

## Fortified finance

How can the genealogy of early Modern fortified cities frame questions concerning sovereignty, security and identity in the contemporary financial districts of London?

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Contents

Introduction; The Threat of War.....p.4

Tactical Urban Boundaries .....p.7

'Ideal' Cities .....p.16

Conclusion .....p.21

List of Illustrations .....p.22

Bibliography .....p.23

# Introduction; the threat of war

Wealth production is the prioritised reigning driver of contemporary society as we know it. The historical formation of districts to facilitate finance has created highly secure and iconised nuclei of power within our cities. This contemporary condition is part of a recent history of the neoliberal dogma that has increasingly grown to govern over the last forty years; the principles of which include: privatisation, deregulation, free-market capitalism, minimal government intervention in businesses and reduced public spending on social services. These circumstances are represented archetypally in the financial districts of London of which this text will focus on: the ‘Eastern Cluster’ of the City of London and its younger satellite district: The Canary Wharf Development in the London borough of Tower Hamlets.

The prolific and recognisable urban typologies of these financial districts; condensed clusters of business-centric towers, has led me to consider the political devices at play in their construction. By using an anachronistic method, this text explores a critical comparison with the theoretical and physical developments of fortified cities of the 16th and 17th Centuries in Europe. With reference to Martha Pollak’s catalogue of the treatises in *Military Architecture: Cartography and the representation of the early modern city: A Checklist of Treatises on Fortification in the Newberry Library*, this text cross references the key principles of early Modern fortress urbanism with the contemporary sites of investigation in London. The relevant principles include: the threats of war, strategic urban boundaries and the conception of the ideal city.

As a referential backdrop, this text draws on the concept of biopower in regard to the building of cities being shaped by forces of power. A term coined by Michel Foucault in *The History of Sexuality*, biopower describes the ‘numerous and diverse techniques for achieving the subjugations of bodies and the control of entire populations’.<sup>1</sup> Foucault’s definition of biopower chimes with an anachronistic approach due to his acknowledgment of a shift in the 17th Century where the sovereign model of ‘power over life’ evolved into a power structure of two interconnected strands: One focussing on the body serving as the basis for biological processes. The second centred on the extortion of bodies as productive machines and their integration into value economic efficiency.<sup>2</sup> This text wants to highlight that these structures are still prevalent in contemporaneity.

It is important to outline the difference in conception between the two financial districts in question. The City of London’s status as a financial district, while established in the 1600s with the arrival of the Bank of England, grew over a much longer time frame.

None the less, the global centre of finance as we know it today has reached its current state largely due the acceleration of banking in the 1980s instigated by Margaret Thatcher’s free-market policies supporting the deregulation of the banks and new fibre-optic technology. This was known as the ‘Big Bang’ of finance. The embracing of technological reform in relation to finance saw digitalised trading propel the UK’s financial sector into the global market. This text positions the time period from the financial ‘Big Bang’ as the main historical-political timeframe that defines the contemporary financial districts as we know them today.

Canary Wharf on the other hand, the second financial centre of Britain, home to the market-led development of glazed skyscrapers, is the City of London’s 1990s East-End equivalent. Unlike its original counterpart, Canary Wharf grew from a different tradition - it was born out of the abandoned ground and severe unemployment created by the West India dockland’s industrial downfall.

In 1980, while the City of London boomed, the docks at the East End of London came to a close. The place which had once employed and housed hundreds of thousands of dockworkers began to see rocketing unemployment levels due to the industrial shift towards container shipping requiring deeper ports. The local economy had collapsed, the land was left dilapidated and over 200,000 people had vacated the borough.<sup>3</sup> While the land had been strategically appropriate for shipping, situated

in the River Thames’ peninsula and laced with internal ports; without a use, the area had become undesirable. The area was seen to require a complete overhaul and the government promoted policies for corporate development in the isolated area.<sup>4</sup> As a response to local depravation the government sought private solutions as opposed to a social initiative, and started the Canary Wharf Group project that invested in the financial district on the Isle of Dogs.

I think the value of drawing parallels and contextualising current powerful phenomena with history allows for a critical reading that could otherwise remain intentionally ungraspable. This is similar to Manfredo Tafuri’s critical historical framing method of contemporary situations, known as operative history.

This text aims to reveal the omnipresent yet indistinguishable power structures in the contemporary urban condition of London’s financial districts, that strike semblance with the historical formations of fortified cities. The act of positioning these three narratives of history - early modern fortified cities, the City of London’s Eastern Cluster and Canary Wharf - together in the space of a page aims to frame a history, as Tafuri describes, as “the continual exposure to the unexpected.”<sup>5</sup> This text does not seek causes, but presents ‘concatenations’, a series of connections that are not resolved conclusions. Furthermore, the purpose of drawing on two competing financial sites within London, that are part of a broader global financial market, aims to highlight a commonality of power structures implemented regardless of place. Nonetheless, I hope that a correlation of tangible similarities across place and time is helpful to form a lens in which to question the formation of urban conditions and their impact on society.

When considering the political context of the development of fortified cities, it is important to acknowledge the pervasive nature of wars in the 16th and 17th Century across Europe and how it became a pre-occupation of European society at large. Dominions within Europe and growing threats from the Ottoman empire were continually fighting to define and enlarge territories at each other’s expense.<sup>6</sup> As Mary Pollak outlines, war was central to the establishment of absolute monarchy effecting the structure of government which in turn formed the early modern European City. A relevant shift away from the practices of war in the middle ages was that battles and sieges were carried out in towns as opposed to open-fields. Thus, war became engaged with actively defending economically and politically important territory that established sovereignty as opposed to being a remote demonstration of strength.<sup>7</sup> The objects of sieges were the municipalities whose citizens dominated the surrounding territory or important trade routes.<sup>8</sup> Fortification became vital for the claim to a nation.

Through a lens of operative history, the dominance of wealth being a targeting factor of warfare has led me to the comparison that London’s financial districts encompass fortified cities meanwhile the market economy can be understood as an equivalent to the sovereign. However, Stephen Metcalf’s description has shifted that perspective slightly. Metcalf outlines the invention of neoliberalism as being beyond just pro-market policy and beyond the prioritisation of finance-capitalism as being our main economic driver. Rather, he suggests, it is an ideology that relies on the premise that competition is the only legitimate organising principle of humanity.<sup>9</sup> By accepting this assumption and establishing that the financial districts are the nuclei of the operations of the ‘universal market’<sup>10</sup> (or our society), the object of defence becomes the premise of competition; and the immaterial concept of competition in turn becomes the sovereign.

<sup>1</sup> Michel Foucault, Trans. Robert Hurley, *The History of Sexuality Volume I*, (1978, New York), p.140

<sup>2</sup> Ibid. p.139

<sup>3</sup> Jack Brown, After thirty years of Canary Wharf, how has it changed the geography of East London?, *The City Metric*, <<https://www.citymetric.com/fabric/after-thirty-years-canary-wharf-how-has-it-changed-geography-east-london-3565>> (accessed 12.04.19)

<sup>4</sup> Malcolm Oakley, ‘London Docklands, Canary Wharf History’, *East London History*, <<https://www.eastlondonhistory.co.uk/london-docklands-canary-wharf/>> (accessed 12.04.19)

<sup>5</sup> Manfredo Tafuri interviewed by Richard Ingersoll, Trans Richard Ingersoll, ‘There is no Criticism, only History’, *Design Book Review*, (no. 9, 1986), p.p 8–11 <<http://complace.j2parman.com/?p=263>> . (accessed 12.04.19)

<sup>6</sup> Martha Pollak, *Military Architecture Cartography and the Representation of the Early Modern City: A Checklist of Treatises on Fortification in the Newberry Library*, (Chicago, 1991), p.xii

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Stephen Metcalf, ‘Neoliberalism: The idea that changed the world’, *The Guardian*, <<https://www.theguardian.com/news/2017/aug/18/neoliberalism-the-idea-that-changed-the-world>> (accessed on 12.04.19)

<sup>10</sup> Ibid.



Fig. 1 Bishopsgate bombing 1993

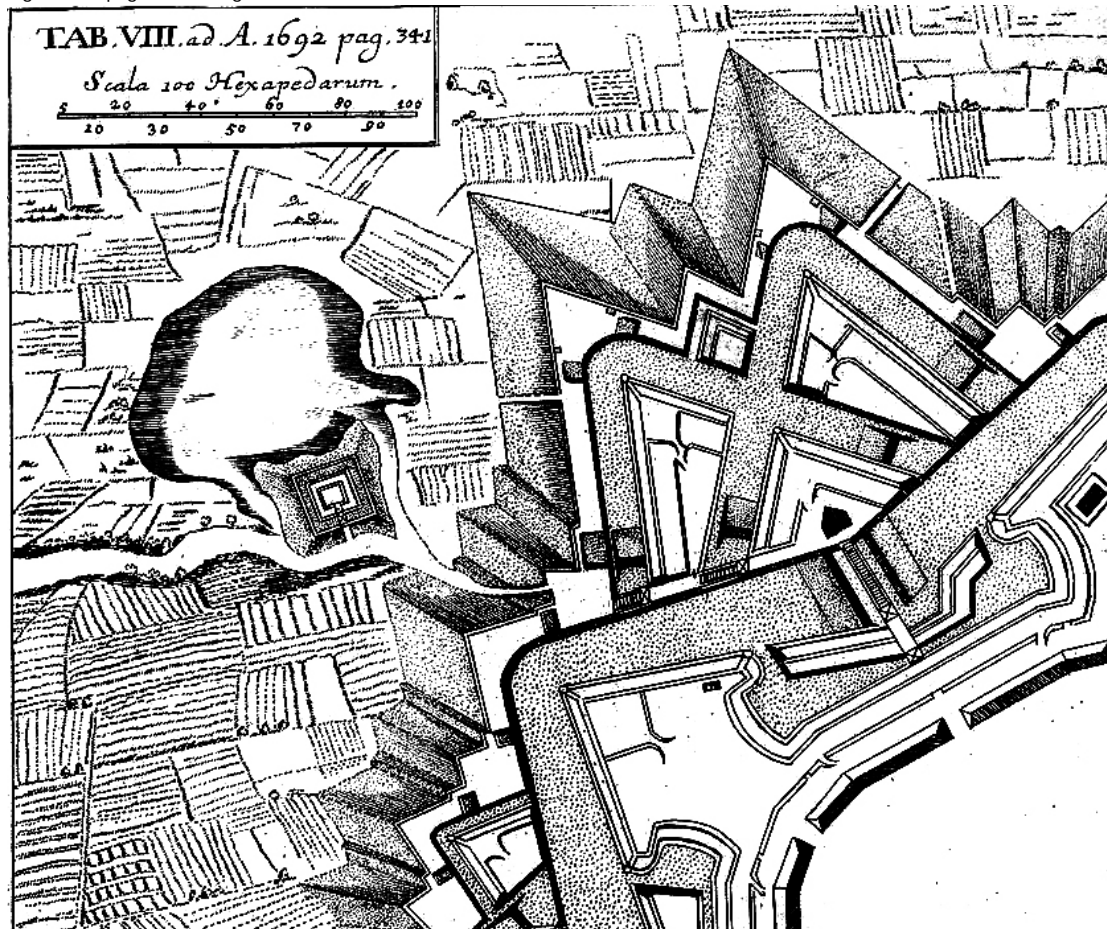


Fig. 2 Bastioned Fort design by Sébastien Le Prestre de Vauban, 1692.

## Tactical Urban Boundaries

In the early 16th Century, Europeans lived in an urban world that was bounded by defensive walls that controlled and dominated them. Castles became supplemented or replaced by fortification, mostly modelled on the bastioned trace; a polygonal structure with arrow head bastions screening curtain walls.<sup>11</sup>

Many fortresses were built with defence in mind but also social control. Those entering and leaving the city were monitored by guards positioned at gates.<sup>12</sup> Similar measures can be clearly observed in the anti-terrorism measures taken in London during the 1990s known as 'The Ring of Steel' and 'The Iron Collar'.

In 1992, 1993 and 1996, the provisional Irish Republican Army successfully exploded large bombs in the City of London's financial district and the Canary Wharf development. The bombings targeted the economic infrastructure of the capital aiming and succeeding to cause severe insurance losses and significant disruptions in trade (Fig.1). These economically dominant targets correspond with the context of early modern sieges in Europe, as discussed in the introduction, and the measures taken as a consequence applied a technological approach to counter-terrorist security.<sup>13</sup>

Despite the name depicting physical material strength, the Ring of Steel in the City of London, was not purely physical, but was a strategic border of surveillance. The approach corresponds with a statement by Francesco di Giorgio Martini, in Trattato, his treaty of fortifying architecture at the end of the 15th Century outlining that "The strength of the fortress depends on the shape of its plan rather than the thickness of its walls."<sup>14</sup> This was at the time revolutionary and he proves his early understanding of the power of strategy, positioning and movement as opposed to the limited strength of material which had previously been the maximum of military defence.

Much like the fortresses of early modern Europe, passage into the City of London in the 1990s became limited and monitored, and many of the measures implemented have lasted and intensified over the last 20 years.<sup>15</sup> Vehicular entrances were reduced from over thirty roads to seven roads, of which were narrowed by the introduction of chicanes to force drivers to slow down and be recorded by CCTV.<sup>16</sup> In many ways these measures, while a noticeable change to the financial environment, were also made to blend into an urban aesthetic of construction and maintenance. The physical instruments funnelling traffic were either orange plastic cones or plastic-coated concrete.<sup>17</sup> While being a physical presence of authority the material language of these regulations was not directly associated with a terrorist threat. In fact, the new regime was officially promoted as a 'Traffic and Environmental Zone' with an attempt to further remove any references to an ongoing terrorist threat.<sup>18</sup>

WThis is different however to the security measures undertaken at Canary Wharf following the 1996 IRA bombing. While the procedures of 'The Iron Collar' were very similar – a secure perimeter, CCTV, number plate recognition and controlled access points – the overtness of the operation being anti-terrorism was much clearer. Rather than concealing the image of fortification, the Canary Wharf group advertised the security cordon on large signs at the entry points to the district.<sup>19</sup> Canary Wharf took a more aggressive approach to attack through proliferation of defence while the City's approach blurred into the status quo of civilian infrastructure.

<sup>11</sup> Paul Hirst. "The Defence of Places: Fortifications as Architecture [Part 1]". *AA Files*, 1997; (no. 33): p.13. <[www.jstor.org/stable/29544045](http://www.jstor.org/stable/29544045)> (accessed 12 April 2019)

<sup>12</sup> Ibid.

<sup>13</sup> Jon Coafee, "Rings of Steel, Rings of Concrete and Rings of Confidence: Designing out Terrorism in Central London pre and post September 11th", *International Journal of Urban and Regional Research*, 2004, (Vol.28.1): p.201-11.< <https://pdfs.semanticscholar.org/8302/cc9eb3e0ff97cbe4dfb1cee80ec492739d55.pdf>> (accessed 12 April 2019)

<sup>14</sup> De la Croix, Horst. "Military Architecture and the Radial City Plan in Sixteenth Century Italy." *The Art Bulletin*, vol. 42, no. 4, 1960, pp.264. JSTOR, JSTOR, <[www.jstor.org/stable/3047915](http://www.jstor.org/stable/3047915)> (accessed 12 April 2019)

<sup>15</sup> Henrietta Williams, *Ring of Steel*: A collaborative project between photographer Henrietta Williams and map maker George Gingell. <<http://henriettawilliams.com/research-ring-of-steel>> (accessed 12 April 2019)

<sup>16</sup> Eric Lipton, "To Fight Terror, New York Tries London's 'Ring of Steel'", *New York Times*, <https://www.nytimes.com/2005/07/24/weekinreview/to-fight-terror-new-york-tries-londons-ring-of-steel.html> (accessed on 12 April 2019)

<sup>17</sup> Coafee, p.205

<sup>18</sup> Ibid. 204

<sup>19</sup> Ibid.





Fig. 3 View from Montrose House, Westferry Road, 1985



Fig. 4 Aerial view of proposal for Canary Wharf, 1984

Canary Wharf's overtly advertised defence strategy is reminiscent of the work of Vauban, whose life's work comprised of the reconstruction of 160 fortresses in the 17th Century.<sup>20</sup> Vauban's extensive career designing military strategies made attack and defence indistinguishable from each other largely due to the prolific dissemination of illustrations of both built work and theoretical proposals which, with their complex geometric overlapping lines were perceived as dangerous<sup>21</sup> and could be equated to an offensive tactic. (Fig. 2)

The difference in overtress of each of the district's anti-terrorism measures is prevalent considering the sameness of attack. While this text reads the financial districts as fortified cities, it is relevant to consider the political theorist Machiavelli's advisory treaty of sovereignty *The Prince* written in 1532. Specifically, Machiavelli highlights the difference in approach to controlling a hereditary state and a new state, highlighting that a hereditary prince does not have to work very hard to retain a state; all he needs is to abide by the customs of his ancestors and get himself through minor emergencies.<sup>22</sup>

Through this reading and considering the different time frames in which the Eastern Cluster and Canary Wharf were established, Canary Wharf can be understood as a new state and the Eastern Cluster a hereditary state. Furthermore, while Canary Wharf was a thriving centre of finance at the time of the IRA attacks, it had not long recovered from a near collapse in 1992 when the newly conceived district went into administration following a property crash.<sup>23</sup> Respectively, I speculate that the Canary Wharf group was less secure in its legacy and thus prioritised the fears that banks could want to leave the district, hence choosing to take an uncompromising stance on being overt about defence. Protecting business was prioritised over composure. Where, the City, embedded in tradition, has a greater initiative not to disturb balance that had been constructed over a long time.

Despite these instances of terrorism highlighting specific militarised approaches of the financial districts, I would argue that they are not as far reaching as the larger-scale, longer-term strategic boundaries inherent in the urban fabric of the areas.

In the conception of Canary Wharf's financial district, the government went hand in hand with big business and the useful weapon of compulsory purchase to maximise pure profit from the most undesirable area of London.<sup>24</sup> The docklands area constituted 6000 acres of so called 'derelict' land, with no trains, no tubes and a tight-knit, albeit deprived community, soon to be displaced.<sup>25</sup> The decision to position the Canary Wharf development within this notoriously inaccessible part of London - Canary Wharf sits within a peninsula with water on three sides - can be understood as a strategic and cynical decision.

While there was significant investment and thought put into connecting the East End district with central London, none of the same efforts were made for connectivity with the immediate neighbouring urban fabric or at ground level. In fact, the newly invested transport infrastructures actively turned their back on Poplar and Limehouse, to the North of Canary Wharf, by creating a dense, one and a quarter mile barricade of six-lane motorway, the new DLR railway tracks and eight rows of rails designated as DLR depot, all with only one pedestrian bridge to cross them. The building of the Limehouse Link tunnel, the most expensive road per meter in the UK,<sup>26</sup> meant people had to move out, where compulsory purchases destroyed communities.<sup>27</sup> A member of SPLASH (South Poplar & Limehouse Action for Secure Housing) described the situation as if the development 'had bombed their estate'<sup>28</sup> and that 'they built it [the transport] for the rich, not thinking about poor people.'<sup>29</sup>

This ignorance of the surrounding deprived neighbourhoods and an affront to large swathes of people is drawn into the original renders for the proposal of the development made by Carlo Diniz

<sup>20</sup> Pollak, p.70

<sup>21</sup> Ibid, p.xxiv

<sup>22</sup> Nicolo Machiavelli, *The Prince*, translated. W.K. Marriott, (The Project Gutenberg, 2006) <<https://www.gutenberg.org/files/1232/1232-h/1232-h.htm>> (accessed on 12 April 2019)

<sup>23</sup> Julia Kollewe, 'Canary Wharf Timeline: From the Thatcher Years to Qatari Control', *The Guardian*, <<https://www.theguardian.com/business/2015/jan/28/canary-wharf-timeline-london-building-docklands-thatcher>> (accessed on 12 April 2019)

<sup>24</sup> Time is Away: Docklands, *NTS*, 2018, <<https://www.nts.live/shows/timeisaway/episodes/time-is-away-18th-june-2018>> (accessed on 12 April 2019)

<sup>25</sup> Ibid.

<sup>26</sup> Tom de Castella, 'The UK's last, great, expensive, short roads', *BBC News Magazine* <<https://www.bbc.co.uk/news/magazine-13924687>> (accessed on 12 April 2019)

<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

in 1984. In Fig. 4 Diniz applies a birds-eye view over the Thames peninsula looking west towards the City. This direction is prioritised ignoring what is East of the site and the image draws a relativity of cityscape between the two financial districts, meanwhile omitting Poplar completely. Looking to the distant horizon for something to relate to overlooks the locality of the place and the relevance to the people living in the surrounding area. It is an abusive dismissal of the struggling local context delivered with seemingly sensitive drawings. The proliferation of tactical imagery resonates again with the dissemination of theoretical treatises in the early Modern period in Europe as a strategic move to garner an image of power through both the built and the unbuilt.

Furthermore, this render chooses the context that it wishes to be associated with by drawing a line as an edge of urbanity. Interestingly these lines disregard the already established zones in London – the lines defining the democratic constituencies of London boroughs. Likewise, the proposals for Canary Wharf show the will to disregard democracy and form their own power. Hence, Canary Wharf cordons off wealth generation from within Tower Hamlets, one of the most deprived boroughs of London<sup>30</sup> by drawing lines to establish territory.

While Canary Wharf utilises infrastructure as a fortifying curtain wall and the bend of the river Thames to physically segregate different social groups the boundary defining the edge of the Eastern Cluster in the City manifests more as a perceived boundary which comes from the dramatic shift in the vertical scale of its buildings - this however, is no less powerful. (Fig. 5)

The shift in scale defines the edge of the cluster. In a study published by the City of London Corporation, a cluster is defined as geographical concentrations of interconnected firms in related industries that compete but also cooperate.<sup>31</sup> The report outlines the deducted benefits of investing to maintain a cluster typology for the financial districts of both the City of London and Canary Wharf for the primary reason of defending and being part of profitable competition. Lloyds of London insurance market, the Bank of England and the London Stock Exchange having grown from small local ventures in the City in the 16th, 17th and beginning of the 18th Centuries demonstrate the beginning of cluster theory for many of the same reasons that still apply today: ease of communication for conducting business, accessibility to London's labour pool and expertise of established businesses in close proximity.<sup>32</sup> At the outset of these financial institutions, livery companies - groups of tradesmen - began to invest in and set up merchant venture companies of which were responsible for setting up the London financial markets that still exist today.<sup>33</sup> These inter-sector relations and face-to-face communication are still seen as important despite technological communication and trading advancements.<sup>34</sup>

While the report outlines the benefits for the districts themselves, it does not mention the effects on the rest of London. Doreen Massey says in an interview for the film *Secret City*: 'Having a big financial sector is like a tree that stops anything else from growing. It actively undermines the possibility of other sectors.'<sup>35</sup> Massey further highlights that historically London's economy has always been a varied economy of manufacturing and small industries with lots of subsidiary industries feeding into other industries and a lot of these are around what is now the expanding perimeter of the City.<sup>36</sup> As the City grows, these other sectors find it difficult to survive because of the land prices driven up by competition between financial businesses. According to the cluster report, it is the legacy of the City which is desirable for businesses who want to be a part of a brand that brings with it credibility.<sup>37</sup> The logic works that if you are able to have an office within the cluster, you have to be rich, and if you are rich you are good at making money, therefore you are good at being a financial business. This logic cumulatively grows a vicious spiral that as Massey argues massively reduces the complexity of London's economy to a dominating financial sector and greater inequality.

<sup>30</sup> Tower Hamlets Council, *Deprivation in Tower Hamlets*, p.2, <[https://www.towerhamlets.gov.uk/Documents/Borough\\_statistics/Income\\_poverty\\_and\\_welfare/Indices\\_of\\_Deprivation\\_High\\_resolution.pdf](https://www.towerhamlets.gov.uk/Documents/Borough_statistics/Income_poverty_and_welfare/Indices_of_Deprivation_High_resolution.pdf)> (accessed on 12 April 2019)

<sup>31</sup> Peter Taylor, Jonathan Beaverstock, Gary Cook, Kathy Pain, Helen Greenwood and Naresh Pandit, *Financial services clustering and its significance for London*, (Corporation of London, 2003) p.16 <<http://ethicalfinancehub.org/wp-content/uploads/2017/12/Financial-Services-Clustering-and-its-significance-for-London-publishedreport-2013.pdf>> (accessed on 12 April 2019)

<sup>32</sup> Ibid. p.35

<sup>33</sup> The City of London Corporation, 'City Timeline', *The City of London Website*, <<https://www.cityoflondon.gov.uk/things-to-do/visit-the-city/our-history/Pages/timeline.aspx>> (accessed on 12 April 2019)

<sup>34</sup> Taylor, Beaverstock, Cook, Pain, Greenwood and Pandit, p.41

<sup>35</sup> Michael Chanan & Lee Salter, 'Doreen Massey on London', extract from *Secret City* (2012), <https://www.youtube.com/watch?v=zhHeelvWEN0> (accessed on 12 April 2019)

<sup>36</sup> Ibid.

<sup>37</sup> Taylor, Beaverstock, Cook, Pain, Greenwood and Pandit, p.7

The edge of the financial district, is a growing boundary,<sup>38</sup> both a line of entry and attack against the surrounding other industries. This role aligns with that of the bastioned traces' strategic polygonal layout designed to keep out the other by shooting cannons from perfectly constructed vantage points. The bastions triangular platforms served the dual purposes of protecting the flanks and of being the base of operations from which the defenders attempted to disrupt assault preparations.<sup>39</sup> This ruthless system strikes a chord with Machiavelli's advice about conquering territory. The sheer curtain-walled boundary, dramatic in scale in comparison to its surroundings can insight fear, alienation and inadequacy. To Machiavelli, creating fear was the best way to ensure territory.<sup>40</sup>

<sup>38</sup> Researchers at GLA, 'London's Central Business District It's global importance', *GLAEconomics*, <[https://www.london.gov.uk/sites/default/files/gla\\_migrate\\_files\\_destination/londons-cbd-jan08.pdf](https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/londons-cbd-jan08.pdf)> (accessed on 12 April 2019)

<sup>39</sup> De la Croix, p.283

<sup>40</sup> Machiavelli



Fig. 5 Broadgate Tower, 2011



Fig. 6 Salient of Sangallo Sangallo's Ardeatina Bastion in Rome





Fig. 7 Map of Turin, 1697



# ‘Ideal’ Cities

An image of success is paramount for the identity of London’s financial sectors and also something that greatly concerned the artists, come architects come engineers developing fortifications in Europe in the 16th Century. Francesco di Giorgio Martini, Filarete and Leonardo Da Vinci concerned themselves with the notion of the Ideal City. Their compositions were based on symmetry, hierarchy and harmony, including radial or orthogonally gridded layouts, gates and bastions aligned to axes. The drawings conceived a social order through form and strict geometry that revealed the autocratic rule of the time.<sup>41</sup>

The designs for fortified cities adopted the current principles from art and aesthetic theory, in particular concepts of perspective and magnificence of the renaissance.<sup>42</sup> By adopting the current aesthetic trends for their own purpose, Modernity as a concept was utilised as a force of military power in and of itself. The power supposed of Modernity reflects the idea that newness is powerful because it is unrelatable. Newness as a characteristic would make a construction harder to interrogate than forms and technique relating to a historical order. This adoption of geometry and perspective is comparable to the ubiquity of the high-tech style of tower design used within the contemporary financial districts.

Jeremy Till makes the point that, technology is used by architects to order and control time; on one hand, it is used to abstract and remove the signs of time - a disorienting trait - and on the other it is used to represent the spirit of an age.<sup>43</sup> By assuming the role of the latter, the towers of the financial districts assume legitimacy; and in their newness, their legitimacy is much harder to interrogate. This assumption of unquestionable power is reminiscent of the autocratic rule of the 16th Century in Europe.

There are currently thirteen new skyscrapers with planning consent or already under construction and due to be completed by 2026 within the City of London. The average height of tall building in the district being 43 storeys.<sup>44</sup> These statistics depict the recent situation of an urban fabric that has been constantly updating in relation to the market economy creating a scene of constant demolition and construction at a great financial cost. The form of the City took a turn towards tower construction with the building of the Natwest Tower in 1981, it’s plan in the form of the bank’s logo; it marked a lift on previous height restrictions in London.

Since the 1980s in the City, the district has cumulatively moved towards tall glazed developments juxtaposing against the neo-classical buildings such as the Bank of England and the Royal Exchange. One current example, situated opposite from the Natwest Tower, is the recent development 22 Bishopsgate. The tallest skyscraper in the City with 62 storeys, its physical form has had a direct correlation with the booms and busts of the market economy. Proposed in 2006, ‘The Pinnacle’s construction began in 2008, however all work was put on hold because of the ramifications of the 2008 economic crash. The partially built core and foundation work, known as the ‘The Stump’, sat inactive for four years until the new version of 22 Bishopsgate was designed with a less complicated façade; this version is currently under construction.<sup>45</sup> The £1.5 billion project is state-of-the-art in terms of technological aesthetic, boasting 100% glazed perimeter of low-iron ultra-transparent glass.<sup>46</sup> This kind of investment portrays an impression of inscrutability and prioritisation of the image of success, while being thrown up off the back of catastrophic global economic damage.

The shift in the City towards colossal ‘cliffs of glass’<sup>47</sup> is reminiscent of the shift in the 17th Century towards a more scientific and rational approach to fortification design when constructions were

considered beautiful if large and carefully built. For example, Turin’s fortifications were known to be the most powerful in Italy after the 17th Century as visitors described them as ‘Bellisme’ – which translates to big visual impact.<sup>48</sup> (Fig. 7)

‘Bellisme’ was also achieved through the presentation of the organisation of armies, another key principle of early modern military theory concerning the Ideal City. The organisation of the army which was seen as an opportunity to effectively display a proposed social order as well as military strength was achieved through the repetitive layouts of lodgings for soldiers.<sup>49</sup> Comparably, this spatial performance of the strength of a labour force is prevalent in the repetitive tower extrusions that by their formal nature display a mass workforce concentrated into the narrow footprints of office buildings. Office towers, mainly since the 1980s, depict abstract shaped icons that are pervasively visible on the skyline and understandable from afar in both financial districts in London. The scale of tall buildings, shows the strength of labour as well as showing the expense that the districts are willing to invest in their ideology.

Despite the similarity in vertical arrangements, the two financial districts have developed the configuration of ‘armies’ differently in terms of plan. This also differed in the shift from the artistic sensibilities of early designs of radial cities to the more rationalised orthogonal gridded layouts that came later in the development of fortified cities. The City of London as a whole can in part be viewed to have a radial configuration when considering the star of roads radiating from the Bank of England and the Royal Exchange – the older financial institutions of the district. The streets lead out in plan towards the directions of the original gates of the City’s walls. The development of the concentrated financial district, does not encircle the radial point of the Bank of England but has instead developed intensely around a few of the eastern radial arteries, hence its name Eastern Cluster. For that reason, the planning and organisation of the City’s workforce has not strictly followed a coherent aesthetic order of symmetry; but rather aligns more with Filarete’s take on city planning. While engaged with radial theory, Filarete also planned his ideal town in a typological manner based on the concept of ‘varietas’, positioning each building for each of the desired functions.<sup>50</sup> This is reflected in the City as seen with the growth of the insurance industry that has collected around Lloyds Insurance market and its respective moves across the district, from the Royal Exchange at the radial junction, East to Leadenhall street and to Lime Street.<sup>51</sup>

As de la Croix describes, the 16th Century military architect adopted an urban scheme that had been defined to an aesthetic ideal by the artist-architects of the previous generation.<sup>52</sup> Another and more militarily popular organisation for fortified cities was the orthogonal grid system, explicitly represented by De Marchi in the 17th Century (Fig.8). The plan shows a gridded central plan ‘draped over a radial skeleton.’<sup>53</sup> De la Croix describes de Marchi’s plan in detail where: ‘Along its seven sides he places the most important buildings: the city hall, the customs house, the hall of justice, the main church, the library and the school.’<sup>54</sup> Considering another render for the Canary Wharf proposal by Diniz (Fig. 9) there are comparisons to be seen with the combination of a unified plan with a perceived diversity of typology and the central focus of the geometric citadel One Canada square. I argue that the developers adopted the same principles of perceived diversity in order to establish a more palatable image of civic space.

Diniz further utilises the tools of the architects of ideal cities in a render that depicts a view from a high window looking down a centralised wide piazza (Fig. 10). The viewpoint, painterly sky and symmetrical framing strike a chord with the preoccupation with perspective and symmetry of the early modern era as well as the classically founded planning principles concerning a central piazza as focal point.<sup>55</sup> In contrast to the starkness between high-tech towers and the heritage of neo-classical architecture described in the City of London, the Canary Wharf proposals aim for a more indistinguishable blend of old and new. Arguably, the post-modern architecture drawn mimics aspects of the heritage of architecture found in the City. This forms the notion that the proposed structures, catering to millions of square meters of commercial office space, have always been there attempting to affirm their right of

<sup>41</sup> Pollak, p.xviii

<sup>42</sup> Ibid. p.xix

<sup>43</sup> Jeremy Till, *Architecture in Space, Time*, <[https://jeremytill.s3.amazonaws.com/uploads/post/attachment/25/1996\\_Architecture\\_in\\_Space\\_Time.pdf](https://jeremytill.s3.amazonaws.com/uploads/post/attachment/25/1996_Architecture_in_Space_Time.pdf)> (accessed on 12 April 2019)

<sup>44</sup> Writers At NLA, London Tall Buildings Survey 2018, (New London Architecture, 2018), p.29,

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<sup>46</sup> Edwin Heathcote, ‘The City of London’s new tallest tower, for a short time’, *Financial Times*, (2015) <<https://www.ft.com/content/36749bf2-2c68-11e5-8613-e7aedbb7bdb7>> (accessed on 12 April 2019)

<sup>47</sup> Ibid.

<sup>48</sup> Pollak, p.xix

<sup>49</sup> Ibid. p.xx

<sup>50</sup> Ibid. p.xxi

<sup>51</sup> Writers at Lloyd’s, ‘Corporate History’, *Lloyds Website*, <<https://www.lloyds.com/about-lloyds/history/corporate-history>> (accessed on 12 April 2019)

<sup>52</sup> De la Croix, p.289

<sup>53</sup> Ibid. p.288

<sup>54</sup> Ibid.

<sup>55</sup> De le Croix, p.288

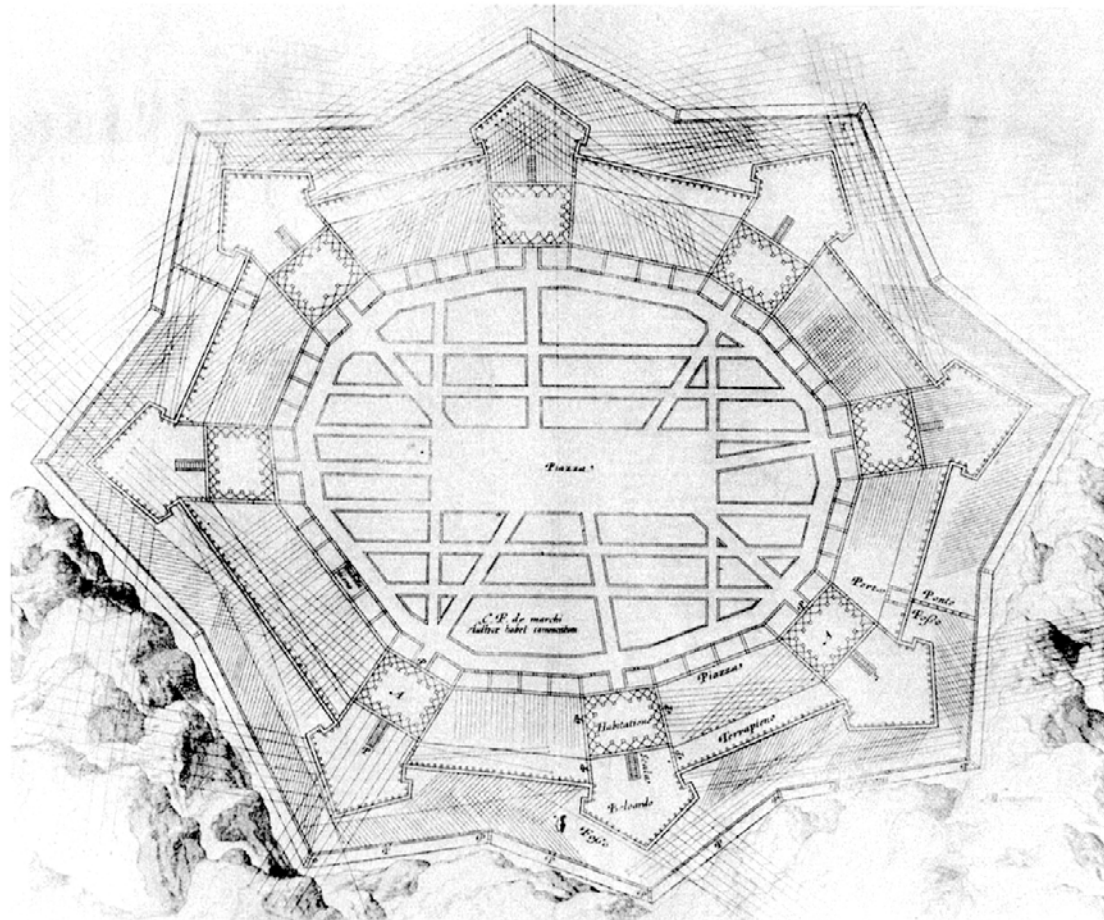


Fig. 8 Eight Bastioned City for Mountainous Terrain (from Della architettura, fol. 162)



Fig. 9 Canary Wharf birdseye view, 1984

place on the Isle of Dogs. This perception brings me back to Machiavelli and his distinction between a heritage state and a new state. It seems that Canary Wharf adopts the principle of heritage to ease the perils of its own newness through a brand new cohesive urban plan decorated to look as established as the City.



Fig. 10 Window View of proposal for Canary Wharf, 1984



Fig. 11 Heritage and hi-tech on Fenchurch Street, 2018

## Conclusion

I have begun to reveal some of the omnipresent power structures in the contemporary urban condition of London's financial districts through a lens of operative history. While some dominant examples of fortification theory have helped to raise questions concerning sovereignty, democracy and the altering identities of the two financial districts, those discussed are not exhaustive of the breadth of tactics employed across both eras. I have established that the premise of capitalist competition is the object of defence and that this has been reached through the unfolding of neoliberalism over the last two decades.

While I have found that there are clear similarities in the outputs of fortification between early modern cities and the contemporary financial districts; such as increased surveillance, establishing tactical boundaries and creating an image of an ideal city - what is unique to the contemporary condition is the ambiguity of those responsible. In the Early Modern period the status of autocratic rule was clear and the militarisation of cities was at the forefront of politics; it was obvious who the leader was. Due to the fact that the financial districts are situated within a perceived democratic society, the instigator is much less clear. I would argue that if the UK's government were to make national policy that matched the fortification methods of the financial districts, the perception that we live in a democracy would be seriously under threat. It is therefore the supporting and distanced relationship that the government has with finance capitalism - a free-market policy - that legitimises and enables its power and reach. As Foucault describes; biopower is the subjugation of entire populations through multiple diverse techniques;<sup>56</sup> I suggest that the combination of techniques in the financial districts, makes the power structures less easy to distinguish. This aligns with Michael Glass' definition of the performance of neoliberalism which is produced by material and non-material actions that are repeated over time and across space by multiple actors and organisations.<sup>57</sup>

I have identified a difference in the conception of war across the two time-periods of which requires defensive tactics. Where in the Early Modern era war was used for establishing physical territory; the contemporary financial districts' aim is to maintain a leading position within the global market. As Donald Mackenzie outlines, the race for this position now concerns the speed of trading which has reached ultra-fast possibilities with microwaves and wireless signals.<sup>58</sup> As yet this technology does not operate across the Atlantic to the USA and the UK still relies on fibre-optic cabling for that trading relationship.<sup>59</sup> Due to the fact that the UK receives fibre-optic signals faster than Frankfurt from USA, the UK still has the advantage of a thousandth of a second over the rest of Europe. However the race towards developing high-frequency trading that can cross the ocean might define a more insecure future for the UK as a leading financial power, especially if the UK leaves the European Union.<sup>60</sup> With this less secure economic future in mind, I think it is important to reiterate Doreen Massey's statement that the prioritisation of the financial sector has created 'a tree that has stopped other forms of the economy growing underneath it'.<sup>61</sup> In the event that London one day might not be a leading centre for finance, it could be that banks and big business leave the districts that they have created. Rather than the image of an ideal and powerful city, a structure that has undermined other industry and does not have other forms of economy to fall back on brings to mind the image of a vulnerable city.

<sup>56</sup> Foucault, p.140

<sup>57</sup> Michael R. Glass, 'Performing Neoliberalism: Practices, Power and Subject Formation', *Handbook of Neoliberalism*, Ed. Simon Springer, Kean Birch, Julie MacLeavy, (Oxon, Routledge, 2016) p.351

<sup>58</sup> Donald Mackenzie, 'Just How Fast?', *London Review of Books*, Vol. 41, No.5, (London: 2019), p.23

<sup>59</sup> Ibid.

<sup>60</sup> Mackenzie, p.24

<sup>61</sup> Michael Chanan & Lee Salter, 'Doreen Massey on London', extract from *Secret City*, <<https://www.youtube.com/watch?v=zh-Heelvwn0>> (accessed on 12 April 2019)



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Fig. 1: ITN. 2018. *April 24, 1993: IRA's Bishopsgate bomb devastates the heart of the City of London* <<http://home.bt.com/images/cloud-136397717265502601>> (accessed 20 April 2019)

Fig. 2: Sébastien Le Prestre de Vauban, 1692. *Unattributed engraving from Ephemeridum Germanicorum* <<https://www.maryevans.com/search.php>> (accessed 20 April 2019)

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Fig. 4: Carlo Diniz. 1984. *Canary Wharf Aerial View* <<http://carlosdinizart.com/gallery/>> (accessed 20 April 2019)

Fig. 5 Henrietta Williams. 2011. *Broadgate Tower* <<http://henriettawilliams.com/research-ring-of-steel>> (accessed 20 April 2019)

Fig. 6 Simon Pepper. *Salient of Sangallo Sangallo's Ardeatina Bastion in Rome*. <[https://arch242doarch.files.wordpress.com/2013/08/pepper\\_planning-versus-fortification.pdf](https://arch242doarch.files.wordpress.com/2013/08/pepper_planning-versus-fortification.pdf)> (accessed 20 April 2019)

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Fig. 9 Carlo Diniz, 1984. *Canary Wharf Birdseye View*. <<http://carlosdinizart.com/gallery/>> (accessed 20 April 2019)

Fig. 10 Carlo Diniz, 1984. *Canary Wharf Window View*. <<http://carlosdinizart.com/gallery/>> (accessed 20 April 2019)

Fig. 11 Mary Jet Anderson. 2018. *Heritage and High-tech on Fenchurch Street*.

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