Chapter Two

A Chronicle of Urban Codes in Pre-Industrial London’s Streets and Squares

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Tricky Problems

‘In the history of London, hopeless fudges have a habit of coming good’.

(Hebbert, 1998, p. 203)

This is the story of the place-makers’ codes for the capital, one of the more intriguing, and certainly confounding tales to come out of the rich planning history of pre-industrial London. For most of its history, the development of London has been driven more by pragmatism than anything else, owing less to the ideals of master planners and more to the simple and recurring message of lessons unremembered, but always rediscovered: that untrammelled development tended sooner or later to result in some sort of tragedy, whether plague, fire or the general human misery that arises from cramming large numbers of poor quality, closely-packed dwellings into a space of limited compass.

The story of what might now be called London’s urban codes reflects the city’s bipolar history, centred around the cities of London and Westminster, but it is more precisely to do with planning within the City of London, and planning outside it. In this chapter, we shall look at three broad examples of how urban codes were applied in particular historic circumstances, all pre-industrial (for reasons we shall come to shortly). These examples were chosen with two purposes in mind: first, they illustrate particularly well the way in which what we would now call urban coding has shaped
well-known parts of London’s urban character, either instead of or in conjunction with other sorts of what we would now call master planning; second, they function as a particularly clear lens through which to view modern urban design coding practice.

To tell the story of these codes, we must look at the people behind them. The earliest of these is Henry Fitzailwyn, London’s first Mayor, whose ambitions, limited as they were to basic fire-proofing of the City, appear modest almost to a fault when compared with those that came later. Fitzailwyn was the first of many to attempt, with varying degrees of success, to mitigate the worst effects of rapid growth and overcrowding. It was partly in response to the failure of some of these initiatives that those with sufficient wealth and land created new squares west of the City of London, such as Lincoln’s Inn Fields and Covent Garden, in the early seventeenth century. These wealthy landowners and speculative builders used a combination of urban codes and master plans to create London’s first suburban developments, but these early attempts formed the prototypes for the many squares for which London is now famous. The aim, simply, was to combine the best of town and country, and make money in the process.

Meanwhile, the City of London continued to be blighted periodically by fire, the most famous of which all but razed it to the ground in September 1666. Our next illustration, then, is the story of how grandiose master plans rapidly gave way to a rebuilding scheme that relied entirely on urban codes. Finally, we return to the squares of London, for in the eighteenth century, it is the wealthy landowner in concert with the speculative builder who, through the alliance of lofty ideals and market forces, mediated through master plans and urban codes, drove the development of central London by creating the scores of squares for which London remains famous.

We shall concentrate our gaze on pre-industrial London, for this is the most instructive period for the student of urban coding. By the time of industrialization, the role of urban codes had diminished as building acts took precedence in an economic environment that might best be described as *laissez faire*. Hall (2002a) called it simply ‘The City of Deadful Night’. And so it is that in the final section, we step smartly into the twenty-first century to the post-industrial era, preoccupied with sustainability, and find that urban codes remain a pragmatic solution to some tricky problems.

Coding for Basic Safety and Health

‘Fitzailwyn’s Assize’ Gets Things Moving

London’s first building ordinance came to be known as ‘Fitzailwyn’s Assize’, after its creator, and it was introduced as a consequence of a fire in the City of London in July 1212 (Alsford, 2006). Little is known of Fitzailwyn himself. According to John Stow (1965), his full name was Henry Fitz Alwin Fitz Liefstane; he was a goldsmith, and he
was appointed Mayor of London – its first – in 1190, a position he was to hold until he
died in 1212.

The fire had broken out on the night of 12 July, according to Matthew Paris, and in
the ten days over which it burned, it destroyed London Bridge, which had only recently
been rebuilt of stone, and a large part of the City of London itself. The human cost was
enormous: over a thousand lives taken, countless more ruined. Not surprisingly, the
main point of the new regulations was to make the City less prone to fire: party walls
were to be at least 3 feet (90 cm) thick and of stone; and roofs were to have gutters to
carry rainwater into the streets (Weinreb and Hibbert, 1988), while thatched roofs were
to be whitewashed to increase fire-resistance (Mumford, 1938).

It is here also that we see the beginnings of the uniform building line, although as
we shall see, the regulations intended to curtail encroachments onto the highway were
not always adhered to (Weinreb and Hibbert, 1988).

Subsequent regulations were of an equally practical nature. A building’s overhanging
jetties – those extensions at storeys above ground level which increased a building’s
floor area without increasing the size of its footprint at ground level – must be high
eough to allow a man on horseback to pass beneath. Roofs were to be of tile, lead
or stone, while chimneys should be faced with tile, plaster or stone. As a precaution
against fire, building occupants were to keep a ladder and a barrel of water to hand at
all times, but in practice these regulations were not always followed; inevitably, the
problems continued (Rasmussen, 1982).

Nonetheless, these ordinances did at least seek to reduce the likelihood of problems
in the future. The concept of ‘planning’ in the sense of ‘urban planning’, or ‘town and
country planning’ was the best part of a millennium away, but the concept of ‘planning’
in its more general sense of forethought was clearly uppermost in Fitzailwyn’s mind
as through his ordinances he sought to ensure that such a devastating fire should not
happen again. As we now know, he was unsuccessful in this, but the foundations had
been laid: the evolution over time of a city even as wilfully independent as London
could be in fact controlled, even if to only a limited extent.

Growth and Squalor in Tudor London

Just how limited became all too apparent in the centuries that followed. Mumford
(1938), writing with the undoubted benefit of several centuries’ hindsight, argued
that over-crowding was actually a post-medieval phenomenon. London’s population
grew from approximately 20,000 to 25,000 at the end of the twelfth century, peaking
at around 50,000 by the mid fourteenth century, and changing little in the century and
half that followed (Weinreb and Hibbert, 1988, p. 613). But in the Tudor period, from
1495, when Henry VII was installed on the throne, to 1603, when Queen Elizabeth
died, London’s population grew fourfold (Ibid.). This explosive growth during the
Tudor period meant that London did indeed become increasingly overcrowded and foul; in one egregious instance, a single house was recorded as containing eleven married couples and fifteen single people (Rasmussen, 1982). As a consequence, London’s residents sought more space, and so London began to spread outwards, moving beyond the walls of the City of London itself, to form new, extra-mural suburbs.

The growth of London may, in part, be attributed to the relative stability that the Tudor dynasty was able to impose. Henry VII, for example, was unusual in that the funds he borrowed from the City of London to continue his wars against the French were repaid on time (Pevsner, 1962). However, much of this growth was not due to natural expansion of the indigenous population, but to continuous immigration from the provinces, even though London’s death rate was very high (Weinreb and Hibbert, 1988, p. 613).

Such unregulated expansion put enormous stress on London’s fabric, and the overcrowding in the City as a consequence of this meteoric growth prompted development to spill over the City walls into those areas south and east of the City and into Westminster. Recognizing that this was clearly a problem, Elizabeth issued a Royal Proclamation in 1580 which forbade any new building within three miles (5 km) of the City. Elizabeth’s Proclamation, enacted in law in 1592, also sought to control overcrowding within the City itself through the prohibition of both the sub-division of existing houses between families and the letting of rooms to lodgers (Weinreb and Hibbert, 1988).

Similar proclamations continued to be issued after Elizabeth’s death, up to about 1630. These included such practical and structural matters as the regulation of brick manufacture, the thickness of walls, and the requirement that any new buildings on old foundations should be of either brick or stone.

The proclamations were ineffective though, and for two different reasons. The first was that the Stuart kings enacting them saw the fines for contravention of the regulations as a source of income. A second, more basic dilemma was that such proclamations were simply not able to solve the problems, such as overcrowding, that came with a burgeoning population (Ibid.).

In an early example of what would now be referred to as ‘leap-frogging’, private landowners simply walked away and developed outside the city walls, finding there a haven from the squalor and disease of the city centre. In the late sixteenth century, the suburbs to the west of the City were described by Stow (1965) in his Survey of London (first published in 1598) as salubrious places, different in character from the heavily built-up suburbs to the north and east. Indeed, in Stow’s time, much of the land between the City of London and Westminster was relatively undeveloped, save for a few large houses overlooking the Thames, including Arundel House, Savoy Palace and Durham House. The church of St Martin in the Fields was true to its name then, as
was St Giles in the Fields, farther north. Westminster Abbey still had its gardens just north of the Strand, called simply the Convent Garden, while Lincoln’s Inn Fields was simply an open area used primarily for recreation.

A necessary question, and a persistent one given the subject matter of this book, is this: were these proclamations examples of urban coding, urban planning, or something else entirely? Today, they would probably fall within the general compass of health and safety regulations, but we should recognize that they were regulations set down with the specific intention of creating a particular outcome that was all about making the City of London a healthier place. Had the lines been drawn on a map, we might have called it zoning, or strategic planning. With no such map, we might call it urban coding. But these are semantic distinctions, invidious in such a discussion as this. Certainly they were a form of planning, in the sense that they were intended to achieve a specific future goal, but they were also in the medieval tradition identified by Lewis Mumford whereby ‘the planner made use of the irregular, the accidental, the unexpected.’ But the planner ‘was not averse to symmetry and regularity when, as in a frontier town, the plan could be laid out in a single step on fresh land’ (Mumford, 1938, p. 53).

Such an approach, though admirably pragmatic, has its limits. The City’s population was burgeoning, and despite various royal proclamations intended to prevent it, urban sprawl due to continued building outside the city walls carried relentlessly on. For the most part this development took the form of cottages put up on an ad hoc basis. Sometimes, however, grander plans were proposed: two examples – Lincoln’s Inn Fields and Covent Garden – we shall look at shortly. But what really changed the face of the City was the Great Fire of 1666.

Coding for Fire-Proofing (With a Twist of Aesthetics)

The fire of 1666 was not the first fire to raze much of the City to the ground. As we have already seen, FitzAilwyn’s Assize was a direct response to a much earlier fire that had exacted a far higher human price than that of 1666. But the Great Fire of 1666 hit London when it was by far the most important city in England – it had not been pre-eminent in the twelfth century – and at a time when it was a major player on the global stage. All but destroyed by the fire, the fabric of the city needed to be replaced quickly if it was not to slip into terminal decline, and King Charles II duly took charge.

Quickest to respond was Sir Christopher Wren, who presented a plan for the rebuilding of the City less than a week after the fire had been extinguished in early September 1666. Wren’s plan was followed by several others, including John Evelyn and Robert Hooke, among others (figure 2.1). All were grandiose and, influenced by the fashions of the continent and the moment, envisaged the reborn City of London as a metropolis of broad streets and piazzas. But, by the end of the month, the King had
concluded that such plans were not the best way forward, and for this simple reason: English property divisions made these plans of theoretical interest only, and the most that could be achieved in reality – admittedly still quite a lot – was some widening of streets, the creation of a few new streets and quays, and the elimination of the worst of the overcrowding (Reddaway, 1940).

Indeed, all the grand plans for London, Wren’s included, were to all intents and purposes impossible to carry out. Had Wren’s plan been followed, for example, every street and building in the City would have occupied a different place (Rasmussen, 1982), and any such rebuilding would have had to happen in the face of existing building lines and ownership lines, some of which remained quite clear, others of which lay hidden by debris. The clearance of this debris was itself a matter of considerable practical and administrative difficulty (Reddaway, 1940). To implement Wren’s plan would thus have required the wholesale redistribution of land to the hundreds of different proprietors affected by the plan, a task for which neither the legal nor financial infrastructure then existed (Rasmussen, 1982). The deliberations of the committee that was eventually convened to consider how to proceed with the rebuilding (all the master plans having been rejected) were therefore pragmatic in tone. They resisted the temptations of grand designs in favour of a more balanced approach that sought to reconcile the needs of safety, financial expediency and practicality (Ibid., p.118), but that would also make the City a more salubrious sort of place (Reddaway, 1940).

Rules were therefore laid down to control what could realistically be controlled. Street widths were specified depending on their importance: ‘Key, one hundred feet; High Streets, seventy feet; Some other Streets fifty feet and others forty two; The least Streets thirty feet or twenty five; Alleys, if any, sixteen feet’ (Ibid., p. 60). Houses were classed as one of four types, depending on which type of street they faced, and they ranged from four storeys for those fronting the grander streets to two storeys for those looking onto smaller streets, or more specifically, ‘two storeys for bylanes, three storeys along the river and for streets and lanes of note, four storeys for high streets and
mansion houses for citizens of ‘extraordinary quality’ (Weinreb and Hibbert, 1988, p. 325). External timberwork was to be minimal in the new buildings, which would be built of either brick or stone. The City consequently took on an appearance after the fire that was completely different from its pre-fire aesthetic (figure 2.2), no longer the maze of half-timbered buildings of the type that can still be found in the Shambles of York, but a tidier, more ordered sort of place with a degree of uniformity that it had previously lacked (Kosof, 1992). The thicknesses of walls and the heights of ceilings and timber scantlings were specified too (see table 2.1). However, there was little that was genuinely new in the regulations and the Act only applied in the City. Even so, the Act was obeyed to a greater degree than previous acts and it was also used as a model outside the City.

A broad quay was built along the river bank, replacing the congested mass of small wooden dwellings that had impeded ready access to water to extinguish the fire, and

Table 2.1. The 1667 Rebuilding Act: table showing proportions of the new sorts of buildings.

<table>
<thead>
<tr>
<th>Sort of Building</th>
<th>Storey</th>
<th>Height of Storey</th>
<th>Thickness of Front and Rear Walls</th>
<th>Thickness of Walls between Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>First cellar</td>
<td>6 ft 6 in</td>
<td>2 bricks</td>
<td>1½ bricks</td>
<td></td>
</tr>
<tr>
<td>first first</td>
<td>9 ft</td>
<td>1½ bricks</td>
<td>1½ bricks</td>
<td></td>
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<tr>
<td>second garret</td>
<td>9 ft</td>
<td>1 brick</td>
<td>1 brick</td>
<td></td>
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<tr>
<td>Second cellar</td>
<td>6 ft 6 in</td>
<td>2½ bricks</td>
<td>2 bricks</td>
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<td>first first</td>
<td>10 ft</td>
<td>2 bricks</td>
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<td>second second</td>
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<td>2 bricks</td>
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<td>third garret</td>
<td>9 ft</td>
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<td>fourth fourth</td>
<td>8 ft 6 in</td>
<td>1½ bricks</td>
<td>1½ bricks</td>
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<tr>
<td>garret</td>
<td>1 brick</td>
<td>1 brick</td>
<td>1 brick</td>
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</tr>
</tbody>
</table>

Figure 2.2. Elevation of Cheapside, showing the front of St Mary-le-Bow. The houses would have been of type authorized for ‘high and principle’ streets. (Source: Reddaway, 1940)
so made it worse. Equally, streets were to be of sufficient width that a fire on one side of the street could not easily spread to the other side. Alleyways and narrow lanes were also prohibited where possible (Rasmussen, 1982). Crucially, however, although the necessary controls were put in place to prevent a free-for-all, the Royal Proclamation made explicit the principle that no one should ‘be debarred from receiving the reasonable benefit of what ought to accrue to him from such Houses or Lands…’ (cited in Rasmussen, 1982). Nonetheless, to prevent the possibility of plots of land lying vacant and unused, one provision of the 1667 Act set out the City’s right of compulsory purchase at full value of any plots that remained undeveloped after three years. The City thus gained the right to sell on the plot of land for development, codifying the principle that land belongs, in effect, to the community, and that a private individual may have the right to use it for certain purposes (Ibid., p. 120).

What to conclude at this stage? The planning of the City of London after the Great Fire was perhaps the most significant application of urban coding in London’s history. The codes specified road widths and building heights, and linked the two together to significantly improve the urban form and safety of the City while working with, rather than against, prevailing legal and physical circumstance. That this almost total reliance on urban codes was possible rested on a single fact above all others: the ground plan – in effect a ready-made physical blueprint – already existed. But supposing the canvas is totally blank?

Coding for the Fashionably Healthy

*It might be said that the development of the urban square of streets and houses surrounding a garden enclosure, which is London’s principal contribution to town planning, arose from the fortuitous conjunction in time of a carefully planned piazza on the European model and an enclosure of fields which was preserved largely by accident.*

(Weinreb and Hibbert, 1988, p. 602)

**Palladio Comes to Town**

If there is any particular urban form that is associated with London, it is surely the residential square. After the end of the Republic under Oliver Cromwell and the Restoration of the monarchy in 1660, the square became the principal unit of any major layout in developments outside the City of London. The progenitors of the London square were the piazza at Covent Garden and Lincoln’s Inn Fields, but it was in Bloomsbury Square that the square first attained its typical form, followed by St James’s Square, ‘reaching an apogee’ in the eighteenth and nineteenth centuries with Grosvenor and Belgrave Squares, and seeing the general form of the London square spread across London (Ibid., p. 601).
Before we look at specific examples, it may be helpful to explore the general principles that applied, for while the layouts were not codified, they did tend to follow a pattern, influenced by current fashions in architecture that had been imported from continental Europe in general, and Italy in particular. The prevailing aesthetic drew most heavily on Palladianism, a neoclassical style of architecture that had developed from the writings of Andrea Palladio in the sixteenth century, which had its own aesthetic grammar (Mitchell, 1990). New town extensions built following neoclassical principles distinguished themselves from their medieval forerunners through the use of straight lines, deliberate symmetry and uniform dimensions; avenues radiating from a central point – an echo of the hunting lodge at the centre of the royal park – symbolized this new aesthetic. To be sure congested slum properties could bring good returns on investment, but the rising bourgeoisie had its own pretensions, which neoclassicism fitted nicely (Mumford, 1938).

In England, the interest in Palladianism had first been ignited by Inigo Jones at the beginning of the seventeenth century, but in the eighteenth century there was a second, more intense phase. This was driven partly in response to the grandiose architecture favoured by the Stuarts, but also by the rise of the pattern book, and the autodidactic possibilities that these offered to craftsmen who knew that by training themselves as architects, they could better themselves. And so it was that with the help of pattern books, Palladian taste spread. Two pattern books stand out above the others. The first was *Vitruvius Britannicus* by Colen Campbell, a folio of engravings of the best ‘classical’ buildings in England, published in 1715. The other was an edition of Palladio’s *Four Books on Architecture* published by Giacomo Leoni. There followed over the next decade or so an ‘avalanche’ of books by authors such as Batty Langley and William Halfpenny (Summerson, 1945). An example from the mid nineteenth century can be seen in figure 2.3, which shows a plate from *Nicholson’s Dictionary of Architecture, Building and Carpentry*. Besides elevations and large-scale details of items such as balustrades, *Nicholson’s Dictionary* also includes detailed working drawings showing how different elements are constructed (Lomax and Gunyon, c. 1860).

This new fashion, combined with the fact that wealthy landowners were in a position to develop large swathes of land in a short period of time, made possible developments that were notable for both their consistency and their elegance; Bath is one such example. For these were ‘geometric achievements … laid and built up at a stroke; if possible under the guidance of an architectural despot’ (Mumford, 1938): in modern parlance we might simply call them blueprints or master plans. In London, an obvious example of this approach is the square, which in its most mature form was typically the centrepiece of a grid-based development, embodying the classical ideals of symmetry, proportion and order, and which tended to look inwards rather than out beyond the estate’s boundaries.

This mature and enclosed form had its origins in the open spaces that surrounded
the City of London. One such was Lincoln’s Inn Fields which in the fourteenth century was already in frequent use by the students, clerks and apprentices studying and practising law nearby. They had a long guarded their right to use it for leisure purposes, even going so far as complaining in 1376 to King Edward about the laying of traps by one Roger Leget. The King responded sympathetically to the complaint, sending Leget to the Fleet Prison, and continuing to protect Lincoln’s Inn Fields from the predations of developers (Rasmussen, 1982).

Although they had originally belonged to the hospitals of St John and St Giles, the three fields that made up Lincoln’s Inn Fields had been seized by Henry VIII and had remained in the ownership of the Crown ever since (Ibid.). By the early seventeenth century, the fields had already been developed as pleasure gardens for the general benefit of the City, and Inigo Jones was commissioned to prepare a plan for a square divided by avenues. He was followed by William Newton, a speculative builder who had acquired the lease of the fields over a period of nine years from 1629 (Ibid.), who successfully petitioned the king for a licence to build thirty-two houses (Weinreb and Hibbert, 1988; Rasmussen, 1982; Pevsner, 1962).

To appease the gentlemen of Lincoln’s Inn, against whose wishes the development was being carried out, a compromise was negotiated whereby Newton could develop Lincoln’s Inn Fields so long as a ‘square piece of ground’ was kept free of buildings. The current form is the result of the protracted negotiations that ensued (Weinreb and Hibbert, 1988), and by 1658, the north, south and west sides were occupied by

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**Figure 2.3.** Examples of arches from Nicholson’s *Dictionary*. Such illustrations, along with detailed construction drawings which such pattern books also contained, enabled artisans to teach themselves about the latest architectural fashions and techniques. *(Source: Lomax and Gunyon, 1860)*
houses, although none of the original buildings remains: the earliest buildings around
the square date to the mid-eighteenth century (Pevsner, 1962). The entire east side of
the square is taken up by Lincoln’s Inn itself. This was not really planning by coding;
in fact it was not really planning at all, so much as developing those parts of Lincoln’s
Fields that were not protected by restrictive covenants. But while tools even this crude
worked after a fashion, the sophisticated demands of Palladian neoclassicism required
sophisticated instruments of control. And they took a while to come to fruition.

The Bedford Estate (1): Covent Garden

Covent Garden could reasonably claim to be the first London square. Granted to the
first Earl of Bedford by Edward IV in 1553, until 1536 Covent Garden had belonged
to Westminster Abbey (Woodiwiss, 1980). Most of the property was let out for grazing,
although the Earl built himself a large wooden house facing the Strand. Thus for most
of the sixteenth century, the appearance of Covent Garden remained more or less
unchanged. By the seventeenth century, however, development had become more
apparent. In 1603, small groups of houses, which were unplanned, had begun to
appear, and in 1630, the fourth Earl obtained a royal licence to demolish the unplanned
collections of buildings and replace them with something possessed of more substance,
both structural and aesthetic (Olsen, 1982).

The licence stipulated that the new buildings should ‘serve to ornament the town’,
and so the Earl hired Inigo Jones, King Charles’s Surveyor General. Jones, whose
work had been heavily influenced by the work of Andrea Palladio and a visit to Italy in
1613–1614, had already cemented his reputation with his designs for the Banqueting
House in Whitehall and the New Exchange in the Strand. For the Earl of Bedford,
Jones designed a square enclosed on three sides by terraced houses, while on the fourth
side was St Paul’s church (Weinreb and Hibbert, 1988, p. 202). The notion of the
piazza had already been favourably written up by John Evelyn in his diary, following a
visit to Livorno in 1644:

The piazza is very fair and commodious, and, with the church whose four columns at the portico
are of black marble polished, gave the first hint to the building both of the church and piazza in
Covent Garden with us, though very perfectly pursued. (cited in Rasmussen, 1982, p. 166).

Indeed, according to Pevsner (1962), the piazza at Covent Garden was actually laid
out following the piazza at Livorno in Tuscany, and also with the Place des Vosges in
Paris in mind. Originally designed as a single composition, of which only St Paul’s
church and a few houses now remain, Covent Garden piazza had Bedford House as
the focal point on the south side of the piazza, St Paul’s church on the west side and
houses having uniform façades on the east and north sides to give the feeling of unity
(Ibid.).
Rasmussen (1982, p. 171) likens the square to a Roman forum, governed by the temple of St Paul’s church. He also points out that the portico of the church and the arcades are of the piazza, although the buildings that they front – St Paul’s church and the houses – may look the other way, and exist independently of the façade (Ibid., p. 172). The arcades thus became very popular in their own right, as part of the public realm, while the houses remained valuable pieces of private property (Ibid.).

The piazza, whose open spaces did not enjoy the protection of restrictive covenants, was only partially successful. A fruit and vegetable market grew up to the north side of the garden wall of Bedford House, and as it developed, so the piazza became less pleasant for the original residents, who, by the end of the century, were seeking new homes elsewhere (Olsen, 1982). The estate was not, in any case, as generously laid out as it might have been. While the piazza and some of the streets were spacious and airy, behind them lay mean and narrow streets and courts that were dark and insalubrious (Ibid.). Even so, Covent Garden, the first piazza in Britain, was the prototype for the London square that the Bedford Estate was subsequently instrumental in developing still further (Ibid.). The next time however, they did it differently.

The Bedford Estate (2): The Great Squares

London’s continued expansion in size and importance in the seventeenth and eighteenth centuries greatly intensified the pressure to develop large private gardens as new suburbs, not least to provide a healthy environment for those who could afford it. The owners of those large private gardens wanted some control over who their neighbours were, and the coming together of the large private landlords with the speculative building industry ensured that the land would be developed within a tightly controlled regime, that resulted directly in the London squares (Rasmussen, 1982, p. 166). Perhaps the best example of this confluence of interests is the Bedford Estate.

The Bedford Estate provides a useful demonstration of the difficulties involved in trying to impose any sort of coherent plan on London precisely because its history is so protracted (Olsen, 1982). Beginning, as we saw above, with Covent Garden in the 1630s, the Bedford Estate came into being over the following two centuries or so in a series of separate developments, spaced out in time, and with hiatuses between (Ibid.). The consequent of this long, drawn-out history is that the Bedford Estate turns out to be a good illustration of the way in which parts of central London’s pre-industrial urban form has come about through ‘unplanned planning’.

The basic approach was simple enough. A master plan of streets and squares would be drawn up, and contractors would be invited to develop particular blocks, following more or less restrictive codes concerning building heights in relation to street widths, for example (Ibid.). These were not dissimilar in principle to the codes used after the Great Fire of 1666. There was a ready market for such developments amongst the
middle classes, who sought city dwellings removed from the insalubrious City, but within easy access of it. The square at the centre of the development thus provided the ‘green lung’ without which the houses in the development would not sell: green space, and the clean, fresh air that it offered was indispensable (figure 2.4). But it was not just a matter of putting physical distance between city and suburb; social distance was also imposed. In Bedford Square, for example, there were gates closing off the approaches from Oxford Street and Euston Road (they were abolished by Act of Parliament in 1893), and people with no business in Bloomsbury were not admitted (Rasmussen, 1982, p. 192).

Figure 2.4. Hanover Square. (Source: Chancellor, 1907)

Figure 2.5. Plan of the Bloomsbury Estate, 1800. The design of each of the plots was left to the contractor (although strict control would have been wielded over what was acceptable). (Source: Reproduced by kind permission of the Duke of Bedford and the Trustees of the Bedford Estates)
The Bedford Estate created three closely planned estates: in the early seventeenth century, Covent Garden, described above; in the late eighteenth and early nineteenth centuries, Bloomsbury; and in the mid to late nineteenth century, Figs Mead. Covent Garden was designed as a whole, but in Bloomsbury and Figs Mead codes were used as part of a master-planning process that laid great emphasis on controlling all aspects of the development (Chancellor, 1907) (figures 2.5–2.7); no great surprise, perhaps, in view of the fact that these were in general speculative developments, involving large
numbers of people, all of whom expected to turn a profit, and all of whom therefore had a vested interest in minimizing uncertainty.

This inevitably led to conflicts, since the timescales of landowner and builder were so completely different. Whereas the builder would typically want to build the small, cheap houses that could quickly be sold for an immediate profit, the landowner, who would typically sell a ninety-nine year lease for the new property, would tend to prefer large, solidly-built dwellings that would still be capable of turning a profit ninety-nine years hence, since this was where (or when) their long-term profits lay (Olsen, 1982).

In practice, compromises on both sides had to be made. For example, in the case of Keppel Street, Bloomsbury, in a conflict between the landowner, the Duke of Bedford, and the builder, Thomas Lewis, it seems likely that Lewis was allowed to build smaller and poorer houses than the Duke of Bedford would have liked. The Keppel Street houses were eventually demolished by the Bedford Estate when their leases ended, and the cleared site was sold to the University of London in 1927 (Ibid.). Enforcing strict observance of leasehold conditions risked driving builders to bankruptcy, which benefited no one. This was particularly the case during the Napoleonic Wars, when the costs of building materials were high (Ibid.).

These developments did not happen in complete isolation. Besides the requirements of the landowner, developments by the large private estates had happened within the context of increasingly sophisticated building acts. The regulations brought in following the Great Fire continued to be developed further, both in terms of scope and geographical coverage. Thus the building acts of 1707 and 1709 affected the cities of both London and Westminster, they affected the appearance of terraced housing, and they were both concerned with fire. The Act of 1707 abolished the wooden eaves cornice, requiring the front wall to be taken up above the roof as a parapet, and the Act of 1709 required window frames to be recessed at least four inches (10 cm) from external wall face. Further Acts were passed during eighteenth century on the construction of party walls and even to encourage the standardization of bricks.

In 1774 all previous legislation was consolidated in a new Act, which divided all buildings into various ‘rates’ according to size and type and established standards of construction for each rate. Each of the four rates was defined in terms of floor area and land value. The Act of 1774 was something of a milestone, drafted by Sir Robert Taylor and George Dance. The changes, though minor, were significant. For example, most of the wooden window frame had to be set within the brickwork of the reveals (the sides of the window aperture), so that only a thin strip of wood remained visible. This affected not just the resistance to fire of the buildings, but also the appearance, a fact not lost on Taylor and Dance, both of whom were accomplished artists, and both of whom understood that the changes they had set out in the Act would play themselves out in a way sympathetic to the neoclassical architectural aesthetic that prevailed at the time (Summerson, 1945).
Besides the existence of the master plan, and the building acts, there were other conditions imposed upon the builders who had been contracted to carry out the work. At Bedford Square, for example, a strict agreement set out the requirements for both materials and dimensions to be used in the first London square to be designed as a unified whole, although it was built by several different contractors (Olsen, 1982). Façades were to follow uniform design proposals that had already been drafted, for example, while pavements outside the houses were to be 9 ft 6 in (about 3 m) deep in the square itself, and 6 ft deep (a little less than 2 m) in the streets leading from the square. This is not unusual: as Olsen (1982) points out, building agreements tended generally to specify such things as building line, dimensions, materials, quality, as well as including covenants against nuisance and trade.

**Coding for the Fashionably Healthy: A Summary**

Planned schemes outside of the City, such as those of the Bedford Estate, were only possible because land development rights were concentrated in the hands of a few wealthy families, the Russells in the case of the Bedford Estate, and remained so through the generations. The Bedford Estate was able to commission builders to take much of the financial risk, and the use of pattern books and the demand for particular styles ensured the consistency in design that conferred a unity to the whole estate, even though it was designed and built by a variety of different builders.

The developers of the great London squares kept a close eye on the market, including the prevailing architectural trends and fashions. They had to, since although the squares themselves were basically supply-led, it was a supply-led process that assumed the existence of a latent demand. The prevailing fashions of the time were also reflected in designs that sought to be both up to date and relatively safe in terms of fire resistance: here the building acts played their part in dictating the types of material used and how they were used and, in combination with fashion, they had a significant influence on the appearance of buildings and streets. We see this particularly in the 1774 Act draft by Sir Robert Taylor and George Dance and discussed above.

The prevailing aesthetic of the time was peculiar to England at a larger scale, too. English squares, tended to differ from their continental counterparts in that they were not intended to be monumental constructs, but rather simply shared open areas that could be used by the local residents. Easily linked together to form a larger whole, as in Bloomsbury for example, they still avoid pretentiousness (Rasmussen, 1982). Even the house plans are similar from house to house: as anyone who has been in more than a few London houses from the eighteenth and nineteenth centuries will know, differences are often of scale, rather than form. Rasmussen (1982, p. 200) sees this as a cultural matter, the reserve of the urban form mirroring the reserve of the people behind it.
But even if the urban form of many of these estates is reserved, eschewing grand boulevards for leafy streets, the great estates of London such as Belgravia or Bloomsbury were planned from the outset, with both master plan and building type specified (Olsen, 1982). Olsen sketches the contrast with Paris, which initially grew with no plans at all. Instead, it is 'an unplanned jungle, hidden behind the elegant façades of Haussmann’s boulevards' in the tradition of French landscape gardening: geometrical patterns cut through a dense substance, shrubbery in the case of gardening, buildings in the case of city planning. London’s great estates, planned *ab initio*, were mostly private developments, often carried out speculatively, and over which the master planner could exercise a degree of control that was close to absolute (*Ibid.*).

**Conclusions**

**Urban Codes and English Culture**

The ‘Insistent verticality of the London house is idiomatic’, thus wrote John Summerson, who added that it is an idiom that derives from two fairly basic economic considerations: the need to maximize the number of houses on a street, resulting in narrow, deep plots of land; and the fact that such a layout enables a more economic layout drainage and sewers (Summerson, 1945, p. 51). To be sure, London’s pre-industrial urban form is the consequence of a rich blend of complex interactions, but if we had to boil it down to its essence, we could reasonably point to three things: statutory instruments; individual agency as expressed through market forces; and architectural fashion (the increasing use of stucco in the late eighteenth century, for example). Only the last of these was not driven mostly by pragmatism, and all are closer to urban codes than master plans.

From Fitzailwyn’s Assize in response to a tragic fire, the development of London has been guided above all not by notions of an ideal city, but by basic rules intended to ensure that the place would continue to function. Such an approach is entirely consistent with London’s history, which, as Hebbert (1998) has pointed out, is ‘more by fortune than by design’. Thus the first legislative planning instruments were simple regulations, designed to ensure a modicum of structural soundness and fire resistance. Subsequent plans for London were more ambitious and, it turns out, less practical than the earlier tools. From the various royal proclamations, starting with Queen Elizabeth’s in 1580, that aimed unsuccessfully to limit building outside the City walls, to the grandiose and short-lived attempts by Charles II’s surveyors, including Christopher Wren, Robert Hooke and John Evelyn, to plan the City anew after the Great Fire of 1666, pragmatism in the face of inertia has usually won through in the end; no surprise perhaps, in so market-driven a place as seventeenth-century London, and still the case three centuries later. For the streets and squares of the great estates were also driven
by private enterprise; but there being no ground plan to follow, master plans had to be
drafted, the urban codes providing the framework by which the labours of the various
contractors could be brought within the control of the landowner. Rasmussen (1982,
p. 176) got it right when he observed that ‘In England, there seems to be a general
aversion against making any institution public which can by any means be run by a
private enterprise’.

And underpinning all of this is a simple cultural foundation, also identified by
Rasmussen in the first half of the twentieth century, and still true today. The English
have, since the Middle Ages, preferred to live in one-family houses, and the response
of both the authorities and the market has been to recognize this preference and to
work with it. This approach is different from the continental one, which rests on
mediating the growth of a city through an abstract idea of some kind of ideal urban
form. The English approach simply ‘legalizes what has already taken place’ (Ibid., p.
75). This, Rasmussen notes, reflects the differing legal systems of the two places,
whereby continental law has been codified, whereas English law has been developed
through precedent.

This is crucial, because the system of precedent is essentially a pragmatic one, based
on what works. The post-fire codes for the City of London are a case in point, and
Rasmussen highlights this in his discussion of whether or not the failure to implement
Wren’s plan for rebuilding the City of London after the Great Fire in 1666 was a good
or a bad thing. He concludes that it was a good thing, largely because the approach
eventually adopted worked with the grain of English culture rather than against it, as
in practice Wren’s plan would have done. And this is the clue to understanding how
urban coding approaches can work in England in the twenty-first century.

Bringing It All Back Home

A clue then, but to a question with no easy answer. It seems clear enough that the
British, or perhaps English preference for ‘muddling through’ when things gets
difficult is an old habit. A kinder observation, already made by Hebbert (1998), might
be that London’s planning has its intellectual roots in pragmatism above all else;
perhaps no great surprise in view of the fact that London was founded as a centre for
those two institutions that are most necessarily pragmatic, commerce and the military.

The modern day planner or urban designer (or urbanist) finds him or herself caught
between a rock and a hard place. On the one hand, a tendency to pragmatism may be
looked upon as a generally positive attribute. On the other hand, such a tendency
may also be distinctly short term in nature – closer to that of the eighteenth-century
builder than the eighteenth-century estate landlord – and the conflicts that existed then
between short-term and long-term profits have not been resolved in the intervening
couple of centuries. The eighteenth- and nineteenth-century squares worked because
there was a market for this sort of urban environment. There is a real sense here that
the development of the richer parts of London has been led by market forces, working
in some cases in fairly close cooperation with Royal patronage. One could argue at a
pinch that this is an early example of public-private partnership, but the reality is that
these were property developers speculatively carving up the available space to develop
as housing estates aimed squarely at the wealthier members of society.

There are of course huge differences between the eighteenth- and twenty-first-
century contexts. The biggest with regard to planning are these: development rights are
now nationalized; there is a town and country planning system that mediates between
private and public interests; there is system of building regulations to ensure minimum
standards of construction in terms of both structural and environmental integrity; there
are many more people with much greater mobility for whom to plan; environmental
interests are now paramount; notions of a prevailing fashion that holds sway – on the
authority of a pattern book for example – have given way to an approach that engages
stakeholders and seeks a democratic consensus.

Urban codes, then, have come in a variety of forms and are nothing particularly
new, even if the moniker is. Rather, they were called ordinances, or building acts, or
royal proclamations, or assizes. But now that the planning and building regulations
systems have between them mopped up much of what those ordinances and acts
and proclamations were for, the role of the urban code has come to be defined more
narrowly, even if its provenance is clear. If there is a master plan, or an existing
ground plan as was the case in the City of London after the Great Fire, the urban
code can provide a general framework within which the urban environment can be
(re)constructed, while providing sufficient freedom and versatility for change over
time. Indeed, this ancient definition retains its relevance: modern definitions of urban
codes by both CABE (2003) and Carmona et al. (2006a) deviate little from this older
order.

There are now many forces to be balanced in urban and regional planning, roughly
summed up in the classic sustainability triumvirate of environment, society and
economy. Urban coding can help in this invidious balancing act by simple virtue of
the fact that it seeks to steer rather than prescribe the final outcome. In this respect, it
owes more to Charles II’s post-fire Acts than it does to the landowners of London’s
great estates. The post-fire Acts were general enough to survive the passage of time;
the pattern books of the eighteenth and nineteenth centuries, though beautiful, might
now be seen as overly prescriptive, even if the master plans of that time, rendered using
modern graphical techniques, would not look out of place in the twenty-first century.
And here perhaps is the lesson from London: it is the combination of plan and code that
has proved so powerful in the past, providing a means of steering development towards
a clear outcome while leaving room for those doing the work to proceed as they see fit;
a pragmatic response to an awkward issue; a hopeless fudge come good.