I wish to begin by taking a look at one of the many dreadful proposals for replanning Istanbul since the mid-19th century, one of which — the Hög Plan — came to pass. The point is that what city planning meant to French, German and other engineers was unrelated to what Sinan or any other Islamic builder meant, even if the word was meaningful to them. 

Istanbul by 1901 was seen as a chaotic slum by Western planners. It was a formless mass, devastated by fires, which deserved no respect while the educated and ruling classes were greatly concerned with achieving Western standards. Thus in that year the Sultan, Abdülhamit II, reacted enthusiastically to an article praising the work of Joseph Antoine Bouvard (1840-1920) who was commissioned to prepare plans for the modernization of the city. Bouvard never visited Istanbul but after studying photographs he imposed Beaux-Arts buildings and boulevards on a city whose hillscape he had overlooked. His aim was to populate the main centres with innumerable Hôtels de Ville and inconsequential Boulevards Hausmann suitably hedged with apartments, a mode of living alien to the existing population. Even the great mosques were lucky to escape with only their dependencies cropped. 

But it would be unwise to be too scornful of Western arrogance, for Sinan could be equally ruthless, at least when he created the Süleymaniye complex. A vast force of military recruits and, during the winter months, galley slaves, shifted at least 1.5 million cubic metres of earth in order to invert a top triangle of hillside over the under-hall in order to make a great esplanade. In the process he destroyed the paradise gardens and park of Mehmet II the Conqueror and doubtless several kiosks and pavilions. This enabled him to lay conduits and drains without digging but involved building lofty retaining walls and extensive vaults, those bridges on which Ottoman monuments so often stand. 

But, with the vision of genius, he did not raise the whole complex on a platform but let the colleges on the Golden Horn side of the mosque and the royal sepulchres descend the steep slope step by step and so not obscure the monumental view, which still survives, from Galata and elsewhere down the shores of the Horn. Yet he preserved the ritual symmetry of the overall plan by having two colleges on either side of the mosque as the outliers of the heart of the matter. Ezekiel's vision of the City of God based on cosmic symbolism — a vision from times as old as Jericho, Babylon and Rome — was never more clearly expressed. The concept of the complex as the orderly floating dock anchored in a choppy sea of homes is not new. It goes back to at least the 4th millennium B.C. and the monumental buildings at the end of the Ubaid period, stratum XIII of Tepe Gawra, which revealed three temples round a court showing concern for balance and symmetry but no consistent respect for topography. His manipulation of constructional techniques and his skill in taking advantage of topography are measures of Sinan's enquiring intellect. In this sense his was a Renaissance mind which experimented and explored and has nothing to do with any fortuitous coincidence of forms with the works of Leonardo da Vinci nor any other Western architect even though the mathematics were twin, due to structural parallels which were implacable masters. 

Mehmet II's policy of permitting the accretion of homes round the nucleus of a religious centre perpetuated the Byzantine city's composition of some thirteen small townsips (nahiyes) within the walls which were subdivided into mahalle or neighbourhoods with lesser mosques, mescit and tekke and other religious foundations which formed part of the ever growing Vakif system of religious land ownership, than which nothing could be more conservative. The broad Byzantine mesês or arteries could not survive the accretion of houses since mere lanes were adequate for mules and porters. A rule, that the Ottomans also enforced in Cairo, required that a warrior mounted on a loaded camel should be able to pass down a street unhampered. There was no need for a professorial way except for the sultan's road from Topkapi Sarayi to the Edirne Gate, the military way to Europe. An increase from 16,000 houses in 1477 to 80,000 in 1585; a population increase from perhaps 80,000 to some 400,000 inhabitants in 60 years, parallels the present devastation of the city still at flood. 

From the foundation of the Fatih complex onwards these centres acted as vortices, suckling in the faithful along with their material needs. The neighbourhoods were self-sufficient and had little need to communicate with each other but only the central markets and the government. But within themselves they had to conform to rules which were imposed by the Chief Architect when exercising his authority as minister for works and waterways. The constant flow of orders-in-council from Sinan's office concerning the
maintenance of pavements or rebuilding in brick and not wood is an indication of the difficulty of enforcing bye-laws which were often beyond the means of the population. The most important rule was transmitted by the Ottomans to Egypt after its conquest in 1517 and all over the growing empire. Apart from not infringing on the street, no building might infringe on its neighbour's right to light, air and, most striking of all, scenery. You could build what you liked, how you liked and where you liked, but you could not obstruct your neighbour's view.

The city can be seen as if a clan encampment in materials little more durable than the sturdy tents of nomads and was personified in Matraki's miniatures of cities which were emblazoned with fortifications, monuments and markets but without a house or home except, perversely, the Christian homes of Galata. Not that Istanbul attained the orderliness of Ottoman camps which were the wonder of European visitors because of their lines of tents, shops and cookhouses, the pickets for hobbling horses and the carefully positioned latrine shields. The order was based on straight lines and rectangles just as was the order of the complexes. This was good enough for the military but not a city in spite of the Kadi's court, the Market court, Christian courts and the policing by the Aغا of the Janissaries. Istanbul was a vast and disorderly gathering of merchants and pedlars and small shopkeepers who camped in the markets or burrowed like rats into the foundations of the major mosque of Aya Sofya eventually to be cleaned out by Sinan. However, without the need for the leadership of 19th-century pioneers like Howard, civilians as well as sultans liked to escape beyond the walls into garden suburbs. The relatively short-lived pax ottomana permitted such outcrops and not just the hunting lodges such as those of Siyavus or Davut Pasha or down the Bosphorus where lay the modest Tivolis and Hampton Courts of their day. This delight in gardens was not exclusively Ottoman, as the hillside of the Albaycin at Granada testifies. In Damascus and Cairo similar suburbs grew outside centres or walls. Indeed, a separate Ottoman town grew up at Bulak on the Nile. The westward general post of the Cairene
bourgeoisie was partly due to the removal of tanneries and other objectionable activities which did not occur with the criminal quarter of Istanbul round Yediküle, once the Golden Gate, which was regarded as the frying pan of sedition like Suluküle of the gypsies until it was destroyed in the 1960's.

It is interesting that while the Ottoman administrators brought their relaxed, mainly lathe and plaster domestic architecture with them to their new conquests in the Balkans or the Mediterranean lands, their subjects did not take to these and until recently it was possible to recognize the old Ottoman quarters in the towns of their former dominions by these structures. In their new territories they respected property rights just as they did at home and even an important foundation had to be made to fit the plot as best it might. But it was significant that the slender Ottoman-style minarets were built as tall as possible, even if disproportionate, in order that they might lord over the town like the Union Jack over a colonial outpost a century ago.

Architecture, in this sense, has always been talkative which is one reason why a populace may react violently to it, favourably or antagonistically. It can be strident and it can be dull, even dumb, which is equally offensive. A simple house may chatter away about the ideal village and the sweet country air. An aggressive tower may bellow about its commercial arrogance or even seek to match greed to faith if only because the plutocrat and his architect found themselves embarassingly close to heaven.

Heaven, of course, is very much what all Islamic architecture is about from the earliest days of the Great Mosque of Damascus or the Dome of the Rock at Jerusalem. Ottoman religious buildings as well as palaces and the barracks of the Janissaries refer continually to the garden of Paradise. Outside, it is not just the trees of a courtyard or a graveyard but also a taste of the open air a complete floral aesthetic applied to fountains and other minor works that is important. This was to make Art Nouveau most welcome when it arrived at the end of the 19th-century in Istanbul.

It had been established in Central Asia and Anatolia long before any Moslem walked the plateau, that great trees were meaningful, remained meaningful for the Ottomans. A few survived as traffic islands in Istanbul until recently. But these were details whereas the core of the city was Islamic in the sense that Matraki portrayed it with the religious and trading buildings defining the areas in exactly the same way as they did Aleppo or any other city.

There was a predetermined form to Istanbul which Sinan had no reason or desire to alter apart from the difficulty of interfering with land tenure as might have been the case with the extraordinary lavish foundation of Beyazît II at Edirne in the late 15th-century in an area which was already part of the city. Sinan inherited the concept of the stone sacred monuments with brick or, on sufferance, wooden homes around them: houses which Turkey North described so vividly after one great fire as hanging like bird cages. Sinan's achievement was to grow out of the loose, near formlessness, of the Sehzade complex into the measured longitudes and latitudes of the Süleymaniye. This sense of design never dimmed — not at the Sokollu Mehmet Pasha foundation at Lüleburgaz, the Selim II Kervansaray which he never actually saw at Payas on the Syrian border nor at the new town of Karapınar built for Selim II. Given the kernel within the conventions which were stronger than bye-laws the rest was left to chance.

For surely within the rambling and twisting lanes and dead end alleys the ordered centre needed to be puritanically severe and to avoid the tangents and foibles of the surrounding neighbourhood. Besides, unless there was money available, as there had been at Fathî or Süleymaniye Sinan could not turn the environment upside down. That the seven hills of New Rome — not to mention the valleys — limited his scope and indeed his adaptation of the Sokollu Mehmet Pasha complex at Kadirga to such demands was a dynamic example of his genius.

We have as a consequence a situation which can only be enjoyed as a paradox: that is to say that Sinan did not plan the city, the city planned him. It is wrong to think of complexes as a part of town planning for they are self-sufficient and inimical to true planning which is universal. Here was a man, whose features we are unlikely ever to see depicted, whom I would prefer to call a mind which was to become a monument in Sinan's own lifetime and yet within Istanbul or Edirne he could neither divert a ditch or close an alley. He might, of course, add. In this there is nothing new. Cities are made up of properties belonging in law to individuals, to the state or to God as a dependant of the state and as a facet of its government. In Ottoman 16th-century terms it meant that Sinan
could not enlarge a highway or precinct in the manner made possible for a wilful 20th-century administration following the advice of a planner like Högg. There was always the possibility of purchasing land after the original plot had been obtained and this could explain why the step medrese descended the hillside beneath the Süleymaniye complex in Istanbul although one is reluctant to deprive the architect of an act of genius and award the laurels to property values and not a creative mind. But the Süleymaniye complex was exceptional in that most of the immense site belonged to the sultan however much it had to be levelled and raised: however much the royal ladies had to put up with the loss of their orchards and gardens. If one examines the other complexes which can seriously be attributed to Sinan or his lieutenants one is faced with a fascinating, disparate array of sites none of which is an ordered rectangle and many of which are idiosyncratic. Even patrons powerful as the declining Grand Vezir Rüstem Pasha and his royal wife had to build the sadirvan of the market mosque, grandiose though it may be, at ground level inconveniently detached across a lane from the terraced courtyard of Rüstem’s great memorial. That same Mihrimah, the richest woman in the world and mistress of the Saray, when building a most dramatic mosque could do nothing to ameliorate the cramped which beset its courtyard, once magnified by the use of a double portico: the monument had to be wedged in below the city walls. It was not simply the lack of space which again and again distorted Sinan’s and other architect’s complexes. Nor was it because patrons could not afford or obtain a larger space, there was also the problem of vakıflan land endowed in perpetuity which in terms of town planning were dead areas crippling logical development. Consider any of the foundations endowed by vezirs and it will be seen that obstacles were insuperable. It was no accident but necessity that had the corners of subordinate buildings shaved or rounded, however elegantly, and that some large units like the medrese of Zal Mahmud Pasha Cami’i or the courtyard-portico of the Mihrimah mosque at Üsküdar were restricted, beautiful as the compromise in the latter case proved to be. The Haseki Hürem complex is very close to disaster. I have monotonously praised Sinan’s solution to the challenging site of the Sokollu Mehmet Pasha at Kadırga yet it seems that the point still needs to be reiterated. When Sinan built on the hillside below the Hippodrome he could not level it because here was too little land. He was restricted by geography and by law. That is to say that his medrese had to be divided from the mosque because a vezir did not have the perogative to incorporate mosque and college courts in the manner of a monarch and this accounts for the two gatehouses between the respective porticoes. He had above all to effect a main entrance to the mosque aligned with the great door and the mihrab. The approach by the grandest stairway of a singularly un-Baroque period in Ottoman architecture passing under the main chamber of the college and the resulting addition of frolicsome stairs up to this elevated room is unforgettable. It is the quality of the thinking behind the achievement of this answer to the problem, so easy to see after the event, that is important to any examination of the place of Sinan in the canon of great architects. If one takes a complex like that of the Atik Valide above Üsküdar, spacious though it is, the problems of an irregular site distorted every subordinate element 14 apart from the imaret but including the medrese and the tekke for dervishes however well the architect handled the problems however idyllic may be the caprice with which the dershane or hall of the medrese backs out over a bridge above a lane. Naturally, problems distort as they distorted the medrese cells round the courtyard of the Zal Mahmud Pasha complex to a degree that only a blind admirer of Sinan could call satisfactory. The difficulty is repeated with the all too sweet Semsi Ahmed Pasha complex by the sea at Üsküdar, a sea which is the cause of it being all too tight a fit. Take the site, take the pre-ordained position of the mosque determined as it must be by the approximate direction of Mecca, take the other elements of a complex which the patron wishes to endow. Trace the site plan and cut out the elements on card if you wish and then try to joggle them into place. It will soon become evident that the architect’s plan was as good as but no better than your own: save only when a third dimensional element is added as it was at Kadırga. In other words, the elements and the site create their own inescapable discipline and if an architect is to be successful he must find that inescapable solution which is the sole solution, warts and all. Warts, because not nearly enough attention has been paid to the power of the patron in
influencing Sinan’s designs. It is sometimes reluctantly agreed that either Rüstem Pasha or Mihrimah Sultan had a passion for tiles which is obvious inside and out of the Rüstem Pasha Camii so that a veritable array of dress lengths was imposed on the architect by one or the other or both of them to a degree that there appear to be two distinct fashions in their design. It is difficult at 400 years remove to appreciate exactly how formidable a grand vezir Rüstem was or the adamantine personality of Mihrimah, however respected Sinan may have been. Likewise, it is assumed that the rigid reinterpretation of the Hagia Sophia Byzantine flexibility with the mosque built for Kılıç Ali Pasha was an act of genius — however strange an anachronism it might appear16 — or an aberration of old age. Whichever interpretation be true, it was surely the form that the Grand Admiral wanted and was paying for with the guild of butchers and other subscribers for this reason or for that along with his poop lanterns and whatsoever glass was in the apse but not the vulgar monosodium glutamate that adorns the narthex. Sinan or his subordinate or his subordinate’s subordinate were asked to imitate Hagia Sophia and reinterpret it in Ottoman terms, rigidly and totally unsympathetically as if unaware of the nuances of the old building which had created so many problems for Sinan and which his elephantine buttresses make obvious. One should also draw attention to the unusual quantity of lead used at roof level at this mosque which relates it to Ivaz Efendi Camii and others of the period. This was because lead was cheap on a glutted market with an unforeseen effect on architecture, as is so frequently the case.16 Because patronage is so important, one needs to reassess the reputation of the malign Sinel II whose mosque was Sinan’s masterpiece, a rarely disputed opinion. It has been suggested that when Sinan asked for his sovereign’s advice about the decoration of the interior, he was merely pursuing formalities and that he was really addressing himself. This supposition hardly fits with the concept of the Shadow of God on Earth however many tons of Cyprian wine may have been stored in Selim’s cellars. It was his mosque: and fabulously expensive too. Of course he knew what he wanted just as he did with his exceptional mausoleum. There is no new building on earth for which the patron is not responsible however many subscriptions from the family and wealthy subjects may be needed.

We have therefore an architect, as always, constricted by the wishes and the purse of his patron and by the legalities of land tenure and the subordination of market forces. The architect has to make the pieces fit and the intellectual importance of his work is directly in proportion to his ingenuity in arranging the pieces within exacting rules. It is curious that in architecture total freedom results in the invention of rules by the builder and a rigid alignment of subordinate buildings. The complex of the Süleymaniye witnesses to this truth. The lack of rigidity of form as far as the site went resulted, paradoxically, in a liberation of the ingenuity of the planner in overcoming problems of restricted space and other exigencies. It was the triumph of reason over Fairy Wishfulfilment.

In writing of Islamic cities, Michael Rogers noted that open spaces17 were few18 but the Ottomans found decayed Costantinople full of them including the Hippodrome, the market gardens over by the walls, the old forums: apart from the Òmeydan and other areas outside the walls. These were appreciated. Mahmud Pasha after the conquest built eleven gardens and there were to be the gardens of the great sarays apart from that of the Old Saray sacrificed to the Süleymaniye complex by as much as a half of its extent. A passion for gardens accounts for orders for half a million hyacinths — which may have been tulips — or 50,000 trees among a host of others at various periods — all for the New Saray.20 But where there was no room for a garden, walls were tiled in flowers. Death was benevolent since the day of one’s demise is the happiest in one’s life because it is the day of one’s ascent to heaven; so cemeteries were happy places to wander, the gravestones were inscribed to the victory (fatihah) of the soul over matter. That interrelationship between interior and exterior which is the signal achievement of Ottoman architecture was true of the whole of the Ottoman way of life. The division between inside and out, sometimes eased by a colonnade, was not easily defined — as iwanos demonstrate. Moreover, courts were roofless rooms too big for engineers to cover even had it been deemed necessary. And at festival times flowers flowed in and out of kiosks without knocking at the door. And while Syrian and Iranian houses were introverted and looked inward to their own shade, Ottoman homes were extroverted and craned their necks to survey the street.
I have confined my enquiry into Sinan and the city to Istanbul in the main partly because Edirne has contracted and become difficult to define in 16th-century terms in a way that Istanbul can still be understood although more and more ravaged day after day. Seen as the city which he controlled for 50 years, as a planner he was conservative and could not alter the pattern of living although he enriched it. He wanted Istanbul rebuilt in brick for political reasons of safety and not for aesthetic satisfaction. The extraordinary and unexpected conclusion that I draw from this study of his contribution to the development of the Ottoman town is that unlike so many Bouvards and Haussmans he was exceptionally kind. He may have halved a garden but he did not uproot more than a handful of the million inhabitants of what was then the largest city in the world.

Godfrey Goodwin

2 Ibid., p. 111.
3 Ezekiel 30/40.
5 Çelik, op. cit., pp. 23-25. A. Raymond, The Great Arab Cities in the 16th-18th centuries: An Introduction, New York, 1965, p. 10, refers to the concept of a divided space — the public city as opposed to the private city which can be read on any town plan.
9 El-Nahal, op. cit., pp. 53-4.
10 A. Refik, ... hicri onbirinci asırdı, p. 36, sect. 70.
12 Even a tyrant like Timur had to stretch ruthlessness to the limit in order to drive a highway through the centre of Samarkand.

13 That is if the third and fourth medrese were additional which M.J. Rogers has suggested could be implied from the recorded budget for the Süleymaniye complex.

14 Among many buildings elegantly mutilated by the shape of a site range from the Kursunlu Han at Galata to the drawn-out Darül-Hadis at Süleymaniye and the extraordinary rush hour effect of the complex of Haseki Sultan due to later additions both sides of the lane that cuts the complex in two. Less obvious is the court of the mosque of Mesih Pasha. Even Fatih after the conquest when the city was more or less prostrate at his feet had problems with the kervansaray of his flamboyantly spacious complex.


16 *Ibid.*, p. 111. Denny misreads my reference to the use of lead in this mosque and those of Zal Mahmud Pasha and İva Efendi. The point was that each had an excessive use of lead in common and thus underlining the influence of commodity prices on architecture. There was a glut which brought the price down due in part to English ships carrying illegal cargoes under the agreed embargo imposed by the Christian powers. See S.A. Sklirrter, *William Harborne and the Trade with Turkey*, 1578-82, Oxford, 1977, p. 71 *inter alia*.

17 Such as the valley now occupied by the Atatürk Bulvar once used for horsemanship as was Rotten Row.

