract, negotiated as the development progressed. As Graham Torode

remarked: "No contractor has an automatic right to win further work just because it's already on site. If it has done well, it will be included on the tender list, otherwise, it will be off."59 The architects and construction managers would recommend contractors, with their "reputation in industry and financial viability" being investigated. 60 Interview processes and visits to contractors' facilities were also part of what was described as a "lengthy and demanding tender process." 61 Moxley was reported as saying that "attitude" was as important as "quality and reliability" and that "price rarely came up as a high priority." 62 While this involved process might seem counterintuitive in the quest for speed and cost efficiency, it acted as a kind of trial run for the practices that contractors would be subject to in the project: multiple levels of oversight, scrutiny and quality control, as well as the constant comparison between contractors and the competition as new work was let for tender. This method worked well for contractors who performed and were willing to be flexible, which really meant being able to build quickly. One construction firm, Byrne Brothers, initially won the contract for the concrete frames for two of the development's buildings, with a tender for £3.5 million. They subsequently won the tenders for the rest of the buildings' frames, turning over £22 million in the process, an amount over five times more than they had managed up to that point.63

# **Material Speed**

Concrete was the material correlate to the Chelsea Harbour's management structure, its pliability and mutability the perfect medium for the project's 'just in time' ethos. The designers had originally thought the buildings would be constructed from steel but changed to concrete once the development was approved. Even though steel frames could be erected relatively quickly, concrete dispensed with steel's long lead times and could adapt to the changes that were being made to the design during construction. Conveniently, the concrete plant used throughout the project was just down the road from the site. The same mix of concrete was specified for all the buildings, further increasing speed through simplicity and the ability to send any concrete mix to any part of the site. Structural simplicity was also paramount. The column set-out of the carpark effectively established the column grid for the buildings above.<sup>64</sup> Flat slabs were poured without any beams or downstands. Thresholds between inside and outside, necessary to mitigate water penetration, were cast as separate upstand beams. Because of this regularity and repetition, flying

forms (also known as table forms) were used for larger floor slabs, enabling reuse and reducing the amount of time spent erecting formwork.<sup>65</sup> Getting the concrete floor slabs as flat as possible was also crucial and this was mostly achieved by power floating the slabs. Carpet was to be laid directly on top of the slab, without any levelling screed. The soffits, too, needed to have a smooth finish, as only a skimmed layer of plaster was to be applied. These processes reduced the need for wet trades to be on site after the structures had been completed, allowing finishing trades full access to the site.<sup>66</sup>

As efforts to increase the speed of construction, some of these methods might not seem particularly economical. There was a tension between achieving efficient and practical grids for both the carpark and the flats above it. A transition slab between the carpark and the buildings above would have enabled their structural grids to be independent, but for reasons of cost and speed, this was not specified.<sup>67</sup> The speed of drawing production meant that some repetition led to the overengineering of structures. And any subsequent changes to plans, such as the location of services, meant cutting through concrete slabs.

Moxley justified these processes in the overall financial terms of the development. The total cost of construction was £100 million.<sup>68</sup> At its height, bills totalled £1 million per week and Moxley believed that he "should be achieving sales of two million on that week's work. If the profit margin is 10%, then that's £200,000. So if you delay a week to sort out a hitch, you've lost that amount of profit. Trying to compare that to the cost of putting in an extra staircase or fire escape, or simply cutting a few holes, is absurd."<sup>69</sup> This kind of flexibility in construction also translated into flexibility for the market. In the first offer to market, flats were able to be customized by purchasers because the building structures were designed as shells into which the apartments were inserted.<sup>70</sup> Moxley noted that buyers were essentially purchasing "an enclosed space in a defined location".<sup>71</sup> He secured his own apartment in Belvedere Tower, which was reported to have "increased greatly in value in a matter of months".<sup>72</sup>

## **Speed and Risk**

Construction speed relied on material homogeneity. Design, in this instance, was about providing an acceptable level of variation that would be amenable to the different commercial and financial interests in the development. There seemed to be no special role for architecture per se, except in delivering a flexible outcome. Yet, one aspect of the design illuminates a much more important question for architecture as it negotiated larger-scale shifts in building and planning regulation that were occurring in this period. A year before Chelsea Harbour was due for completion, Brian Finnimore—Moxley, Jenner and Partners' design co-ordinator for the development—noted that the Harbour Yard building presented significant problems when it came to fire safety. The building was proposed with a mix of functions: restaurants, bars, commercial and light industrial studios, as well as flats, arranged around a full-height, top-lit atrium with open circulation galleries. It had been established that fire and smoke could quickly spread through such a building because of the spatial connectedness the atrium provided.<sup>73</sup> Yet, at the time Chelsea Harbour was under construction, the atrium building type had eluded definitive regulation. As the statutory body enforcing building codes in London, the GLC had realised the risks the atrium presented, issuing in 1985 a Technical Information Note on fire safety and the atrium.<sup>74</sup> The note promoted what it called an "engineering design approach" to the fire suppression systems that would need to be designed into the atrium.<sup>75</sup> The problem, of course, was that the GLC would become defunct in 1986, shedding its vast store of technical expertise that could inform such an approach. Decisions regarding fire safety, along with building approvals, were then left to the local borough councils.

In this context Finnimore painted a picture of delayed and deferred decision-making regarding fire safety compliance at Chelsea Harbour. In the fast-track approach, where design decisions were made progressively alongside the construction process, Finnimore described how the local authority could only take on an advisory role in lieu of the design being finalized. Further, given the novelty of the atrium morphology and the way it combined different functions normally separated from each other, local authority officers might not have the expertise or experience to make definitive judgements regarding its safety, especially in relation to designs still under development. They were able to seek advice from London Scientific Services, an organisation set up after the dissolution of the GLC, but this only further

fragmented and deferred the decision-making process, leaving the architect at significant risk if design decisions likely then to be under construction were eventually deemed to be non-compliant at the project's completion. Counterintuitively in the context of a development process built on speed and flexibility, Finnimore made a plea for a regulatory apparatus that would give certainty, rather than being open to continual negotiation.<sup>76</sup>

What is evident and yet not worked through in Finnimore's discussion is the consequence of Moxley's efforts to reposition the architect as the manager of an entire development process. Moxley did not invest in a significant change either to architects' tools of the trade, nor in the basic organisation of architectural labour. Architects under Moxley's direction still drafted by hand, drew fees and worked all hours. What Finnimore recognized, to his evident chagrin, was that the architect—as director, project partner and manager—was being positioned as the professional who took on risk, as risk was what replaced the certainties of prescribed outcomes in regulation. But this active repositioning of the architect was made possible because of an architectural logic rather than a regulatory one. Still a relatively new architectural feature in London at the time,77 the atrium brought the consequences of the performance-based approach governed by the new Building Act to the fore, in particular the lack of technical knowledge that could inform design and code enforcement.<sup>78</sup> This put the architect front and centre in making risk-based design decisions. Yet, the very nature of the atrium design and its speed of construction meant that risk could be shown to be actively and successfully managed by the architect.79

To be sure, a larger narrative attends this repositioning of the architect. It was about professional differentiation in an increasingly competitive marketplace, one where professional competence, expertise and speed were valued. Moxley's development of AMM had set the scene architecturally for what shape this repositioning could take once regulatory apparatuses changed, and the material and programmatic shape of the atriums at Chelsea Harbour allowed for the demonstration of this competence and expertise.

## Conclusion

The watchwords of the Chelsea Harbour development process—management, communication, flexibility, competition, performance, risk-marked the way in which an approach to development was also the negotiation of a larger-scale environment of deregulation, marketization and financialization. Speed precipitated and also marked these ways of acting: the sequence of construction became about the management of overlaps and communication with multiple stakeholders. Speed leveraged competition, which in turn promoted flexibility and the demonstration of performance. And speed meant the embracing of risk as the architect's ultimate professional comportment with respect to the regulatory apparatus. Speed, then, wasn't only what ensured greater profits gained by quick project delivery. Certainly, design and construction processes became more fast-moving, yet so did the political context within which these processes took shape. So-called 'streamlining' was one political mechanism used to precipitate this sense of change. But the experience of it was hardly smooth. Chelsea Harbour showed that regulatory change manifested itself as a series of gaps: the gap (or window) in planning approval; the gap in knowledge and expertise induced by the dissolution of the GLC; even the on-site gaps between project phases and different construction packages. Rushing forward into these gaps was a project team who organized drawings, approvals and tenders 'just in time', with a design that made risk management the centrepiece of architectural competence and expertise.

By the late 1980s fast building had been established as a prominent development method. In 1989, the *Architects' Journal* ran a series of ten articles on the topic, including two by Moxley and a profile of Chelsea Harbour. The articles outlined the legal aspects of contracts, project management principles, issues of design and construction including detailing, prefabrication and value engineering, and perspectives on the structuring and speed of international construction practices. Prominent developments were also featured, including Broadgate in the City of London, Stockley Park on the outskirts of London, as well as firms such as Arup Associates, Foster Associates, DEGW and Building Design Partnership.<sup>80</sup>

If management, communication, flexibility, competition, performance and risk are also the watchwords of neoliberalism, then the fast-building practices discussed in these articles, and demonstrated at Chelsea Harbour, positioned them in relation to a

set of architectural practices and processes that were historically and geopolitically specific. The atriums of Harbour Yard or the London Design Centre would never have had the symbolic power or potency to induce the kind of bewildered vision of late capitalism that Fredric Jameson experienced in the Bonaventure Hotel. [FIGURE 7] Yet, the process and technicalities of their architectural coming into being materialized a shifting set of relationships between the architectural profession, the construction industry, and a regulatory system, repositioning the architect within the managerial, flexible, risk-based apparatus of speculative development. While we might legitimately critique the Chelsea Harbour development for its various dissimulations of architecture's relation to money in all its forms, it allows insight into the workings of a profession and a process of design and construction that makes abstract financial relationships concrete.

# **Figure Captions**

Figure 1

Chelsea Harbour. Schematic diagram. Drawing by Sophie Lanigan.

## Figure 2

Chelsea Harbour. Marina, hotel (centre), and apartment block (right). Photograph by Nigel Talamo, 2022.

## Figure 3

Chelsea Harbour. Apartment block (left), Belvedere Tower (centre), and Harbour Yard (right). Photograph by Nigel Talamo, 2022.

## Figure 4

Chelsea Harbour. Interior of London Design Centre. Photograph by Nigel Talamo, 2022.

## Figure 5

Chelsea Harbour. Apartment block. Photograph by Nigel Talamo, 2022.

## Figure 6

Chelsea Harbour. Apartment blocks and marina. Photograph by Nigel Talamo, 2022.

## Figure 7

Chelsea Harbour. Interior of London Design Centre. Photograph by Nigel Talamo, 2022.

## Acknowledgment

Research for this article has been supported by the Australian Research Council under its Discovery Projects scheme (DP190101114). I would like to acknowledge and thank Helen Gyger for her research assistance.

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<sup>&</sup>lt;sup>1</sup> Russ Swan, "Fast-track Redefined," *Concrete Quarterly* 158 (Autumn 1988): 8; Graham Ridout, "Concrete Achievement," *Building* 251, no. 47 (21 November 1986): 61.

<sup>&</sup>lt;sup>2</sup> Ridout, "Concrete Achievement," 57.

<sup>&</sup>lt;sup>3</sup> Ridout, "Concrete Achievement," 61.

<sup>4</sup> Swan, "Fast-track Redefined," 17.

<sup>&</sup>lt;sup>5</sup> See Mary McLeod, "Architecture and Politics in the Reagan Era: from Postmodernism to Deconstructivism," *Assemblage* 8 (February 1989): 22-59.

<sup>&</sup>lt;sup>6</sup> Fredric Jameson, *Postmodernism, or the Cultural Logic of Late Capitalism* (London: Verso, 1991), 44. The account of the Bonaventure developed in this book is a revised version of two earlier texts: Fredric Jameson, "Postmodernism: the Cultural Logic of Late Capitalism," *New Left Review* 146 (1984): 53-92; and Fredric Jameson, "Postmodernism and Consumer Society," in E. Ann Kaplan, ed., *Postmodernism and its Discontents* (London: Verso, 1988), 13-29.

<sup>&</sup>lt;sup>7</sup> Mike Davis, "Urban Renaissance and the Spirit of Postmodernism," New Left Review 151 (1985): 109-110. See Davis's own critique of urban development practices in Los Angeles in Mike Davis, "The Infinite Game: Redeveloping Downtown L.A.," in Diane Ghirardo, ed., Out of Site: A Social Criticism of Architecture (Seattle: Bay Press, 1991), 77-113; Mike Davis, "Chinatown, Part Two? The 'internationalisation' of downtown Los Angeles," New Left Review 164 (1987): 65-86; Mike Davis, City of Quartz: Excavating the Future of Los Angeles (London: Verso, 1990). See the critique of this mode of critical urban analysis in Rosalyn Deutsche, Evictions: Art and Spatial Politics (Cambridge, MA: MIT Press, 1996), 198-9; and my discussion in Charles Rice, Interior Urbanism: Architecture, John Portman and Downtown America (London: Bloomsbury, 2016), 20-26.

<sup>&</sup>lt;sup>8</sup> Reinhold Martin has given a more nuanced account of this relationship, arguing for a more thoroughgoing discursive entanglement between architecture and postmodernism. See Reinhold Martin, *Utopia's Ghost: Architecture and Postmodernism, Again* (Minneapolis: University of Minnesota Press, 2010). Douglas Spencer has also reanimated Jameson's account of architecture's mediating function to characterize the emergence of an affect-based architecture of neoliberalism. See Douglas Spencer, *The Architecture of Neoliberalism: How Architecture Became an Instrument of Control and Compliance* (London: Bloomsbury, 2016).

<sup>&</sup>lt;sup>9</sup> Kenny Cupers, Catharina Gabrielsson and Helena Mattsson, "Introduction: Undead Neoliberalisms," in Kenny Cupers, Catharina Gabrielsson and Helena Mattsson, eds., *Neoliberalism on the Ground: Architecture and Transformation from the 1960s to the Present* (Pittsburgh: University of Pittsburgh Press, 2020), 5. In addition to the chapters of this anthology, see also Jonathan Massey, "Risk Design," *Grey Room* 54 (Winter 2014): 6-33; Sara Stevens *Developing Expertise: Architecture and Real Estate in Metropolitan America* (Yale University Press, 2016); Amy Thomas, "Architectural consulting in the knowledge economy: DEGW and the Orbit Report," *The Journal of Architecture* 24, no. 7 (November 2019): 1020-1044.

- <sup>10</sup> Within critical urban studies, Neil Brenner has recognized the need to identify what he calls 'actually existing neoliberalisms'. See *Neil Brenner*, *Critique of Urbanism: Selected Essays* (Basel: Birkhauser, 2017).
- <sup>11</sup> For example, the Crystal Palace (Joseph Paxton, London, 1851), or the Empire State Building (Shreve, Lamb, and Harmon, New York, 1930).
- <sup>12</sup> Mira Bar-Hillel, "Chelsea Harbour: Berthed at Last," *Building* 249, no. 35 (30 August 1985): 20; Swan dates the idea to 1984. Swan, "Fast-track Redefined," 9.
- <sup>13</sup> Ben Campkin, *Remaking London: Decline and Regeneration in Urban Culture* (London: IB Tauris, 2013), 108-110.
- <sup>14</sup> Bar-Hillel, "Chelsea Harbour," 21.
- 15 Swan, "Fast-track Redefined," 9.
- <sup>16</sup> The competition process was not without controversy. Moxley's team's entry initially won the competition which was then opened again because the size of the financial bid was deemed too low. The team then won the second round. See Godfrey Golzen, "When the Big Break Comes," *The Architect: The Journal of the Royal Institute of British Architects* 94, no. 4 (April 1987): 32, Swan, "Fast-track Redefined," 9-10; Bar-Hillel, "Chelsea Harbour," 21.
- <sup>17</sup> Secretary of State for the Environment and Secretary of State for Wales, *The Future of Building Control in England and Wales*, Cmnd. 8179 (London: Her Majesty's Stationery Office, 1981), 4.
- <sup>18</sup> Colin Davies, "Building Up Speed," Architects' Journal 178, no. 27 (6 July 1983): 28.
- <sup>19</sup> National Economic Development Office, *Faster Building for Industry* (London: Her Majesty's Stationery Office, 1983). The research for the report was undertaken by the Building Research Establishment (BRE) and engineering consultants Ketchington Little. The scope of the report was limited to industrial buildings.
- <sup>20</sup> Davies, "Building Up Speed," 28.
- <sup>21</sup> On the emergence of design/build in the UK, see the dossier "Design/Build: A Different Solution?" *Building* (20 January 1978): 68-90.
- <sup>22</sup> Department of the Environment, *Streamlining the Cities: Government Proposals for Reorganising Local Government in Greater London and the Metropolitan Counties*, Cmnd. 9063 (London: Her Majesty's Stationery Office, 1983), 4. For an instructive discussion of the relationship between ideology and implementation in the Thatcherist deregulation agenda and its shifting dimensions through the 1980s and after, see Andy Thornley "The Ghost of Thatcherism," in Philip Allmendinger, Huw Thomas, eds., *Urban Planning and the British New Right* (London: Routledge, 1998), 211-235.
- <sup>23</sup> Ken Livingstone, the incumbent left-wing Labour leader of the GLC, saw the whole plan as politically motivated. See Ken Livingstone, "Confound Their Politics!" *Town and Country Planning* 52, no. 12 (December 1983): 335. The enmity between Livingstone and Conservative politicians was well known, with one commentator remarking: "It is not often that personal revenge is advanced as a reason for major institutional change, yet such explanations have been advanced in Britain as plausible in the case under consideration". (M. R. Bristow, "A Woman in Planning, or Metropolitan Planning Revisited 1984," *Built Environment* 10, no. 1 [1984]: 85.) The "woman in planning" of the article's title is a reference to Thatcher herself, Bristow arguing that the changes to planning proposed by the Conservative Government were a result of Thatcher's "personal political decision" (81). Livingstone became Mayor of London under a newly constituted Greater London Authority in 2000, serving until 2008 when Boris Johnson was elected. For a detailed examination of the effects of the dissolution of the GLC, see Tony Travers, "London after Abolition," *Local Government Studies* 16, no. 3 (1990): 105-116.
- <sup>24</sup> Swan, "Fast-track Redefined," 10.
- <sup>25</sup> "Fast Building: Chelsea Harbour," Architects' Journal 191, no. 18 (November 1989): 71.
- <sup>26</sup> John Anderson quoted in Swan, "Fast-track Redefined," 12.
- <sup>27</sup> Golzen, "When the Big Break Comes," 32; "Fast Building: Chelsea Harbour," 71.
- <sup>28</sup> Swan, "Fast-track Redefined," 12.
- <sup>29</sup> John Anderson quoted in Swan, "Fast-track Redefined," 12.

- 30 Graham Torode quoted in Swan, "Fast-track Redefined," 13.
- 31 Ray Moxley, "Streamlined Management," Building 233, no. 29 (22 July 1977): 70.
- 32 Neil Thomson, "Alternative Method of Management," Building 234, no. 4 (27 January 1978): 68.
- 33 Ray Moxley, "Quality of Design," Building 234, no. 3 (20 January 1978): 86.
- 34 Moxley, "Quality of Design," 86.
- 35 Moxley, "Streamlined Management," 71.
- <sup>36</sup> Thomson, "Alternative Method of Management," 70.
- 37 Moxley, "Streamlined Management," 71.
- <sup>38</sup> Thomson, "Alternative Method of Management," 69. The BRE study was of one of Moxley's office rehabilitation projects and noted the experience of two central pillars of AMM: close client involvement and the close control of subcontractors' work. The study noted that the client attending regular site meetings with the construction team enabled "rapid decision making," but a time blowout on the project due to a major structural change made the client unhappy. The architects then "questioned the value of such heavy client involvement" (69). The study also reported an instance of a subcontractor being replaced because of poor work, and the doubling up of two different joinery contractors, each being used "where their respective talents were most effective" (70).
- <sup>39</sup> The BRE study pointed to some problems with programming of works. Short term programs were prepared which meant that "there was a failure to look at work overall." Thomson, "Alternative Method of Management," 70.
- <sup>40</sup> Moxley, "Streamlined Management," 71.
- <sup>41</sup> "The Architect and Project Management," Building 234, no. 4 (27 January 1978): 72.
- <sup>42</sup> Thomson, "Alternative Method of Management," 67.
- 43 Thomson, "Alternative Method of Management," 69.
- <sup>44</sup> Katie Lloyd-Thomas and Tilo Amhoff, "Writing work: Changing practices of architectural specification," in Peggy Deamer, ed., *The Architect as Worker: Immaterial Labour, the Creative Class, and the Politics of Design* (London: Bloomsbury, 2016), 136. Lloyd-Thomas and Amhoff argue that the distinction between process and product-based specification was not so hard and fast, with the idea of the 'open' or performance-based specification subsequently gaining traction, especially in the context of large projects (138-139).
- 45 Thomson, "Alternative Method of Management," 70.
- <sup>46</sup> Moxley, "Quality of Design," 86.
- 47 Moxley, "Quality of Design," 86.
- <sup>48</sup> See "The Report of the Monopolies Commission on 'Restrictive Practices' in the Professions," *RIBA Journal* 77, no. 12 (December 1970): 557-59; "The Monopolies Commission: The RIBA Replies," *RIBA Journal* 78, no. 6 (June 1971): 240-42, 56.
- <sup>49</sup> See "New Government to Enforce Monopolies Report on Fees," *Building* 237, no. 27 (6 July 1979): 9. See also the account of Amy Thomas, "The Political Economy of Flexibility: Deregulation and the Transformation of Corporate Space in the Postwar City of London," in Cupers, Gabrielsson and Mattsson, eds., *Neoliberalism on the Ground*, 142-143. There was some tension and discrepancy between the approach of the ARCUK and the RIBA in revising their codes of conduct. See Denise Searle, "The New Morality," *Building Design* 530 (30 January 1981): 7; Neal Morris, "RIBA Reminds All Members about Fixed Fee Scale," *Building Design* 551 (26 June 1981): 3. For a discussion of similar shifts in the US context, see Jay Wickersham, "From Disinterested Expert to Marketplace Competitor: How Anti-Monopoly Law Transformed the Ethics and Economics of American Architecture in the 1970s," *Architectural Theory Review* 20, no. 2 (2015): 138-158.
- <sup>50</sup> Thomas, "The Political Economy of Flexibility," 143.
- <sup>51</sup> Davies, "Building Up Speed," 28.
- 52 Ridout, "Concrete Achievement," 59.
- 53 Ridout, "Concrete Achievement," 61.

- 54 Ridout, "Concrete Achievement," 59.
- 55 Alastair Stewart, "A Development with Celebrity Status," Building 253, no. 41 (7 October 1988): 90.
- <sup>56</sup> Golzen, "When the Big Break Comes," 32. For a different view of the utility of CAD for architects in a fast-building process, see Colin Davies, "Fast Building 1: Milestone or Millstone," *Architects' Journal* (11 October 1979): 79-81.
- <sup>57</sup> Golzen, "When the Big Break Comes," 32. See also Peggy Deamer, "Work," in *Perspecta* 47 (2014): 27-39.
- <sup>58</sup> See, for example, the way project management is defined relative to architecture in Martin Barnes, "Fast Building 3: Project Management," *Architects' Journal* (18 October 1989): 71-72.
- <sup>59</sup> Graham Torode quoted in Swan, "Fast-track Redefined," 14.
- 60 Stewart, "A Development with Celebrity Status," 90.
- 61 Stewart, "A Development with Celebrity Status," 90.
- <sup>62</sup> Stewart, "A Development with Celebrity Status," 90.
- 63 Swan, "Fast-track Redefined," 14.
- 64 Swan, "Fast-track Redefined," 16.
- 65 Ridout, "Concrete Achievement," 59.
- 66 Ridout, "Concrete Achievement," 61.
- <sup>67</sup> Swan, "Fast-track Redefined," 16.
- <sup>68</sup> Ridout, "Concrete Achievement," 57. Swan reported the cost of the development as £150 million. Swan, "Fast-track Redefined," 8.
- <sup>69</sup> Moxley quoted in Swan, "Fast-track Redefined," 15. See also "Fast Building 7: Finance," *Architects' Journal* 190, no. 19 (November 1989): 67.
- <sup>70</sup> Amy Thomas has described a similar shell and core approach to commercial building, pioneered by consultancy firm DEGW. Thomas, "Architectural consulting in the knowledge economy". This approach would become a feature of fast building in the commercial office sector. See Davies, "Fast Building 1".
- <sup>71</sup> Mira Bar-Hillel, "Shells on the Shore," *Building Design* 826 (6 March 1987): 22.
- <sup>72</sup> Golzen, "When the Big Break Comes," 32-33.
- <sup>73</sup> See, for example: George Atkinson, "Fire Hazards and the Design of Atria," *Building* 243, no. 41 (8 October 1982): 55; Alan Parnell and Gordon Butcher, "Smoke Control: Fire in Atria," *Building Services* 6, no. 6 (June 1984): 65-67.
- <sup>74</sup> Greater London Council, *Fire Safety for the Atrium: Technical Information Note* (London: Greater London Council, 1985). This note updated an earlier memorandum on the subject.
- 75 Anthony Ferguson, "Fire and the Atrium," Architects' Journal 181, no. 7 (February 1985): 69.
- <sup>76</sup> Brian Finnimore, "The Need for Atria Fire Codes," Fire Prevention 205 (December 1987): 30-33.
- 77 The atrium had become popularized in the UK as a result of Richard Saxon, *Atrium Buildings: Design and Development* (London: Architectural Press, 1983).
- <sup>78</sup> Approved documents regarding performance-based approaches fire safety for atrium buildings were slow to appear. See: London District Surveyors Association, *Fire Safety in Atrium Buildings*, Fire Safety Guide no. 2 (London: LDSA, 1989); British Standards Institution, *Draft BS for Fire Precautions in the Design, Construction and Use of Buildings: Part 7. Code of Practice for Atrium Buildings* (London: BSI, 1990); Loss Prevention Council, *REC RC 21 Recommendations for the Fire Protection of Atrium Buildings* (London: Loss Prevention Council, 1990).
- <sup>79</sup> On fire safety, risk and new forms of professional expertise, see Liam Ross, "Regulatory Spaces, Physical and Metaphorical: On the Legal and Spatial Occupation of Fire-safety Legislation," in Katie Lloyd Thomas, Tilo Amhoff and Nick Beech, eds., *Industries of Architecture* (London: Routledge, 2016), 235-244; Liam Ross, "Creative Uncertainty: Arup Associates, Fire Safety, and the

Metaengineering of Government," in Cupers, Gabrielsson and Mattsson, eds., *Neoliberalism on the Ground*, 270-293. On design manifesting regimes of risk, see Massey, "Risk Design".

80 Davies, "Fast Building 1"; Ray Moxley, "Fast Building 2: Problems and Potential," *Architects' Journal* 190, no. 15 (11 October 1989): 83-85; Barnes, "Fast Building 3: Project Management"; Richard Saxon, "Fast Building 4: Managing the Design," *Architects' Journal* 190, no. 16 (October 1989): 73-75; David Chappell, "Fast Building 5: The Legal Aspect," *Architects' Journal* 190, no. 17 (October 1989): 79-83; Ray Moxley, "Fast Building 6: Fast Details," *Architects' Journal* 190, no. 18 (1 November 1989): 67-69; "Fast Building 7: Finance," *Architects' Journal* 190, no. 19 (November 1989): 67; Barrie Evans, "Fast Building 8: Prefabrication," 190, no. 19 (November 1989): 69-71; Bob White, "Fast Building 9: Value Engineering," *Architects' Journal* 190, no. 19 (8 November 1989): 75-76; Martin Hordyk and Colin Cave, "Fast Building 10: Lessons from Abroad?" *Architects' Journal* 190, no. 19 (8 November 1989): 77, 79; "Fast Building: Chelsea Harbour"; "Fast Building: Broadgate Phases 3 & 4," *Architects' Journal* 190, no. 19 (8 November 1989): 72-73; "Fast Building: No. 5 Long Walk Road," *Architects' Journal* 190, no. 15 (11 October 1989): 86-87.