Edinburgh's First New Town from a Transnational Perspective
Continental Sources for Eighteenth-Century Town Planning in Britain

Alexis Joachimides

Abstract   The consistently geometric layout of the plan for the extension of Edinburgh, result of one of the first major competitions in urban planning, staged by the Town Council in 1766, was the starting point for the most ambitious project for the expansion of a city in Great Britain during the eighteenth century. Despite the intensive and prolonged efforts of local research in the subject, until now the origins of this plan have not been established convincingly. With Turin and Berlin two continental sources of inspiration for the designers in the former Scottish capital are here being proposed for the first time. Not only are they explicitly mentioned in contemporary sources and were available knowledge for the educated elite of Edinburgh. In their different layout, they could in fact account for some of the structurally most important features of the design for what was to become the First New Town there.

Keywords   urbanism, town planning, competition, cultural transfer, enlightenment, Grand Tour

The First New Town of Edinburgh, the opening stage in a major enlargement of the former capital of Scotland during the later eighteenth and early nineteenth century, was the largest and most ambitious town planning project in Great Britain during the period and one of only a few comparable schemes in Europe at that time. When it was put into practice, the extension eclipsed the pre-existing town, fundamentally changed the social fabric of Edinburgh, and engendered the growth of the compact urban landscape to about three times the space it had occupied before the beginning of the process. It is not easy to understand why this particular process has until now received almost no attention in either the standard accounts of the history of urbanisation and town planning, or in the leading textbooks on the history of architecture in Britain and beyond.[1] Obviously, the rational and strictly geometric layout of the plan for the first enlargement of Edinburgh, the result of one of the earliest competitions in urban planning staged by the Town Council in 1766, would merit a discussion in a transnational discourse on the development of the ideal city since the Renaissance.[2] The following essay can only be a first step in that direction, building upon the longstanding and extensive research on the Edinburgh New Towns by local scholars.[3] However, as much effort as has been put into establishing the preconditions, the procedures, and the protagonists of the Georgian expansion since the 1930s, this research is concerned exclusively with situating the urbanism of Edinburgh in a national context, fluctuating between the Scottish and British identity of the city.[4] In this discursive space many 'blind spots' remain, invisible as long as the larger picture of eighteenth-century town planning in Europe as a whole is not taken into consideration. For example, the origins of the plan for the first extension, as adopted by the Town Council in 1767, have not yet been established

convincingly, despite many decades of discussion. The contemporaneous introduction of rational planning in Scotland, limited to small model villages and military barracks, the English contributions to urban design, and the well published French models of the period have all been proposed as influences, but none seem sufficiently similar to the result of the Edinburgh competition. Instead, Turin and Berlin are proposed here for the first time as two other continental sources of inspiration for the designers in the former Scottish capital. They were explicitly mentioned in contemporary sources and were known to the educated elite of Edinburgh at the time. In their different layout, they could in fact account for some of the structurally most important features of the design for what was to become the First New Town there.[5]

Until the second half of the eighteenth century the city of Edinburgh occupied an entirely enclosed site, strictly limited to the upper stretch of a steep oblong hill ascending from east to west towards a rocky cliff on which the castle has assumed a strategic position since time immemorial (Fig. 1).[6] Originally, the hill had accommodated two separate corporations which had merged by the seventeenth century; Edinburgh on the high ground in front of the castle and Canongate towards the lower eastern end. The ridge of the hill formed the common backbone of these twin towns, a broad street of about a mile in length, now called the Royal Mile, connecting the castle with the former abbey of Holyrood, which has been the seat of the monarch in Scotland since the reformation. When the towns had been founded in the Middle Ages, the remainder of the hill had been subdivided into rectangular building lots. With their small sides they sat on a string along the main artery, but extending considerably in length towards the slope of the hill, separated by narrow alleyways along their side to access the far end of the allotment. On paper, the result resembled a comb with fine teeth or a herringbone pattern.[7] As the population increased in the early modern period and without further space available, building on these lots intensified and they were filled, ever more densely packed, with multi-storied tenements. These steep houses with one or more separate flats on each floor, ultimately reached an average height of five or six storeys, some rising up to ten or even fourteen storeys. Overcrowded and without the means to get rid of refuse and wastewater other than by dumping it into the alleyways, the proliferation of these tenements constituted serious hygienic problems, besides the unpleasantness of the stench. Together, the overpopulation of the confined city and the resulting intensification of the built environment overstrained the medieval layout to such

an extent that by the eighteenth century Edinburgh seemed in urgent need of extending its townscape.

Every expansion had to face the difficult topography of the adjoining countryside.[8] On three sides the hill of Edinburgh was severed from neighbouring high ground by deep valleys, while the lower eastern end was engirded by two large mountain peaks, one of which is still uninhabited today. To the north and west, the slope of the hill was particularly steep and a swamp at its foot completed the seclusion, so that the city had not needed a defensive wall on these sides. To the south, the slope was less precipitous and consequently fortified, allowing for a small extension in the seventeenth century some distance down from the ridge. In the mid-eighteenth century, suburban development spread to the southern heights beyond the valley bottom, even though access to the town centre remained arduous until the building of a South Bridge (1785–88) to incorporate this urban fringe.[9] The southern suburbs were originally developed as private speculations outside the city boundaries, depriving the Town Council of taxpaying inhabitants. Considering planned expansion, its supporters looked northwards at some higher ground in the possession of the council, just beyond the swamp of the so-called North Loch. Ultimately, this shallow ridge was to become the site of the First New Town, but not before the building of a bridge across the swamp made it accessible from the city centre (Fig. 2). Proposed since the 1720s to facilitate access to the city's harbour at Leith five miles northwest at the estuary of the Firth of Forth, the North Bridge was late to come. It was only begun in 1765 and completed in 1772, when development in the future New Town had already started.[10] Even before an extension of the fiscal boundaries of the city or the demolition of the wall on the southern side, the bridging of the valleys was an absolute precondition for any attempt at enlargement. But prior to the 1760s, political tensions and diverging economic interests among the major groups of the citizenry had for many decades prevented any attempt at such a project.

With the suppression of the last Jacobite rebellion in 1745, the political situation of Edinburgh had changed considerably.[11] After a long period of civil unrest and factional conflict, the Whig supporters of the Hanoverian dynasty prevailed and came to dominate local institutions. But even their rivals among the Scottish Tories, traditionally loyal to the Stuarts, made their peace with the new political order. The return to stability led to expectations of economic recovery after a period of manifest decline and required a new definition of the city's future role in a nascent British Empire. While Edinburgh
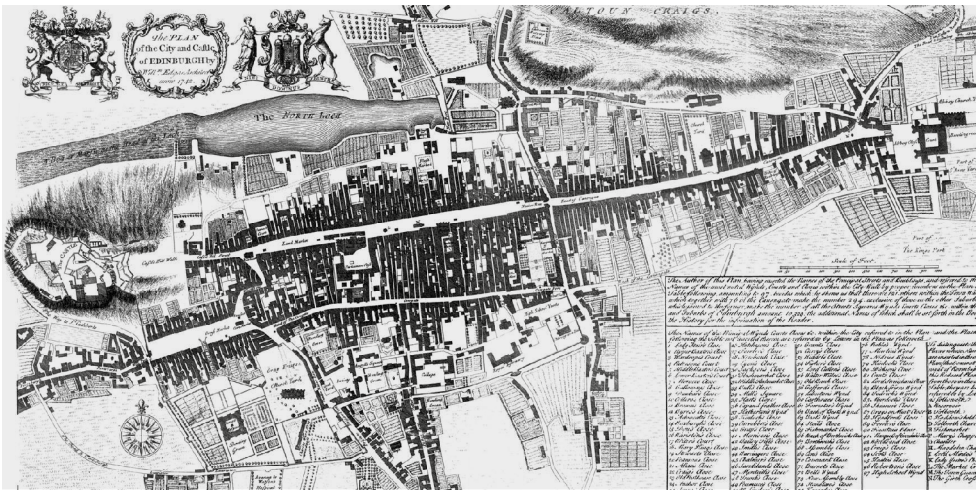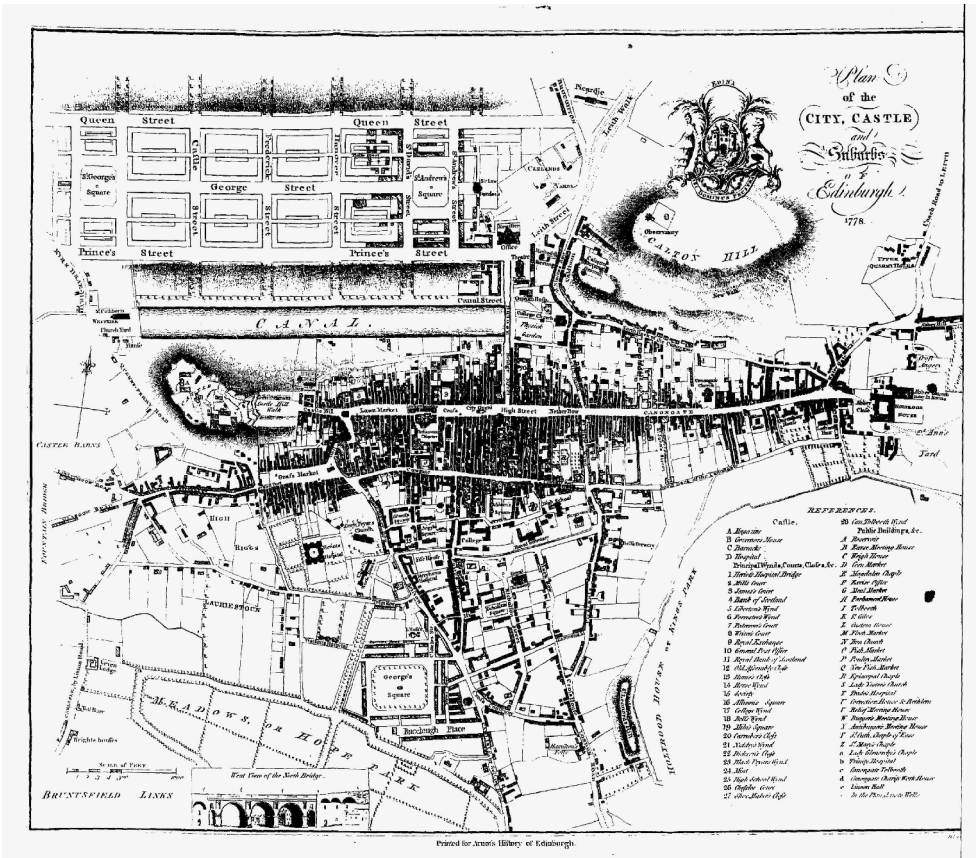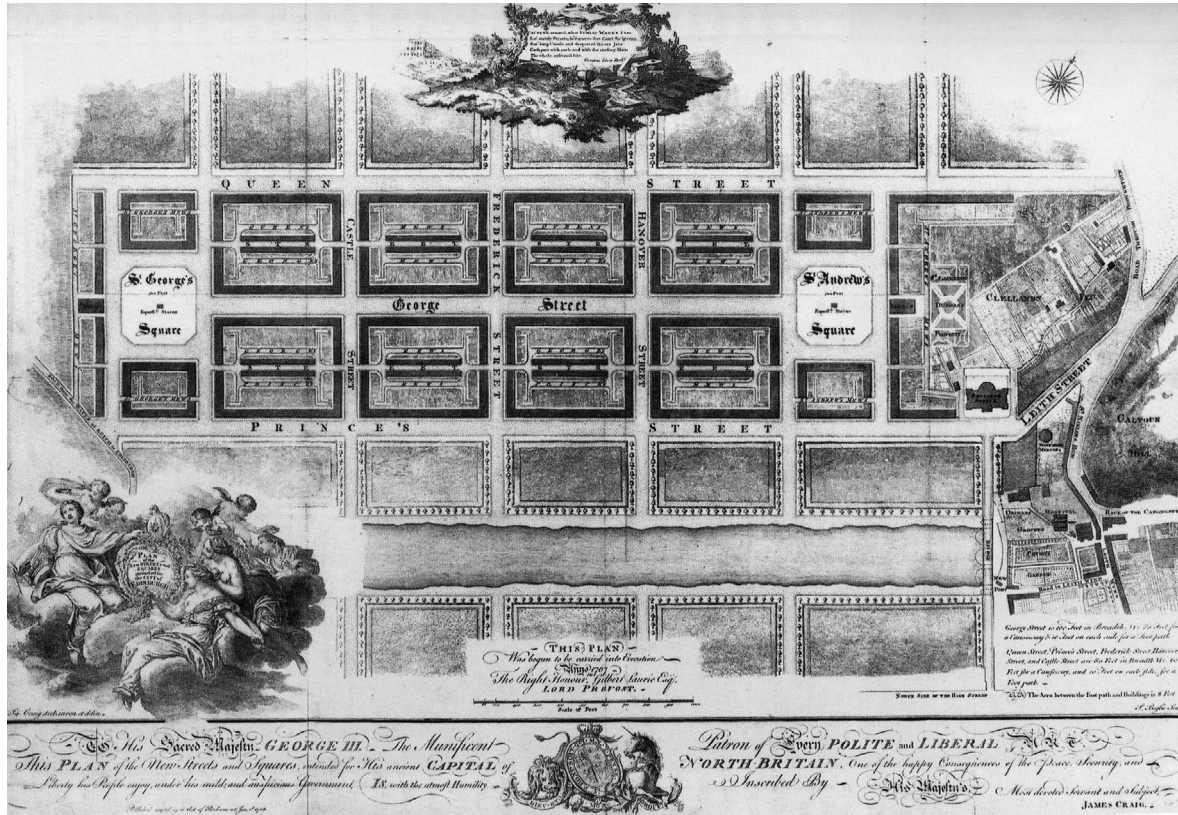
Fig. 1 Peter Fourdrinier: *The Plan of the City and Castle of Edinburgh by William Edgar, Architect,* engraving, dated 1742 (North is at the top). **Fig. 2** N.N., *Plan of the City, Castle and Suburbs of Edinburgh,* engraving, published in Hugo Arnot: The History of Edinburgh, Edinburgh 1779, 233 (North is at the top).

Fig. 3 Patrick Begbie: *Plan of the New Streets and Squares intended for the City of Edinburgh, Ja. Craig, Arch., inven. et delin.*, engraving, dated 1768 (North is at the top).

had lost its traditional status as the seat of government in Scotland with the Union of Parliaments in 1707, it remained the largest city in the former country, the administrative centre of a separate Scottish church and legal order, and the seat of one of the leading universities in Britain standing at the head of a highly differentiated system of higher education. To the supporters of an enlargement of the city, not exclusively members of the victorious Whig party, the establishment of a new town on the lines of modern urbanism was the way to overcome a backwardness that the city had accrued during half a century of political schism. However, despite the presence of a political consensus, they faced serious opposition to their project from the side of the landowners on the hill. These local traders and craftsmen, members of the corporations that together formed the Town Council, feared that their property would loose all value if the more affluent citizens left for a highly attractive new development.[12] For two decades after 1745, their conflict of interest with the landed gentry, widely identical with the judicial and intellectual elite of the city, prevented any progress. Only when both sides found a compromise,

limiting the projected new town to a suburban residential area and leaving all administrative and educational institutions inside the future old town, could the enlargement finally begin.[13] A sketch of this compromise is already outlined in the major printed pamphlet in favour of the creation of a new town, published as *Proposal for carrying on certain Public Works in the City of Edinburgh* in 1752, almost fifteen years before competition. In order to ease the apprehension of the local houseowners, the author compared the prospect of an elite suburbia in the former Scottish capital with similar developments throughout Europe: "It has been objected, That this project may occasion the centre of the town to be deserted. But of this there can be no hazard. People of fortune and of a certain rank, will probably chose to built upon the fine fields which lie to the north and south of the town: but men of professions and business of every kind, will still incline to live in the neighbourhood of the exchange, of the courts of justice, and other places of public resort. [...] *Turin, Berlin,* and many other cities shew the truth of this observation. In these cities, what is called the *new town,* consists of spacious streets and large buildings,

which are thinly inhabited, and that too by strangers chiefly, and persons of considerable rank; while the *old town*, though not near so commodious, is more crouded than before these late additions were made."[14]

This prediction of 1752 about the social constitution of the future extension was to be proven wrong in the end, as the ever expanding dynamic of the New Towns, once engendered by the first attempt, had emptied the old town of all but the most disadvantaged inhabitants by the early nineteenth century. Modern scholars disagree about whether the *Proposal* underestimated the population drift outward from the hill and seriously expected the acquisition of wealthy new citizens from among the Scottish nobility and gentry, or only pretended to do so, in order to deceive their critics.[15] Be that as it may, the Town Council eventually adopted the creation of the new town, lobbied in Westminster to achieve an extension of the city boundaries to accommodate the designated northern building site, and arranged a competition for its layout in 1766.[16] On 22 May of that year the council published a call for the submission of proposals in local newspapers, to which six participants answered. It assigned the selection to the North Bridge Committee, constituted in 1763 to oversee the building of the bridge and consisting of members of the local gentry, the juridical elite, and non-participating architects. In August, the committee pronounced the proposal by the local master mason James Craig as victorious, but asked the planner to revise his contribution in consultation with its experts. It took nearly a year until Craig and a newly created New Town Committee, of similar constitution to the North Bridge Committee, came to a conclusion which was formally adopted by the head of the council, the Lord Provost, on 29 July 1767.[17] Thereafter, the architect presented the result to King George III in London who consented, but asked for a royal denomination of the main streets. Incorporating this change, the plan was eventually published as an engraving at the beginning of 1768 at the initiative of its designer.[18] By this time, immediately after the first sales of building lots in 1767, the new town had begun to be constructed on its eastern edge following the final version of Craig's plan as preserved in Edinburgh, with only some specific adaptations that are mentioned below. While the formal process of this competition can be reconstructed in detail, any assessment of the actual choices made by the relevant committees turns out to be impossible. None of the competition entries was preserved, not even the victorious scheme by Craig, and except for his, no names of the participants are recorded in the council minutes. Nonetheless, some scholars have invested much effort into the identification of alternative layouts which they tried to attribute to the competition without much credibility or agreement.[19] These variations are either not reliably dated and might well be afterthoughts, like a plan by Craig with a circular space in the centre, or they do not constitute a serious proposal at all, like a sketchy draft in the shape of a Union Jack which has been mistaken as such. All that has remained for examination is the layout which was adopted by the Town Council in 1767 and on which the actual new town was based (Fig. 3).

In this scheme three broad main streets, positioned in parallel east-west orientation, define the new development as a long and narrow rectangle, separated by smaller cross streets into four enormous building blocks on either side of the central axis. The future Princes Street and Queen Street, the two roads at the outer limit were meant to be built on only on their inner side, leaving open the view over the swamp towards the old town in the south and over gently sloping fields towards the Firth of Forth in the north. In both directions, all cross streets continue outside the boundary of the planning area as tree-lined avenues. The central axis of the future George Street, named after the king, terminates at both ends with a public open space of identical quadratic shape. Although called St. George Square and St. Andrew Square, after the patron saints of England and Scotland, in the original design they were not meant to become English squares with private gardens behind railings, but followed the continental model of a *place royale* with equestrian statues in the centre.[20] At each end the vista along the central axis would have been closed by a church facade at the far side of the *place*, of which only the identically named church in St. George Square was realised, while at St. Andrew Square the monumental villa of the local member of parliament, Sir Lawrence Dundas, soon took pride of place and forced the other church into the northern row of houses along George Street.[21] The easternmost cross street that leads into St. Andrew Square is out of alignment with the North Bridge further to the east, because the demarcation of an adjacent private property forced a compromise on the planners, probably contrary to the original idea for the entrance to the new town.[22] In 1771/72 the long discussed new Register House, a building for the Scottish national archives, was used to cover the dead end in front of the bridge's northern exit and took this position as an articulation point which distributes traffic from the old town between the new town to the left and the road to the harbour in Leith to the right.[23] Also, some private land at the opposite end of the plan's area could still be acquired in due time, as it was necessary for the

complete realisation of the western square. Besides providing a solution to the imperfect approach, the plan offered two other suggestions beyond the area for which the designer was formally responsible – the layout of a garden on the site of the North Loch and the possibility of extending the new town to the north.

In terms of scale and complexity as well as in its consistent geometry, this layout was unprecedented in Britain and in consequence proves difficult to assess in terms of possible models or sources of inspiration. Neither Scotland nor the British Isles in general had a tradition of urban design on a large scale in the early modern period, or a sufficiently consistent culture of town planning on which to draw for such a project. The few larger schemes of baroque regularity previously put forward in this field were utopian design exercises which were not meant to be realised, as they disregarded the actual property boundaries in the locations they were supposed to redesign. This is true for Sir Christopher Wren's drafts for the rebuilding of the City of London after the Great Fire of 1666, as well as for the plans of an extension of Edinburgh advocated by the Earl of Mar, a Jacobite exile in Paris, in 1728.[24] While these projects show the knowledge of all the modern principles of continental town planning, they did not provide any specific solution for the designers of the Edinburgh new town besides the most prolific stereotypes of geometric layout, straight street alignment and axial vistas. However, to possess the knowledge of such common features, the planners of the new Edinburgh would not have needed to draw on isolated and long forgotten instances of ideal planning. Insofar as England experienced more and more modern-style new towns, realised in speculative development during the first half of the eighteenth century, the particular contribution of these projects was a national typology of garden spaces like the rectangular square, the circular or polygonal circus and the crescent in the shape of a segmental arch. While such configurations were featured supportively in current architectural theory and employed in the prestigious extensions of the London Westend or the city of Bath, this English typology was conspicuously absent in the design for the Edinburgh *places* with their 'French' character.[25] A later variation of Craig's plan for the new town with a circus in a central location was not considered at all.[26] Maybe the Edinburgh planners had access to the design for the Royal Crescent in Bath by the younger John Wood, as constructed from 1767, a segmental row of town houses looking upon a private garden in a downward sloping wooded setting, before they chose a similar 'country house view' for the northern boundary of the new town at Queen Street.[27]

If so, the transposition constituted a quantum leap, as the Bath design would have fitted completely into one of the long building blocks, which together formed a continuous row of houses for 3500 feet, looking down toward the Firth over a similar landscape setting of downward sloping woodland and fields. While the modest dimensions of Bath provided the opportunity for a simulated palace front as a design solution for the terrace, the imperceptibly long stretch of frontages in Queen Street excluded any such attempt at unification.[28]

The same problem of scale arises with the suggestion to situate the Edinburgh plan among the first Scottish adaptations of regular town planning, that appear only shortly before the competition in 1766.[29] They were either model villages created by estate improvers, like the new hamlet of Inveraray (Argyll), begun in 1747, or barracks inside fortresses constructed by the state to suppress resistance in the Highlands as at Fort George (Inverness), erected in 1748–69.[30] The architect John Adam, brother of Robert Adam and his representative in Edinburgh, who was also a member of the New Town Committee in 1767, was involved in each instance.[31] Both projects show the same pattern of a comparatively large rectangular square in the centre surrounded by a continuous row of terrace houses, subdivided into two equally sized compartments by the crossing of the main road along the lateral axis. Any comparison with the Edinburgh new town plan is inhibited by the small scale of these designs, not exceeding the size of a traditional village. But even if the dimensions are not taken into consideration, those layouts do not share more than one peculiar detail with the competition result of 1767. They offer rear access to the houses along the square through small side alleys, which could have prompted the provision of similar back alleys to reach the garden lots and mews inside the large building blocks of the new town. As it is, the lack of appropriate models in Britain has for some time prompted scholars to look for international prototypes of the Edinburgh development.

The well publicised and highly respected French urbanism of the seventeenth and eighteenth centuries was an obvious first choice for any such attempt, but again the similarities with Edinburgh are rather elusive.[32] The monumental new *places royales* in Paris, Nancy, or Bordeaux represent the same typology as employed for the new town squares, but a similar inspiration could be gained closer to home from the Piazza of Covent Garden in London, designed by Inigo Jones in 1631. This early project in London, with its Italian sources, incorporated features that were prolific in early modern town planning everywhere in Europe.[33] More specific is the comparison

of the Edinburgh concept with the extensive refurbishment of the city centre of Nancy by the architect Emmanuel Héré de Corny, around 1750, including the same idea of two *places* connected by a broad residential street on the main axis.[34] But, on closer inspection the dissimilarities are more relevant than the general correspondence, as both *places* are not symmetrical either in disposition or size, since they have entirely different functions within in the overall layout. The former *Place Royale,* now Place Stanislas, is the large and dominant focus, sealed off by a triumphal arch towards the self-contained promenade of the connecting street, while the different shape and size of the Place Hémicycle, on its opposite end, is perceived as the *cour d'honneur* of the adjoining seat of government. For better or worse, the design of Nancy clearly avoids the insistent symmetry of the Edinburgh plan. A similarly rigid inversion of the main open spaces can only be found in France at a very remote and early example of regular urban planning, the small town of Richelieu (Indre-et-Loire) in the south-west, conceived from 1631 onwards at the family seat of the identically named cardinal and head of state.[35] The similarity is even more pronounced, although Richelieu is only about one third of the size of the First New Town. It has the shape of a narrow rectangle, defined by three parallel streets, of which the main artery opens up into two identical quadrangles, just before leaving the city gates on either end. Nonetheless, it differs from Edinburgh in that these *places* are not the terminus of the main street practically or visually and, as the town is fully engirded by a city wall, there are additional small alleys along the inside of the walls, adding up the amount of parallel streets to five. The remaining similarities of both plans seems more likely to be coincidental than the result of a conscious adoption by the designers in Edinburgh. This is corroborated by the fact that the layout as described would only have been known to someone actually visiting the little town and recording the plan himself, because the only engraved plan available in the eighteenth century presented an unexecuted variation, with only one *place* in the centre of a grid of five streets of identical proportions, thus eliminating all the features that would have been relevant to the Edinburgh design.[36]

Obviously, the search for the origins of the plan for the first extension of Edinburgh has not yet been conclusive. A plausible clue to potential sources of inspiration beyond France is provided by the *Proposal* of 1752, explicitly comparing Turin and Berlin with the intended local project, as quoted above, albeit in a strictly sociological context. However, it remains conspicuous that the author considers himself well informed about the social make-up of city expansions in these distant places, without feeling any need to justify this claim. It seems not out of place therefore, to consider these counterparts from an urbanistic point of view as well, looking at their potential to account for some of the features of the First New Town that could not be found among the comparisons discussed earlier. Turin was nothing less than an exotic choice, since it was well established in eighteenth-century travel literature as one of the first major stopovers of the Grand Tour, considered the most beautiful city in Italy due to its consistent tradition of rational planning.[37] This was the result of more than a century of renovation and extension under absolutist rule which moulded the city into the closest realization of an ideal princely residence ever to be achieved. Made known by the local dynasty of the dukes of Piedmont in many ways, as with the anticipatory city plan of Tommaso Borgonio of 1682, which showed the shape that the city actually only reached in the mid-eighteenth century, the urban fabric of Turin was general knowledge among the educated elites of Europe.[38] At first glance, the overall layout is distinguished by many traits absent in Edinburgh, from the highly pronounced city limit of the modern artillery fortifications around the city, to the hierarchical subordination of each of its consecutive extensions to the centre of political power at the Piazza Castello, the seat of the ducal government.[39] But there are some features which could have been stimulating for the designers in Edinburgh, if attention is drawn to the inner structure of the three self-contained new towns which made up the bulk of modern Turin beyond its ancient Roman core. In each instance, the extension repeated the same basic pattern of a broad main street terminated by two *piazzas,* which are each provided with a monumental scenographic composition to close the vista. Along a main axis of more than 3000 feet, the southern enlargement, begun in 1621, is contained within the tower-gate of the *cour d'honneur* of the ducal castle at the Piazza Castello on the inner end and the stage set of a pair of twin churches, framing the city gate Porta Nova further away, on the Piazza San Carlo at the outer end (Fig. 4).

The same structure is repeated in 1673 with a similar distance to the central square, for the south-eastern enlargement, with the street Contrada di Po as its main axis and once again with the extension from 1736 onwards along the Via Dora Grossa, today Via Garibaldi, although in these instances the two *piazzas* at either end are not identical to each other in size and shape, unlike in case of the first extension. It is a modern misunderstanding of the baroque concept behind Turin, to assume that the rectangular grid of secondary streets branching off from
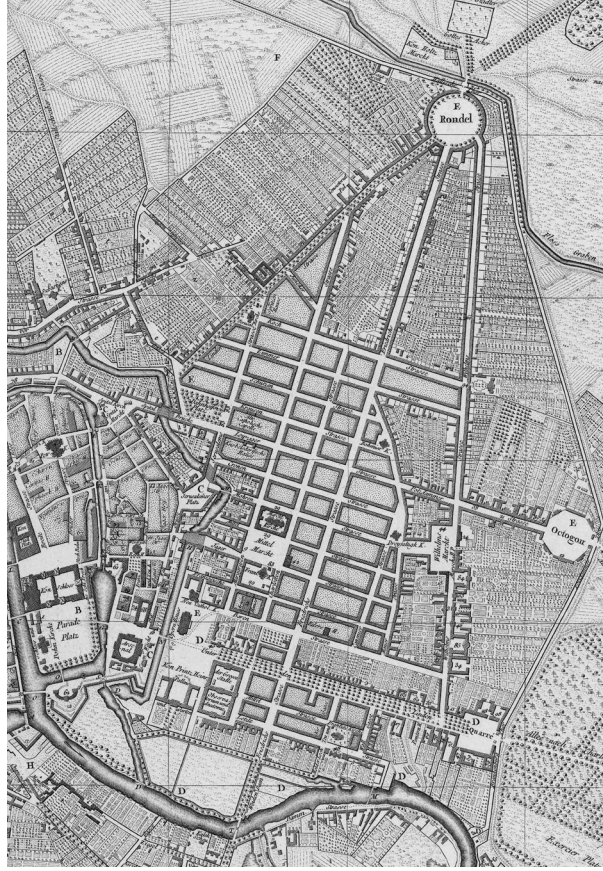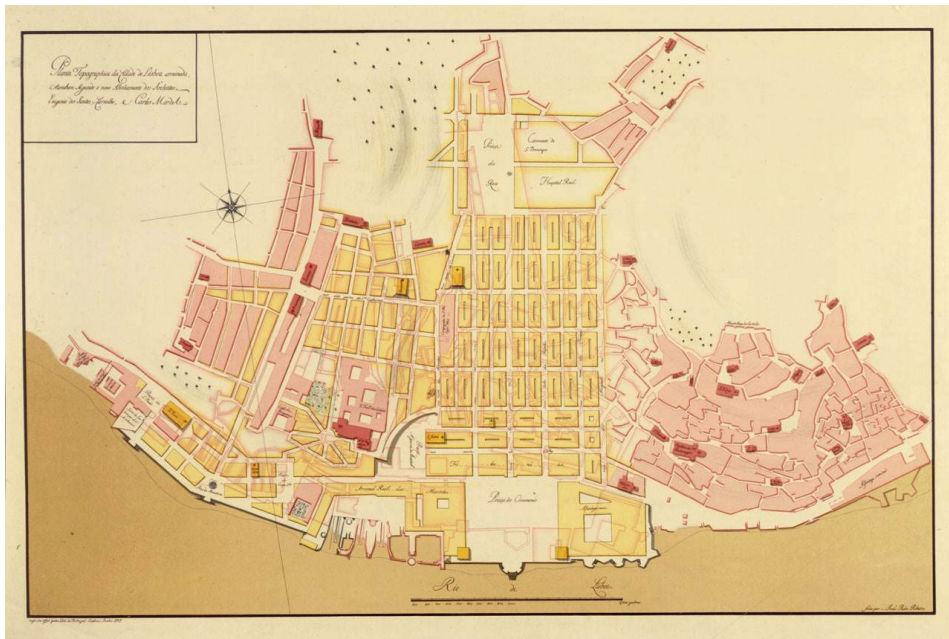
Fig. 4 Detail with the first southern extension of Turin from Tommaso Borgonio, "Augusta Taurinorum", engraving, published in N.N.: *Theatrum Statuum Regiae Celsitudinis Sabaudiae Ducis Pedemontii [...]*, Amsterdam 1682, vol. 1, plate no. 8 (North is at the top). **Fig. 5** Detail with Dorotheenstadt and Friedrichstadt from a reduced version of Friedrich Gottlieb Berger after Samuel Graf von Schmettau, *Plan de la Ville de Berlin [...]*, engraving, dated 1757 (North is at the bottom). **Fig. 6** João Pedro Ribeiro: reconstruction of the design by Eugénio dos Santos Carvalho and Carlos Mardel for the rebuilding of Lisbon in 1758, coloured lithography, dated 1947 (new buildings in yellow, remaining old structures in pink).

the main axes is the potentially infinite extension of the Roman street pattern underlying the city centre.[40] Not only do these modern grids deviate in their orientation from the street pattern there and among each other. Moreover, before the destruction of the fortifications and the endless continuation of the main streets into the open countryside from about 1800, each new town had evolved separately and was strictly confined by a scenographic framing. This obvious inspiration for Edinburgh's inverted symmetry is further supported by the enormous extent of the building lots in Turin. Originally conceived as sites for large aristocratic palaces and their gardens, in the end they were mostly filled with multi-storey tenements behind palace-style frontages built for a bourgeois clientele.[41] Whether the Edinburgh planners actually expected the construction of aristocratic mansions in their new town, or only a series of terraced tenements with common palace-style facades, they apparently adopted the Turin block size suited to both purposes.

One of the most important aspects of the design of 1767 for the future development of the New Towns in Edinburgh was the provision for a systematic continuation of the first extension. In this respect, the self-contained enlargements of Turin were not of much help, as each of them had been added to the existing city without regard to the others, kept together only by the surrounding circular fortifications. But for the purpose of a future extension of the Edinburgh scheme, the example of Berlin offered a solution. In the case of Berlin a first new town had been erected from 1674 outside of the city walls to the west, called Dorotheenstadt after the wife of the elector Friedrich Wilhelm of Brandenburg, since the land belonged to her possessions.[42] As ultimately completed much later, the layout of this first new town followed the same baroque scenography as described in Turin, with the broad main axis of the street Unter den Linden contained between the *place* of the electoral castle, and a quadrangle in front of the main western city gate in the direction of the town of Brandenburg. When it came to the foundation of a second new town in 1688, this time on the property of the new elector Friedrich III and consequently named Friedrichstadt, the planners used the secondary cross streets of the first design to integrate their southward extension geometrically with the existing one (Fig. 5).[43]

As this second new town was to be positioned at a right angle to the first, one of the small cross streets, now called Friedrichstraße, became the main axis of the new layout, leading to a circular *place* at the southern exit, its humble origins still attested to today by the reduced width compared to the main axis of the first

new town and the lack of a hierarchy in relation to the secondary streets parallel and lateral to it. If the result in Berlin could be considered as somehow imperfect for that reason, it still offered a way to coordinate further extensions of a new development on the principle of the same geometry. In Edinburgh, the implied 'extension' of the secondary cross streets beyond the northern limit of the First New Town in the 1767 plan followed the Berlin precedent, at first on paper only, but ultimately on the ground, when the early nineteenth-century Second New Town was linked with the first by actually extending every second cross street of the predecessor.[44] One might object that Berlin was a less obvious choice than Turin, being not as prominent, either in a contemporaneous discourse on urbanism or as a destination for tourists. But this inspiration was not entirely out of reach for an Edinburgh public at this time. A possible source of information could have been the exiled Jacobite James Keith, nominally 10th Earl Marischal. After the unsuccessful uprising in 1715, he had left Scotland for good and started an impressive career in the Russian and later the Prussian army, becoming Field Marshal General in 1747.[45] From 1749 Keith was the military governor of Berlin and as such partly involved in issues of urban development. Like other Jacobite exiles, he kept contact with Scotland by letters from abroad before he died in battle at Hochkirch in 1758. The advice he would have been able to provide must have seemed less partisan to the local Whig hegemony, when Prussia changed its loyalties in the so-called *renversement des alliances* of 1755/56 and became an important new ally of Hanoverian Britain. From this time onwards at least, experiences from Berlin had lost their Jacobite flavour.[46]

Turin and Berlin were included in the cosmopolitan 'space of knowledge' of the Edinburgh elite, as testified by their appearance in contemporary sources and supported by other evidence mentioned above. As examples of recent urbanism, they could be considered as model solutions for some of the most important problems raised by the planning of the new town, although, as always, such a prototype had to be adapted to the specific situation on site. But their relevance was at least as significant as that of London, Bath, or Nancy among many other examples proposed so far. One more candidate remains to be assessed in this context, as it has recently been suggested as a paradigm for Edinburgh with some persuasiveness.[47] The rebuilding of Lisbon after the disastrous earthquake of 1755, which entirely destroyed the economic centre of the lower city and the harbour, makes no appearance in Edinburgh sources of the period, but shares some of the main design features

with the First New Town (Fig. 6).[48] As a narrow longitudinal rectangle, defined by parallel streets leading inland at right angles to the waterfront, with the main axis confined between two major open spaces at either end, new Lisbon seems familiar enough from the perspective of Edinburgh. But while the earthquake had had an enormous resonance among the educated elites of Europe, the reconstruction of the Portuguese capital, approximately contemporary with the Edinburgh project, received almost no attention at the time outside the country. In contrast to Piedmont or France, the Portuguese monarchy refrained from publicity for their most ambitious urban development, for a long time virtually unknown to the rest of the world.[49] The obvious similarities between Lisbon and Edinburgh have therefore to be understood in a different way. Most likely, they are the result of the use of the same model in both cases, as the Lisbon plan had also turned to the new towns of Turin for inspiration. In particular, this concerns the self-contained and inwardly directed layout of the main street between two opposed squares at either end, even if the rigid symmetry of their identical size and shape, as used in the first extension of Turin or in Edinburgh, was absent in Lisbon. Their layout adapted the baroque scenography of the Turin new towns to the needs of a harbour city where the two *places* had very different purposes. The Praça do Comércio at the waterfront, served as a monumental entrance to the city from the river and housed the main public buildings relevant to its commercial activities. The inland Praça de Dom Pedro IV, served as market place for the local food supply provided by regional agriculture and brought into town through the road exit at the far end of this square. Lisbon employed other models besides Turin as well, but even the waterfront square, an almost identical repetition of the *Place Royale* in Bordeaux, modified the French prototype by using the Turin 'model house' with an arcaded ambulatory for the buildings framing it.[50] Therefore, Lisbon is another

instance to support the assumption that the 'ideal city' in Piedmont had a far reaching impact on early modern urbanism, not missed by the planners in Edinburgh. Yet, as in Lisbon, their First New Town assimilated various international stimuli from a broad range of suggestions found all over Europe. The process that led to the extension of the city in the last quarter of the eighteenth century is testimony to the intellectual scope of vision that could be expected from one of the leading centres of enlightened learning and debate in Europe, the proverbial 'hotbed of genius', as Edinburgh was known as at the time.[51]

Figure list

Fig. 1 Peter Fourdrinier: *The Plan of the City and Castle of Edinburgh by William Edgar, Architect*, engraving, dated 1742.

Fig. 2 N.N., "Plan of the City, Castle and Suburbs of Edinburgh", engraving, published in Hugo Arnot: *The History of Edinburgh*, Edinburgh 1779, p. 233.

Fig. 3 Patrick Begbie: *Plan of the New Streets and Squares intended for the City of Edinburgh, Ja. Craig, Arch., inven. et delin.*, engraving, dated 1768 (North is at the top).

Fig. 4 Detail with the first southern extension of Turin from Tommaso Borgonio, "Augusta Taurinorum", engraving, published in N.N.: *Theatrum Statuum Regiae Celsitudinis Sabaudiae Ducis Pedemontii [...]*, Amsterdam 1682, vol. 1, plate no. 8.

Fig. 5 Detail with Dorotheenstadt and Friedrichstadt from a reduced version of Friedrich Gottlieb Berger after Samuel Graf von Schmettau, *Plan de la Ville de Berlin [...]*, engraving, dated 1757.

Fig. 6 João Pedro Ribeiro: reconstruction of the design by Eugénio dos Santos Carvalho and Carlos Mardel for the rebuilding of Lisbon in 1758, coloured lithography, dated 1947.

Annotations

1 Edinburgh's New Towns are not even mentioned in textbooks like Lewis Mumford: *The City in History: Its Origins, its Transformations, and its Prospects* (New York: Harcourt, Brace & World 1961), Wolfgang Braunfels: *Abendländische Stadtbaukunst: Herrschaftsform und Baugestalt* (Cologne: DuMont Schauberg 1976) or Charles Delfante: *Grande Histoire de la ville de la Mésopotamie aux Etats-Unis* (Paris: Colin 1997). They appear only briefly in Henry-Russell Hitchcock: *Architecture: Nineteenth and Twentieth Centuries* (Harmondsworth et al.: Penguin Books 1958), 70–71 and John Summerson: *Architecture in Britain 1530–1830* (Harmondsworth et al.: Penguin Books 1953), 308–309, as in their subsequent editions. A short and dismissive account is included in Erwin Anton Gutkind: *International History of City Development* (New York: The Free Press of Glencoe 1964–1972), vol. 6, 308–310, at the end of a lengthy discussion of the Old Town.

2 Classic accounts of the concept ignore the Edinburgh competition of 1766, e.g. Helen Rosenau: *The Ideal City: Its architectural Evolution in Europe* (London: Methuen 1959); Hanno-Walter Kruft: *Städte in Utopia: Die Idealstadt vom 15. bis zum 18. Jahrhundert zwischen Staatsutopie und Wirklichkeit* (Munich: Beck 1989).

3 The author is currently preparing a comparative study of the Edinburgh New Towns and the contemporaneous extension of Bordeaux in a transnational context, to address these two neglected subjects on a broader basis.

4 For major contributions to this research cf. Frank C. Mears/John Russell: "The New Town of Edinburgh", *Book of the Old Edinburgh Club* 22 (1938), 167–200 and 23 (1940), 1–37; Alexander John Youngson: *The Making of Classical Edinburgh 1750–1840* (Edinburgh: Edinburgh University Press ¹1966, ²1988); Peter Reed: "Form and Context: A Study of Georgian Edinburgh", in: Thomas A. Markus (ed.): *Order in Space and Society: Architectural Form and its Context in the Scottish Enlightenment* (Edinburgh: Mainstream Publishing Company 1982), 115–153; Kitty Cruft/Andrew Fraser (eds.): *James Craig 1744–1795: "The Ingenious Architect of the New Town of Edinburgh"* (Edinburgh: Mercat Press 1995); Charles MacKean: "Twinning Cities: Modernisation versus Improvement in the two Towns of Edinburgh", in: Brian Edwards/Paul Jenkins (eds.): *Edinburgh: The Making of a Capital City* (Edinburgh: Edinburgh University Press 2005), 42–63; Anthony R. Lewis: *The Builders of Edinburgh's New Town 1767–1795* (Reading: Spire Books 2014).

5 The consecutive steps in the evolution of the enlargement of the city are traditionally numbered according to the time of their inception. Thus, the original extension, based on the competition of 1766, has been considered as the First New Town since the development of a Second New Town, to the north of the first project, from around 1800 onwards.

6 For the structure and appearance of the old town cf. Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 1–17; John Gifford/Colin McWilliam/David Walker: *The Buildings of Scotland: Edinburgh* (Harmondsworth et al.: Penguin Books 1984), 81–237; Ian Campbell/Margaret Stewart: "The Evolution of the medieval and Renaissance City", in: Brian Edwards/Paul Jenkins (ed.): *Edinburgh: The Making of a Capital City* (Edinburgh: Edinburgh University Press 2005), 21–41.

7 First recorded in a town plan engraved by Peter Fourdrinier: *The Plan of the City and Castle of Edinburgh by William Edgar, Architect* (Edinburgh 1742); cf. William Cowan: *The Maps of Edinburgh 1544–1929* (Edinburgh: Edinburgh Public Libraries ²1932), 30–34 (No. 5a); Martin K. Meade: "Plans of the New Town of Edinburgh", *Architectural History* 14 (1971), 40–52, esp. 43 (part I, no. 1).

8 For the topography and fortifications cf. Gifford/McWilliam/Walker: *The Buildings of Scotland: Edinburgh* [as in note 6], 21–25 and 84–85.

9 For the development of the south side cf. Mears/Russell: "The New Town of Edinburgh" [as in note 4], part 1, 172–173; Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 14–15. For the South Bridge, see ibid., 111–117; Gifford/McWilliam/Walker: *The Buildings of Scotland: Edinburgh* [as in note 6], 233–235.

10 On the history of the North Bridge cf. Mears/Russell: "The New Town of Edinburgh" [as in note 4], part 1, 189–199; Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 60–65; Edward C. Ruddock: "The Building of the North Bridge, Edinburgh, 1763–1775", *Transactions of the Newcomen Society* 47 (1974–1976), 9–33.

11 Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 15–24; Michael Fry: *Edinburgh: A History of the City* (London: Pan Macmillan 2009), 205–215 and 266–267.

12 These apprehensions are explicitly mentioned in Edmund Burt: *Letters from a Gentleman in the North of Scotland to his Friend in London* (London 1754), Reprint as Robert Jamieson (ed.): *Burt's Letters from the North of Scotland* (Edinburgh: Birlinn 1998), 22; cf. MacKean: "Twinning Cities" [as in note 4], 45. The constitution of the Town Council is described by Hugo Arnot: *The History of Edinburgh* (Edinburgh 1779), 507–511.

13 Since the authoritative study by Youngson: *The Making of Classical Edinburgh* [as in note 4], political lines of conflict were considered as the main reason for the postponement; more recent research stresses economic aspects instead; cf. MacKean: "Twinning Cities" [as in note 4], 42–46.

14 [Sir Gilbert Elliott, 3ʳᵈ Baronet of Minto]: *Proposal for carrying on certain Public Works in the City of Edinburgh* (Edinburgh 1752), 31–32 [Italics in the original text]. The identification of the author is traditional since at least Mears/Russell: "The New Town of Edinburgh" [as in note 4], part 1, 176. For the pamphlet as a compilation with collective authorship cf. MacKean: "Twinning Cities" [as in note 4], 45.

15 For the first interpretation e.g. Miles Glendinning/Ranald MacInnes/Aonghus MacKechnie: *A History of Scottish Architecture from the Renaissance to the Present Day* (Edinburgh: Edinburgh University Press 1996), 169–176; for the other cf. MacKean: "Twinning Cities" [as in note 4], 45–46.

16 Older accounts of the competition have been rendered obsolete by Stuart Harris: "New Light on the First New Town", *Book of the Old Edinburgh Club* N.S. 2 (1992), 1–13; in addition cf. Andrew Fraser: "A Reassessment of Craig's New Town Plans 1766–1774", in: Cruft/Fraser: *James Craig 1744–1796* [as in note 4], 25–47, esp. 27–28; Volker M. Welter: "An undocumented Plan for Edinburgh's First New Town by James Craig", *Book of the Old Edinburgh Club* N.S. 5 (2002), 107–109.

17 Signed and dated on the design by James Craig: [*Plan of the New Town at Edinburgh*], Ms., in: Edinburgh, City of Edinburgh Museums and Galleries, inventory no.: 1978/37; cf. Meade: "Plans of the New Town" [as in note 7], 46–47 (part III, no. 3); Fraser: "A Reassessment of Craig's New Town Plans" [as in note 16], 27–29. This plan was published as an engraving under the title mentioned above after 15 August 1767, probably for the acquisition of prospective buyers of building lots; cf. Meade: "Plans of the New Town" [as in note 7], 47–48 (part III, no. 3a).

18 Patrick Begbie: *Plan of the New Streets and Squares intended for the City of Edinburgh, Ja. Craig, Arch., inven. et delin.* (Edinburgh 1768), cf. Cowan: *The Maps of Edinburgh* [as in note 7], 42–47 (no. 10); Meade: "Plans of the New Town" [as in note 7], 49 (part III, no. 3d). For Craig's journey to London esp. Fraser: "A Reassessment of Craig's New Town Plans" [as in note 16], 34–38 and 42–43.

19 Highly speculative and divergent propositions have been published by David C. Simpson: "City Plans and the New Town", *University of Edinburgh Journal* 23 (1967), 52–57; Meade: "Plans of the New Town" [as in note 7]; Harris: "New Light on the First New Town"

[as in note 16] and Fraser: "A Reassessment of Craig's New Town Plans" [as in note 16], 31–34.

20 When the development neared completion, they were converted into private gardens nonetheless; cf. Connie Byrom: *The Edinburgh New Town Gardens: "Blessings as well as Beauties"* (Edinburgh: Birlinn 2005), 35–50. St. George Square changed its name to Charlotte Square in 1785 as a courtesy to the wife of George III, while all other street names in the published plan of 1768 are still in use today.

21 Mears/Russell: "The New Town of Edinburgh" [as in note 4], part 2, S. 20–24; Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 83–84; Gifford/McWilliam/Walker: *The Buildings of Scotland: Edinburgh* [as in note 6], 325–326 (s.v. "Royal Bank of Scotland").

22 First supposed by Reed: "Form and Context: A Study of Georgian Edinburgh" [as in note 4], 121.

23 In the engraved plan of 1768 identified generically as "Public Building"; in a second printing of c. 1772 labelled as "Register Office" with the outline of Robert Adam's design of 1771/72; cf. Fraser: "A Reassessment of Craig's New Town Plans" [as in note 16], 37–38.

24 For the projects in London after 1666, cf. Thomas F. Reddaway: *The Rebuilding of London after the Great Fire* (London: Edward Arnold ²1951); Michael Cooper: *"A more beautiful City": Robert Hooke and the Rebuilding of London after the Great Fire* (Stroud: Sutton Publishing 2003). For the Earl of Mar's design esp. Campbell/Stewart: "The Evolution of the medieval and Renaissance City" [as in note 6], 35–38.

25 A good example for contemporaneous theory is John Gwynn: *London and Westminster improved, illustrated by plans. To which is prefixed a Discourse on Publick Magnificence [...]concluded by some Proposals relative to Places not laid down in the Plans* (London 1766). For the use of this typology in London and Bath cf. John Summerson: *Georgian London* (New Haven/Conn. and London: Yale University Press ⁷2010), esp. 87–103; Cathryn Spence/Tim Mowl (ed.): *John Wood and the Creation of Georgian Bath* (exh. cat. Bath, Building of Bath Museum 2004–2005).

26 Usually understood as a self-correction of the planner in 1774; cf. Meade: "Plans of the New Town" [as in note 7], 49–50 (part III, no. 3e–3f). The identification as his competition entry in 1766 by Fraser: "A Reassessment of Craig's New Town Plans" [as in note 16], 31–34, is inconsistent with some details of the plan.

27 Suggestion by Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 79–80. The Royal Crescent discussed for example in Summerson: *Architecture in Britain 1530–1830* (⁹1993) [as in note 1], 359–365.

28 Reed: "Form and Context: A Study of Georgian Edinburgh" [as in note 4], 122–123.

29 Gifford/McWilliam/Walker: *The Buildings of Scotland: Edinburgh* [as in note 6], 273; John R. Hume: "James Craig's New Town", *Rassegna* 17 (1995), 18–25; MacKean: "Twinning Cities" [as in note 4], 47.

30 Alexander Fraser: *The Royal Burgh of Inveraray* (Edinburgh: St Andrew Press 1977); Iain MacIvor: *Fort George* (Edinburgh: Historic Scotland 2001).

31 David King: *The Complete Works of Robert and James Adam* (Oxford et al.: Architectural Press ²2001), 31–33.

32 Contemporaneous French solutions were easily available through publications like Pierre Patte: *Monumens érigés en France à la gloire de Louis XV* (Paris 1765). For their exploitation with regard to Edinburgh cf. Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 74–79; Reed: "Form and Context: A Study of Georgian Edinburgh" [as in note 4], 121–122.

33 For Covent Garden cf. Summerson: *Georgian London* [as in note 25], 12–16; considered as a prototype for Edinburgh's *First New Town* by Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 74 and Gifford/McWilliam/Walker: *The Buildings of Scotland: Edinburgh* [as in note 6], 273.

34 Mireille-Bénédicte Bouvet: „Les places de Nancy au XVIIIᵉ siècle", in: Alexandre Gady/Jean-Marie Pérouse de Montclos (eds.): *De l'esprit des Villes: Nancy et l'Europe urbaine au siècle des Lumières 1720–1770* (exh. cat. Nancy, Musée des Beaux-Arts 2005), 71–81.

35 For Richelieu cf. Kruft: *Städte in Utopia* [as in note 2], 90–98; the comparison with Edinburgh proposed by Youngson: *The Making of Classical Edinburgh* (²1988) [as in note 4], 78–79.

36 Nicholas Tassin: *RICHELIEV* [chateau and town], engraving, c. 1634; the divergence between the engraving and the actual layout is not noticed by Youngson.

37 Besides many French guidebooks, a typical English example is Thomas Nugent: *The Grand Tour: Or, a Journey through the Netherlands, Germany, Italy, and France* (London 1778), vol. 3, 170–174.

38 Tommaso Borgonio: "Augusta Taurinorum", publ. in: *Theatrum Statuum Regiae Celsitudinis Sabaudiae Ducis Pedemontii [...]* (Amsterdam 1682), vol. 1, no. 8; cf. Martha D. Pollak: *Turin 1564–1680: Urban Design, military Culture, and the Creation of the absolutist Capital* (Chicago and London: University of Chicago Press 1991), 179–185.

39 A fundamental study in Augusto Cavallari Murat (ed.): *Forma urbana ed architettura nella Torino barocca: Dalle premesse classiche alle conclusioni neoclassiche* (Turin: Unione tipografico editrice torinese 1968); the best monograph available in English is Martha D. Pollak: *Turin 1564–1680* [as in note 38]; in addition the city is discussed in every standard textbook.

40 Still taken for granted e.g. in Braunfels: *Abendländische Stadtbaukunst* [as in note 1], 171.

41 Cavallari Murat (ed.): *Forma urbana* [as in note 39], vol. 1.1, 620–630 and 668–682.

42 For the following account cf. Erika Schachinger: *Die Dorotheenstadt 1673–1708: Eine Berliner Vorstadt* (Cologne et al.: Böhlau 2001).

43 Max Jaehns: *Die Friedrichsstadt in Berlin unter dem Großen Kurfürsten und Friedrich I.* (Berlin: Poetschki 1911); Goerd Peschken: *Berlin: Eine Residenz wird errichtet: Berlin bis 1800 vorgestellt an Stadtgrundriß und Bauten* (Berlin: Ästhetik und Kommunikation 1987), 42–68; Melanie Mertens: "Der Ausbau Berlins zur königlichen Residenz", in: Franziska Windt/Christoph Lind (ed.): *Preußen 1701: Eine europäische Geschichte* (exh. cat. Berlin, Schloß Charlottenburg 2001), vol. 2, 269–278.

44 A good synthesis of this planning process is Connie Byrom: "The Development of the Second New Town", *Book of the Old Edinburgh Club* N.S. 3 (1994), 37–61.

45 Sam Coull: *Nothing but my Sword: The Life of Field Marshal James Francis Edward Keith* (Edinburgh: Birlinn 2000).

46 Karl W. Schweizer: *War, Politics, and Diplomacy: The Anglo-Prussian Alliance, 1756–1763: Frederick the Great, William Pitt, and Lord Bute* (Lanham/Maryl. et al.: University Press of America 1991).

47 MacKean: "Twinning Cities" [as in note 4], 48.

48 The major study of new Lisbon is José Augusto França: *Une Ville des Lumières: La Lisbonne de Pombal* (Paris: S.E.V.P.E.N. 1965); for an English account cf. Kenneth Maxwell: *Pombal: Paradox of the Enlightenment* (Cambridge: Cambridge University Press 1995).

49 França: *Une Ville des Lumières* [as in note 48], 119–120.

50 For the comparison with Bordeaux cf. França: *Une Ville des Lumières* [as in note 48], 123 or Andreas Köstler: *Place Royale: Metamorphosen einer kritischen Form des Absolutismus* (Munich: Wilhelm Fink Verlag 2003), 225–226; in both instances without notice of the difference to Bordeaux in the design of the frontages.

51 David Daiches/Peter Jones/Jean Jones (eds.): *A Hotbed of Genius: The Scottish Enlightenment, 1730–1790* (Edinburgh: Edinburgh University Press 1986); Alexander Broadie: *The Scottish Enlightenment: The historical Age of the historical Nation* (Edinburgh: Birlinn 2001).