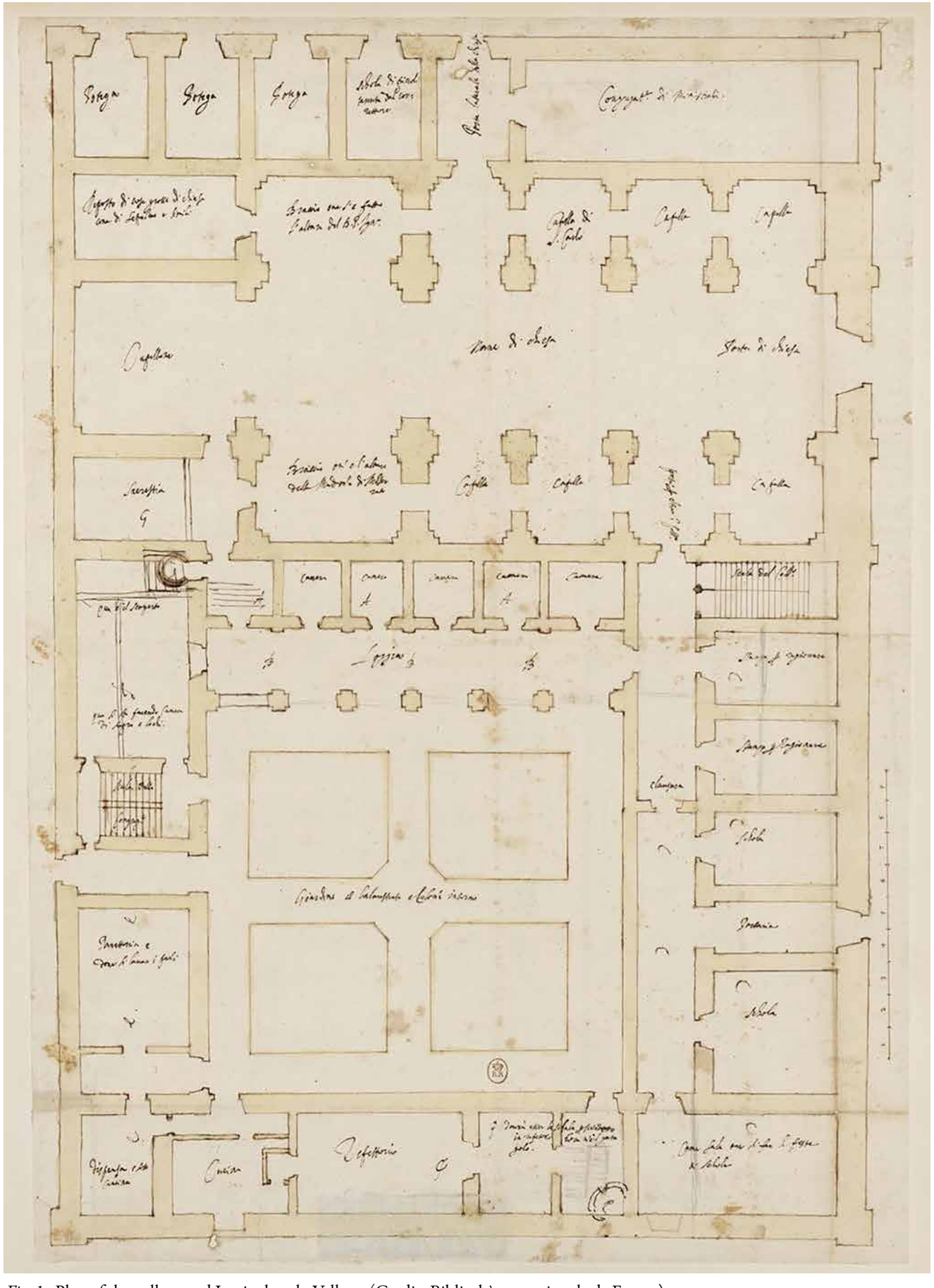


Fig. 1: Plan of the college and Jesuit church, Valletta (Credit: Bibliothèque nationale de France)

The University of Malta
An Architectural Appraisal from Inception to the Present

Conrad Thake[1]

Formative years – from Jesuit College to University in Valletta

The University of Malta owes its origins to the *Collegium Melitense Societatis Jesu* instituted in 1592 by Pope Clement VIII (r.1592–1605).[2] It was during the magistracy of Martino Garzes that the foundation stone was officially laid on 4 September 1595 for a building that would host the *Collegium* in Valletta. This building and the Jesuit church attached to it occupied an entire block and had frontages on four streets namely Merchants Street to the west, St Paul Street to the east, St Christopher Street to the north, and Archbishop Street to the south. The first plan of the church and college complex was designed by the Neapolitan Jesuit architect Giuseppe Valeriano (1542–96). However, as he died a few months after the laying of the foundation stone, it is highly unlikely that Valeriano ever visited Malta. As the chief architect of the Jesuit community he undertook the design of several projects in Rome, Naples, Palermo, Marseilles and various cities in Spain.[3] However, in most cases he would have only provided the plans without visiting the place and overseeing the actual construction works. Valeriano's plans for the Jesuit complex in Valletta underwent various modifications after his death. It appears that in the late 1590s, construction works were suspended and only resumed in 1602, once changes were approved by the Jesuit provincial. Another Jesuit architect Natale Masuccio (1561/68?–1619), originally from Messina, was directly involved in approving all changes to the original design. Masuccio was the architect responsible for most of the Jesuit projects in Sicily at the time and in 1610–12, travelled to Malta to oversee works on Wignacourt's aqueduct project.[4] Works continued after Masuccio's departure from Malta in 1612, with other changes being undertaken to the plans around the period 1616–19, following a visit by a Jesuit delegation from Rome.

The plan is typical of other Jesuit complexes built in Sicily and Italy with three wings surrounding an open courtyard. There are two important historical plans of the Maltese Jesuit complex in the drawings collection at the Bibliothèque nationale de France.[5] These plans drawn by Padre Tommaso Blandino (1582–1629), show in detail the layout of the Jesuit church and college as it was constructed during the first half of the seventeenth century. The plan of the local complex bears a very close resemblance to that of the contemporary Jesuit Church and College at Trapani (*c.*1612), attributed to Masuccio. Both colleges have an open central courtyard as their focus with the classrooms being arranged in a linear sequence along the four sides and accessible from an internal corridor. In the Valletta complex, at some point a ground floor loggia was constructed within the original courtyard to provide access to a series of classrooms. The architectural historian, Quentin Hughes, describes the plan in the following terms:

> The college buildings were first designed with a plan which seemed to rotate in a clockwise direction like those Cassar had evolved for the Magisterial palace, the Auberge d'Aragon, and the Auberge d'Italie: only here there was no overlapping of the main structure at one corner and the rotation was continuous. The plan revolved around a central

Fig. 2: Entrance to former Jesuit College, Merchants Street, Valletta

> courtyard, which was spacious before later additions onto the western cloister wall reduced it in size, and the cloisters ran along the northern and western sides of the courtyard, sheltered from the hot sun and open to the cool mistral breezes.[6]

The building had its original entrance on Merchants Street. A spacious, wide staircase constructed of local hardstone, situated at the other end, provided access to the *piano nobile* level. The various internal rooms within the complex are accessed through a wide masonry-vaulted corridor. The internal layout was a product of the reconstruction that ensued following the severe physical damage to the college and Jesuit church in 1634, owing to the explosion of the nearby gunpowder magazine (*polverista*).[7] The Order's resident military engineer Francesco Buonamici (1596–1677), acting upon the request of Padre Tagliava, was very much involved in remodelling the adjoining Jesuit church and constructing an entirely new façade for both church and college.[8] The stone vaulting of the college's interior spaces is testimony to Buonamici's pioneering architectural work in introducing the Baroque style to Malta. Buonamici, originally from Lucca, had a distinguished architectural career and during his stay in Malta also submitted designs for churches in Trapani, Syracuse, and Piazza Armerina in Sicily.[9] The Maltese Jesuit complex sustained considerable physical damage as a result of the catastrophic earthquake that struck Catania and the Val di Noto region in Sicily in January 1693.

The façade of the Jesuit church as remodelled by Buonamici around 1650, served as the catalyst for the transformation of various buildings in Valletta in the contemporary Baroque style.[10] Buonamici had to ensure that the façade of the Jesuit College along Merchants Street would visually complement that of the church without upstaging it. He introduced a wedge-like semi-basement level at the lower end in order to account for the steep incline in street level and to ensure that all windows at ground floor level would be aligned horizontally. Buonamici introduced plain pilasters to subdivide the façade into a series of equal wall planes which were slightly receded from the projecting pilasters. The windows were set within the recessed wall panels and equidistant from each other, thus creating a constant spatial rhythm. Whereas all windows had identical projecting lower sills supported by pairs of projecting scroll corbels, Buonamici capped them with alternating segmental and broken triangular pediments, a common Mannerist theme. The entrance portal next to the church façade had pilasters with alternate projecting bands that framed a semicircular-headed doorway with an overlying Doric entablature and

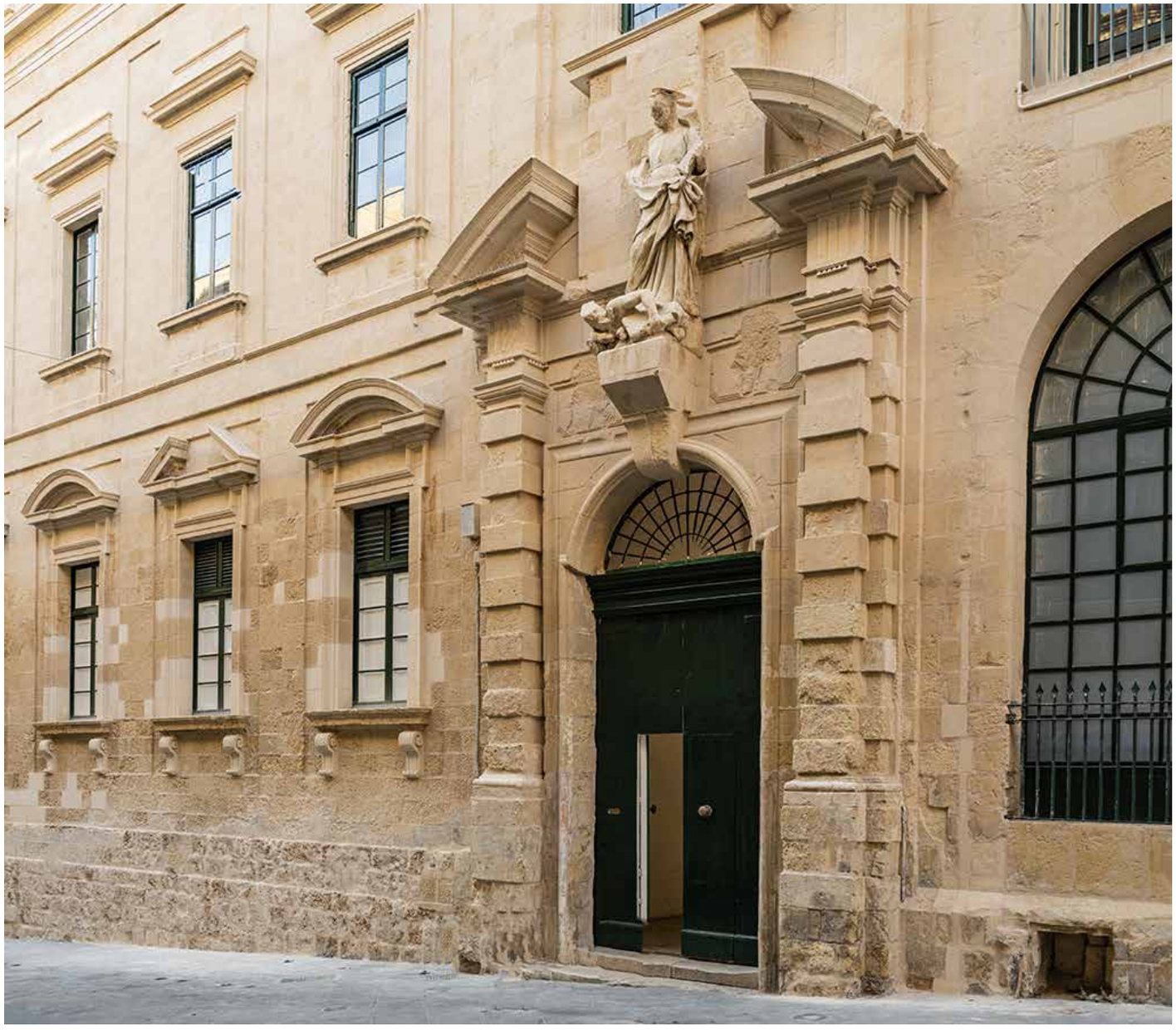


Fig. 3: Façade of the Jesuit College, Merchants Street, Valletta

a broken pediment in which was displayed a statue of St Ignatius Loyola, the founder of the Jesuits.

The windows at the *piano nobile* level were similar in size and form to those at ground floor level, and vertically aligned to them. Only in this case, the spacing in-between the windows took the form of a recessed wall panel bounded by plain vertical and horizontal bands and all windows had straight architraves without alternating segmental or broken pediments. The façade is a restrained and controlled interpretation of academic Mannerist architecture. The roofline of the college façade was aligned with the entablature of the church façade, thus permitting the upper tier of the church façade to rise above it and symbolically retain preeminent status. However, during the first half of the twentieth century, an additional floor was added to the college, in the process compromising the fine balance that originally existed between the college and Jesuit church façades.

During the rule of the Order, the Jesuits conducted academic studies in disciplines pertaining to *grammatica et litterae humaniores* (grammar and the humanities). Beyond courses in literature, the arts, and the humanities, it transpires that during the mid-seventeenth century there were also specialized mathematics courses coordinated

by the Sicilian Jesuit Giacomo Masò.[11] Following the expulsion of the Jesuits in 1768, all their property including the college and church were confiscated and taken over under the direct administration of the Treasury. In 1769 Grand Master Emmanuel Pinto de Fonseca (r.1741–73), acting upon the authority of Pope Clement XIV (r.1769–74), raised the status of the College to that of a university.[12] Four papal briefs were granted to the new institution, two dated 20 October 1769 and two 26 January 1771. Following these papal decrees, the authorities embarked on recruiting academic staff and formulating curricula for various courses of studies. Eminent foreign lecturers were invited over to join the resident academics and, within a few years, diplomas in Philosophy, Laws, and Divinity were offered to students who had pursued the relevant courses and passed the prescribed examinations. Subsequently, diplomas in Medicine and Pharmacy were also offered, while special licences and warrants were granted by the Grand Master to young men trained in the hospitals and in the galleys of the Order.[13]

During the period that the French occupied Malta (1798–1800), the University was renamed the *École Centrale*, but this was short-lived as the University re-opened its doors at the beginning of British colonial rule. Parts of the building were rented out as commercial space at the beginning of the nineteenth century. In May 1824, a secondary entrance from St Paul Street was introduced. The portal interpreted in a distinctive Neoclassical style has two end-pilasters and two free-standing fluted Doric columns supporting a straight lintel and an overlying arch. A sculpture of the Royal British insignia is set within the arched opening. Inscribed on the doorway lintel is the Greek inscription, ΠΡΟΠΥΛΑΙΟΝ ΤΗΣ ΤΙΜΗΣ Η ΜΑΘΗΣΙΣ (trans. 'Learning is the Gateway to Honour'). The design of the portal is attributed to the Maltese architect Giorgio Pullicino (1779–1851).[14] It is interesting to note that his son G.B. Pullicino was in 1839 appointed Master of Geometry, Algebra and Land Surveying in the University and organized the course curriculum for the newly established Department of Civil Architecture and Land Surveying (1837).[15] The curriculum for the first comprehensive course for Architects and Land Surveyors included the subjects of geometry, trigonometry, land surveying, planimetry, stereotomy, valuation and 'livellation.'

During British colonial rule, the University of Malta continued to prosper as the oldest university in the Commonwealth, excluding British universities. During the Second World War the building housed an Air Raid Precautions Centre. After the war, it soon became evident that the former Jesuit *collegium* was stretched to its physical limit. Even though an additional floor had been constructed in the 1920s, space was still very limited with the Jesuit church occupying over a third of the entire block, the ground floor being taken up by the secondary school, and the rest of the premises accommodating various administrative offices, library, and seven faculties. In 1945 Professor H.J. Channon, who had been invited by the Rector, was consulted on various issues facing the University. In his report, Channon specifically stressed that the buildings were manifestly inadequate to meet contemporary needs.[16] The British architects and town planners Harrison and Hubbard in their report on Valletta and the Three Cities, commissioned by the Malta government after the war, discussed in detail the possibility of relocating the University. Although recognizing that the existing building, annexed as it was with the Jesuit church, had a prestigious tradition of 'which many a younger university might be envious', they referred to 'practical drawbacks', such as the 'noise originating in the streets bounding the insula has so increased as seriously as to embarrass professors and students alike' and that 'the central court, which must in the circumstances be a principal source of air and light has, to provide additional accommodation, been much reduced in size by ill-conceived accretions to the original structure'.[17] Harrison and Hubbard proposed relocating the university to a site at the so-called triple bastion of Floriana within Argotti

Fig. 4: Entrance to former Jesuit College from St Paul's Street, Valletta

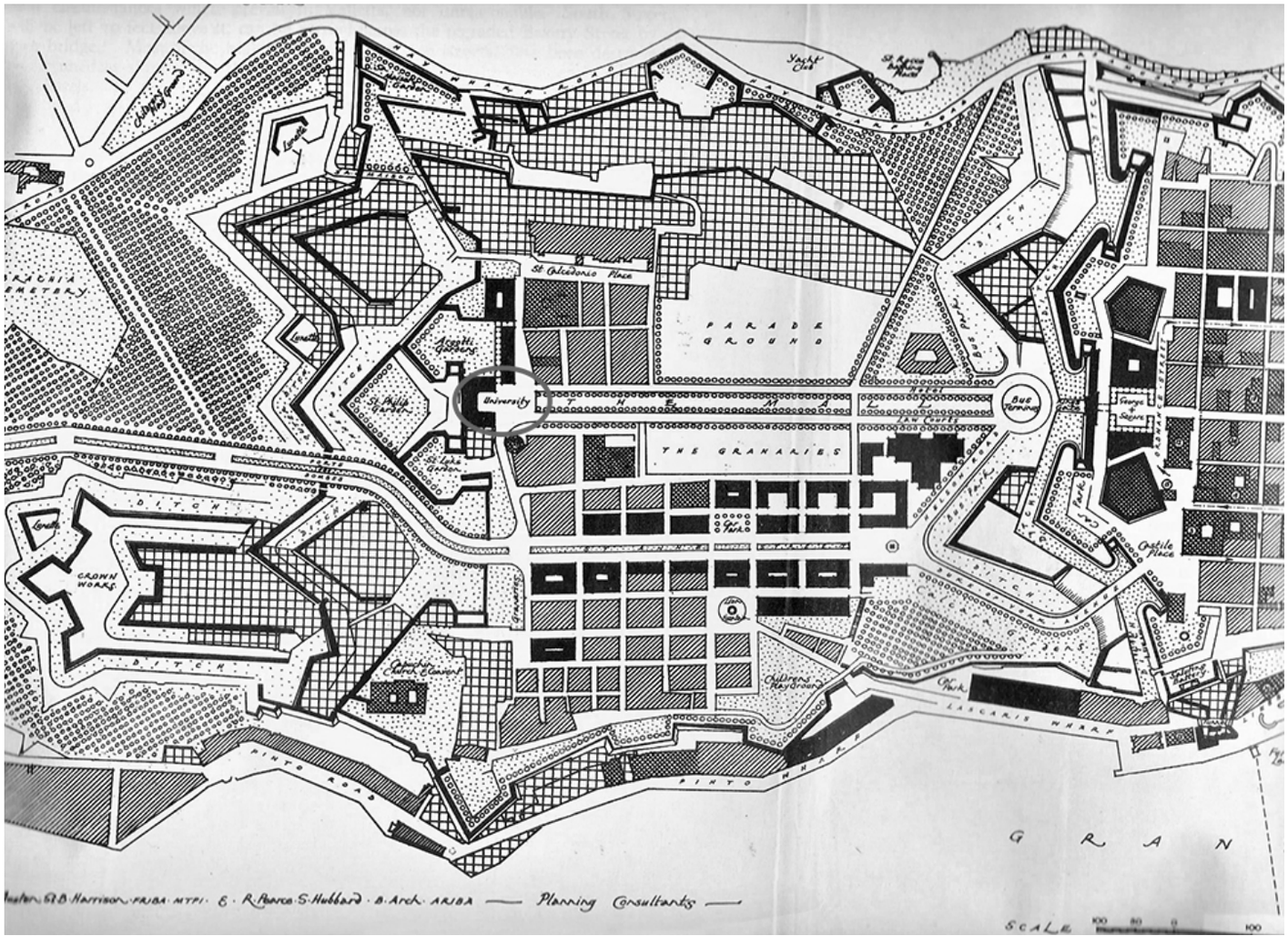


Fig. 5: Location plan for proposed new university in Argotti Gardens, Floriana from Harrison and Hubbard report – *Valletta and the Three Cities*

gardens, at the end of the Mall. Their proposal and justification for relocating the university is well articulated in their report:

> If the main building were placed, as we have taken the liberty to indicate in our plan, in the centre of the triple bastion of Floriana, it would be directly approached from Kingsgate by a splendid avenue over half a mile long, and so occupy in the plan of the Capital a position worthy of the role which the University must always play as the cultural centre of the Island and the cradle of its professional classes. The advantages of the site are many. It is high and healthy; it is surrounded by delightful gardens, one of which has long been the property of the University; it commands a view of a great part of the Island; it is quiet; it is within easy reach of Valletta and, because the bus terminus is close, of every part of the Island; it is conveniently placed for medical students who live and spend much of their time at Pietà and for the theological students whose home is in the Floriana Seminary; lastly, in the parade-ground nearby, is the only area suitable for organized games to be found on Sceberras. It is also possible, without injury to the gardens, to erect a wing of the building along Sarria Street planned to suit the peculiar needs of the Science Faculties.[18]

Harrison and Hubbard's proposal was fully endorsed and supported by another British consultant Dr Ifor L. Evans in his *Report on Higher Education in Malta* (1946). However, this proposal was ultimately rejected following strong objections by the Floriana Civic Committee and the Antiquities Committee who expressed major concerns relating to conservation and heritage issues.[19] With funds being severely limited, most of the attention

New image?

was now devoted to reconstruct those parts of the Valletta building that had sustained extensive damage during the war. In 1947, Prime Minister Sir Paul Boffa (1890–1962) directed the Government Public Works Department to undertake urgent maintenance works and to rebuild the war-damaged sections besides planning for an enlarged Aula Magna, reconstructing the examination hall and library, and creating additional study and workshop facilities.[20] Since there was an urgent need to provide new laboratory facilities for Chemistry, Biology, and Hygiene studies, a site at the lower end of Valletta was identified, some 300 metres away from the main complex. The site identified for the new Science Laboratories block lay just opposite the entrance to the Sacra Infermeria and Fort St Elmo. War debris was cleared from the site in 1951 and excavations followed soon after. On 15 April 1952, Governor Sir Gerald Creasey and Archbishop Sir Michael Gonzi blessed the foundation stone.[21] The new laboratories block to accommodate the Faculty of Science was officially inaugurated in 1959. It was named Evans Laboratories, in memory of Dr Evans, one of its main proponents who had in the meantime passed away. Soon after, a new Lyceum complex in Msida was planned to host the Departments of Mechanical and Electrical engineering and the Faculty of Education.[22] In 1962, a government education commission estimated that the annual intake of university was set to increase to 250 students annually and the University Council predicted a total university student population of 800. It was now abundantly clear that the Valletta and Msida complexes could never by themselves sustain such numbers and that a new and more larger university campus was urgently required. Major reforms in tertiary education were in the pipeline.

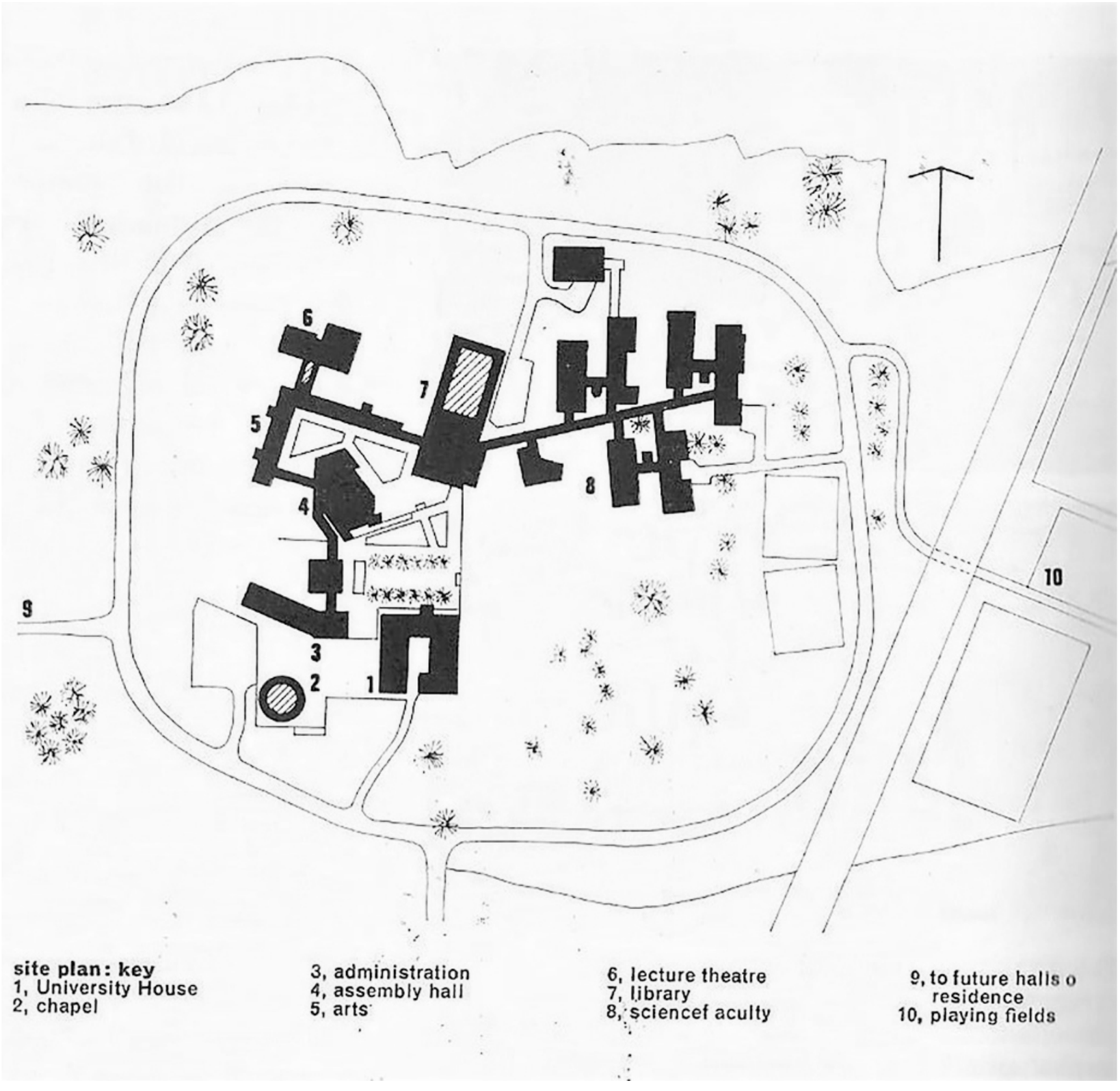


Fig. 7: Original master plan for new campus of the Royal University of Malta, Tal Qroqq, by the architectural firm Norman & Dawbarn

The new campus for the Royal University of Malta at Tal-Qroqq, Msida

The seventy-acre site selected for the new university campus was situated in an area known as Tal-Qroqq which commanded panoramic views of Marsamxett Harbour and the Valletta skyline. The British architectural firm Norman & Dawbarn was commissioned to prepare a master plan for the new campus,[23] which was approved and published in November 1961. The architects in charge of the project were J.D. Delisle Burns and Alastair Smith on behalf of Norman & Dawbarn, with the local executive architects being the established firm of Mortimer & Degiorgio. The preparation of the master plan cost £450,000. Construction works commenced in 1963. The official foundation stone was laid on 22 September 1964 in the presence of the Secretary of State for the Colonies, Duncan Sandys; the university Rector, Prof. Edwin Borg Costanzi; and the papal legate to Britain, Mgr Igenius Cardinale who blessed it.[24] The birth of the new campus coincided with Malta's attainment of independence. The foundation of the new campus just a day after Independence was a potent symbolic act signifying that the Royal University of Malta was being renewed concurrently with the new status of Malta as a fledgling independent island state.

The planning model adopted was that of an American university-style campus with a complex of individual buildings surrounded by a peripheral ring-road. The main nucleus of the scheme comprised the University House, the open quadrangle, and the library building. By 1969, the Faculties of Arts, Science, the Library, Administrative Offices, and the Senior and Junior Common rooms were completed. Soon after, works commenced on the construction of the multi-purpose Assembly Hall, today known as Sir Temi Zammit Hall, which had a total capacity of a thousand people.

One of the first buildings to be constructed was the Library building, a focal point and hub of the new campus. It was designed as an imposing free-standing block with

Fig. 8: Ceremony of the laying of the foundation stone by Archbishop Michael Gonzi.

all the four sides covered by a combined reinforced concrete and ceramic *brise-soleil* or a sun-shade screening device to temper the strong sunlight. The Library building took the form of a well-proportioned box-structure rising high above the elevated terrace that overlooked the open quadrangle in front of University House (today, referred to as Student House). The monumental Library building served as the physical locus of the campus. It was interpreted in an International Modern Style which is reminiscent of the architectural work of the American modernist architect Edward Durell Stone, in particular his Chancery of the United States Embassy in New Delhi, built in the 1950s.[25] The exterior steel and glass curtain wall of the Library is today protected by a cantilevered climatically responsive sunscreen. The original composite concrete and ceramic *brise-soleil* which gave the building its distinctive appearance deteriorated severely over time and it was dismantled and replaced by a new metal-mesh screen in 2008.[26] This replacement was a source of some controversy in the local press, with the university architects justifying the decision on the basis that the original screen posed a danger and was beyond repair.

Fig. 9: The Library building under construction

Fig. 10: A partial view of the Humanities building and the Library building under construction

Fig. 11: The Library building with its distinctive *brise soleil*

Fig. 12: A view of the quadrangle, Library building, Science lecture hall, Maths and Physics block, and Chemistry building in the background

Fig. 13: The multi-purpose Assembly Hall, today known as Sir Temi Zammit Hall flanked by the Administration and Humanities buildings.

The Old Humanities block was built during the same period as the Library building. It is a modernist building distinguished by a continuous and rather austere portico at ground-floor level and with a repetitive series of vertical window strips along its façade. The construction system adopted for most of the buildings was that of traditional load-bearing masonry walls combined with reinforced concrete beams and slabs. The construction of the Library, the Old Humanities, and University House buildings was criticized from certain quarters that the International Modernist Style was not sufficiently attuned to the local vernacular.[27] The next buildings to follow, including the Administration block, the Assembly Hall, the Science Lecture theatre, the Maths & Physics and the Sciences buildings, were all interpreted in a language that was more in synergy with local architecture. In contrast with previous buildings, there was a concerted effort to utilize local limestone for the external facades. A recurrent theme in the design of the façades was the use of vertical strip windows and a more varied roofline silhouette. Within six years from breaking ground, the main nucleus of buildings was complete. The official opening ceremony of the new Royal University of Malta campus was held on 23 November 1969, to coincide with the bicentenary of the University's foundation.[28] Prince Charles was invited for this event as the main guest of honour.

One of the buildings that differed significantly in terms of architectural style from the Norman & Dawbarn designs was the building that accommodated the Faculty of Architecture. Prof. Quentin Hughes (1920–2004), who had been appointed as Head of the Department of Architecture, had engaged architect Peter Richardson (1942–2003), then teaching in the Department to design the building. Richardson, a graduate from the Department of Architecture at the University of Liverpool, was considered by his peers to be an inspired teacher and a visionary, blessed with a razor-sharp mind. His approach to architecture was not shackled by rigid stylistic canons and he was gifted with an intuitive ability to design.[29] The architectural approach to the Architecture department building is highly sculptural and dynamic in form with

Fig. 14: The University House, today referred to as Student House

Fig. 13: The University House as seen from the entrance of the Library block

BW

Fig. 16: A view from the former entrance approach to the university campus

an organic layout that departs from the conventional box-like building envelope.

The building combines the use of exposed raw concrete (*béton brut*) juxtaposed with local limestone and a sloping metal-covered roof. It is the closest local example of what is known in Britain and on the continent as Brutalist architecture. Richardson created an angular and jagged outline inserting vertical window strips to introduce natural light in the offices and open studio-space. Sadly, since the Faculty of Architecture has vacated the building, its interior arrangement has been irretrievably altered by the various office cubicles that encroached upon the open studio and exhibition spaces within. The external appearance of the building has also been adversely affected by visually intrusive air-conditioning units and exposed duct work that snake their way along the building's exterior. In spite of its present condition and ill-advised internal remodelling, it still ranks as one of the most architecturally significant modernist buildings on campus.

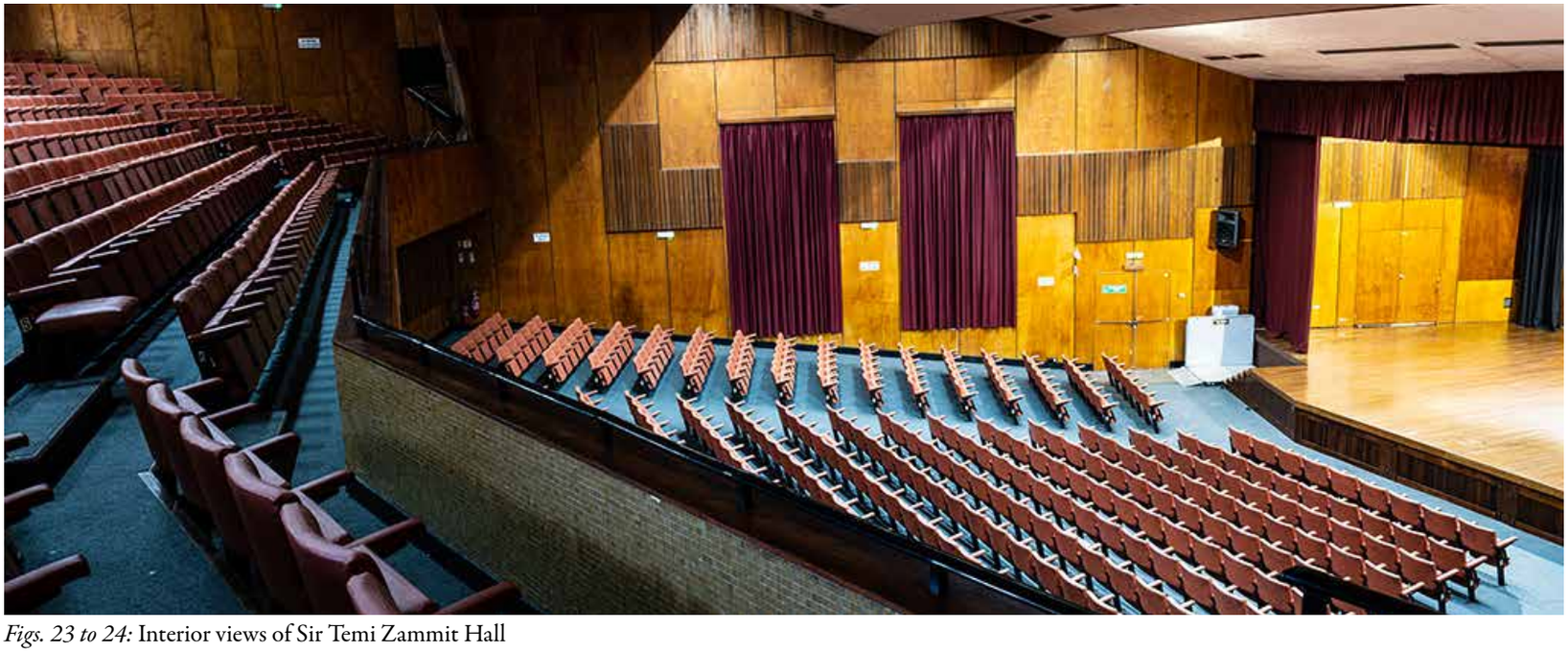
Although the Norman & Dawbarn master plan had originally envisaged a university chapel, more than a decade would elapse before the commencement of construction works on it. A young emerging Maltese architect, Carmel (Lino) Gatt (1951–2016), was entrusted to design the chapel. It proved to be an outstanding modern architectural work not only on the campus but in Malta generally. Still in his twenties, and under the spell of Le Corbusier's Notre Dame du Haut chapel at Ronchamp, Gatt produced a dynamic and organic design composed of free-flowing curvilinear forms and cascading spaces set amidst the surrounding carob trees and Aleppo pines. On 26 January 1977, Archbishop Sir Michael Gonzi presided over the laying and blessing of the foundation stone.[30] The chapel, dedicated to St Thomas More, first welcomed students a year after. The interior of the chapel was designed so that the congregation was accommodated along a stepped semi-circular seating arrangement with the altar as main focus. Soon after works started, Gatt travelled to Canada to pursue postgraduate studies and

Fig. 17: Skyline of the university campus as seen from across the valley. From left to right: Biology block, Maths and Physics Block, Library building and Old Humanities block

Figs. 18 and 19: Details of the former Architecture department building

Fig. 20: The former Architecture department building designed by Peter Richardson

Figs. 21 to 22: Views of Sir Temi Zammit Hall



Figs. 23 to 24: Interior views of Sir Temi Zammit Hall

Fig. 25: The University chapel dedicated to St Thomas More, designed by architect Lino Gatt

Figs. 26 and 27 (overleaf): Interior views of the University chapel

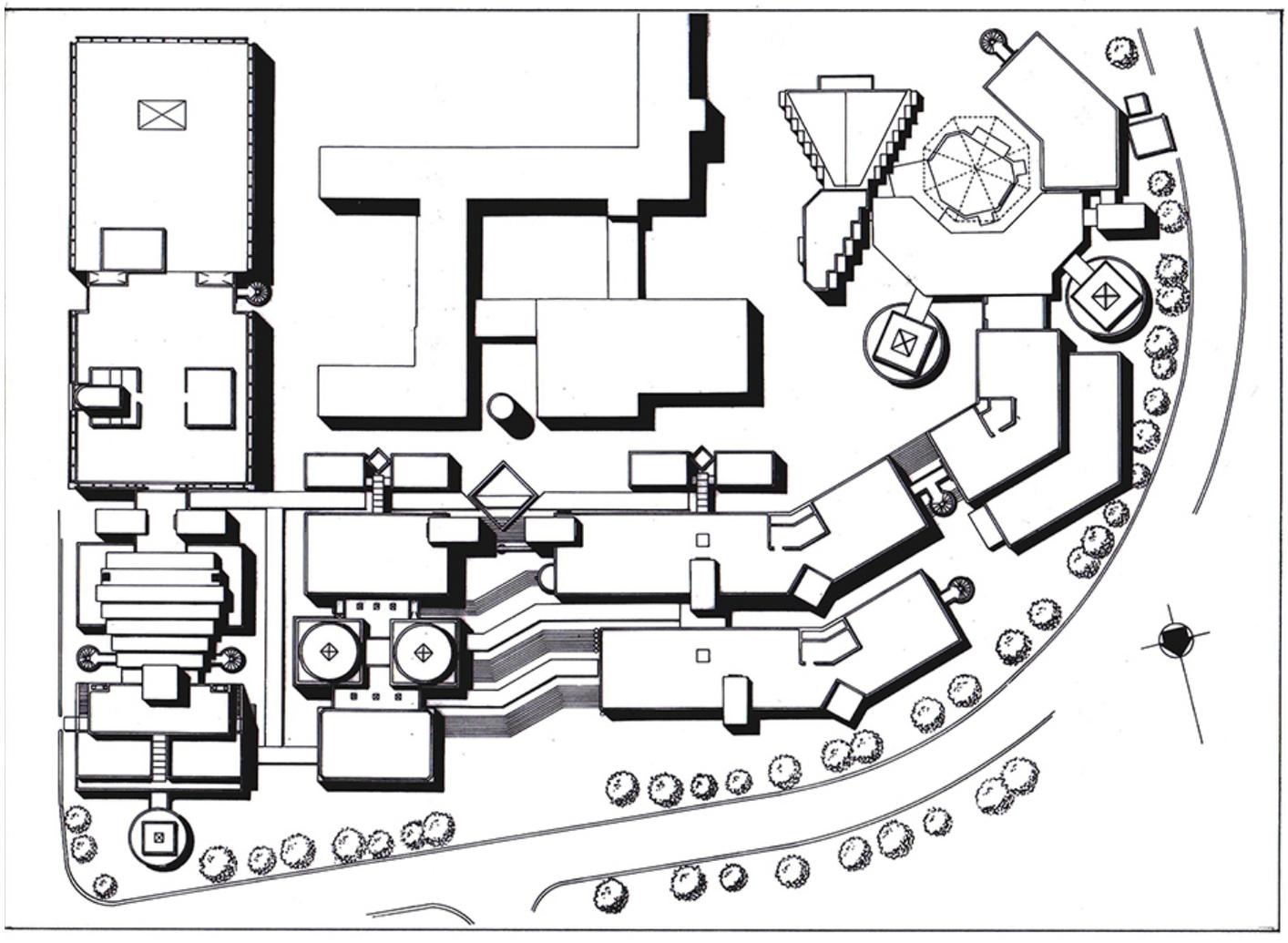


Fig. 28: Master plan by architect Richard England outlining the expansion of the campus to the valley side.

the university's architect-in-residence, William Micallef, completed the chapel in accordance with Gatt's original design.[31]

The architect was keen to maintain a harmonious relationship with the natural landscape characterized by traditional rubble walls, carob trees, and vegetation. Situated close to the old university entrance just off the campus ring-road, it was intended as an oasis of peace, offering students a quiet space for prayer, contemplation, and meditation. Architect Edward Said has described the chapel in the following terms:

> For Gatt, like Le Corbusier, context was instrumental in conceiving his desired overall form. Back in the early seventies the area was still largely characterized by cultivated fields parcelled with rubble walls, gently terraced downhill. With a keen eye for landscape architecture, the young Gatt subtly moulded the buildings to sit into the fields, sinking its entrance and offsetting it from the ring-road. This process evolved in tandem with his idea of a hemi-cyclical arena-like nave with raked seating providing an intimate, comfortable embrace for the congregations around the altar. Dominating the interior are the elegant deep down-stand crossbeams supporting the lantern which beautifully illuminates the sanctuary.[32]

The chapel's interior was extensively refurbished on the occasion of Pope John Paul II's visit in 1990, when he actually encountered university students within it.[33]

Expansion and consolidation

The period 1989–2000 witnessed an exponential increase in the student population which was matched by a major expansion and intensive building programme. The

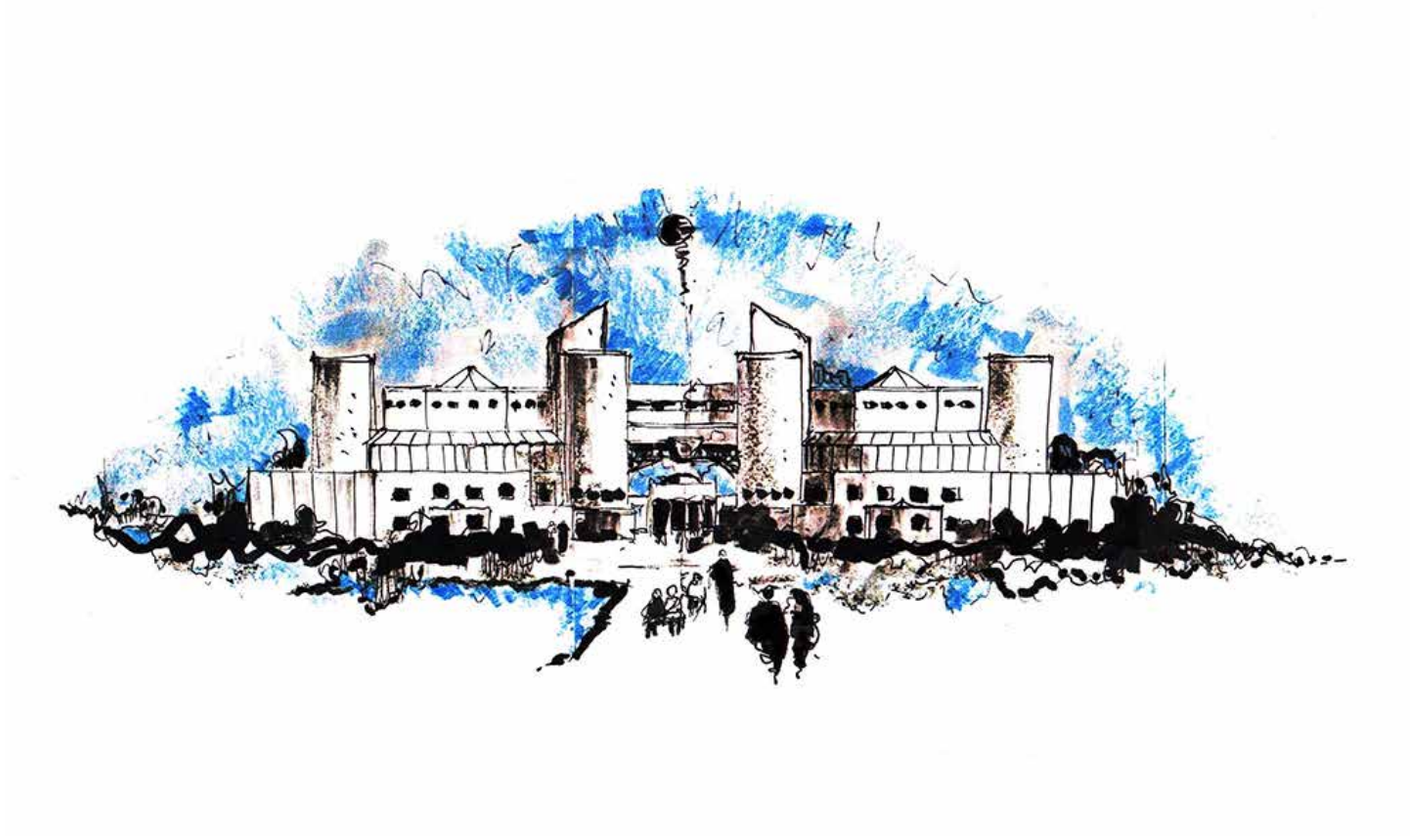


Fig. 29: Richard England, conceptual drawing of the Gateway building and new entrance approach to University.

Fig. 30: Gateway building referred to as Mikiel Anton Vassalli building (photograph credit: Richard England)
Overleaf – Figs. 31 and 32: Mikiel Anton Vassalli building

university Rector Reverend Professor Peter Serracino Inglott (1936–2012) commissioned architect Richard England to prepare a new master plan that would take into account recent developments and propose guidelines for the future expansion of the campus for the following decade. This master plan more than doubled the original built-up footprint of the campus and several new buildings were constructed. A new entrance approach to the university was defined and highlighted by the imposing Mikiel Anton Vassalli Lecture Hall, popularly referred to as the Gateway building. In this instance, the architect treats the building as a sculptural display of various three-dimensional forms creating a dynamic massing effect. Two cylindrical forms containing stairwells are linked at the lower level by an open steel-girder painted green.

Other new additions to the campus include a new Architecture & Civil Engineering building that was constructed on the site of a former Second World War gun-post and an extension to the original Library building. Beyond the Library extension, a new block hosting the Main Lecture Hall and various offices was built, together with two linear parallel blocks referred to as Humanities Block 1 and 2 respectively. The latter buildings were terraced down on various split levels descending towards the Għollieqa valley, which can be considered the sole green lungs of the campus, today engirdled on all the other sides by two major arterial roads, the Birkirkara Bypass and Regional Road, and the Mater Dei hospital on the other. It was not accidental that Richard England decided to orientate the expansion of the university to face the valley, in the process exploiting the scenic views offered by the rural setting. The architectural critic Edwin Heathcote described the extension of the university campus in the following terms:

> The enormous expansion of the site, undertaken by Richard England in 1989, took nearly a decade to complete. It proved the ideal project for the architect to express his proclivity for treating buildings as minicities: it was in this scheme that he came as close to realizing a new, virtually self-contained urban environment as is possible without embarking on the creation of a new city. The scheme is based around a series of terraced units, the spaces between which form an intricate network of ministreets. The larger units are punctuated by breaks and formal interventions which open up a hierarchy of vistas, glimpses (both of internal constructs and out to the natural topography of the site) and processional routes through the site in the vaguely picturesque tradition of Camillo Sitte. The site is modulated in three dimensions by steps, terraces, arcades, Zen-like rock gardens, and formal, sculptural building elements. It is indeed the 'silence in between' which makes the site. The architectural expression of the built elements is simple: openings are merely punched through, inexpressive in the fashion of the Mediterranean vernacular, and the form of the blocks is unspectacular (occasionally evoking the repetitive grids and black openings of Aldo Rossi's eerie works), only catching the eye in rotated pavilions that break up the larger masses and in brightly coloured cylindrical circulation elements. But, in the arcades, gateways, and passages there are echoes of Stirling, Botta, and Rossi in the urban treatment of the linking spaces and the establishment of screens and colonnades which provide both the practical function of shade and the picturesque function of framing views and setting up formal geometries.[34]

Most of the new buildings were originally two-storey structures terraced in relation to the topography of the site. Over time, additional floors have been added as the demand for additional lecture halls and offices increased exponentially. England placed special emphasis on the physical linkages and connections that took the form of arcades, colonnades, stairs, and ramps that connect the composite parts into one urban scheme.[35] Although one may be critical of certain functional aspects of the interior

Figs 34 and 35: Conceptual drawings by Richard England showing massing of the various buildings proposed in the expansion of the campus.

Opposite – Fig. 33: Library extension by architect Richard England

Fig. 37. Aerial view of the new campus extension (photograph credit: Anthony Cassar Desain)

spaces and its shortcomings in terms of providing the appropriate ambiance for lecture rooms, the strongpoint of England's scheme was that it generated a coherent framework that unified the various individual buildings and open spaces.

During the first decade of the new millennium, with the ever-increasing importance of computer technology and digital communications, the University authorities constructed what was officially claimed to be a new 'state-of-the-art building' to accommodate the new Faculty of Information and Communication Technology.[36] The landmark building was constructed along the ring-road overlooking Triq Mikiel Anton Vassalli. The building designed by Tba Periti represented a sharp break, both in terms of architectural language and in materials used in the other parts of the campus. This building was the first 'high-tech' building on campus constructed as a steel-frame structure with a predominantly glass external façade. The façade was composed of specially engineered, glass panels filled with inert gas, and coated with appositely calculated reflective material so as to be energy-efficient.[37] The building has no traditional windows and the thermal ambience of the interior spaces is controlled by an advanced Building Management System (BMS). All internal environmental conditions such as temperature, ventilation, and humidity are controlled and regulated by an integrated automated system. The four-storey building is configured in the form of two separate blocks physically connected by means of a multi-storey entrance, lobby, stairwell, and lift area, together with an underground car park. The building hosts various computer teaching and research labs, research and tutorial rooms, study-areas, and other related facilities. Contemporary with the ICT building a separate building known as IT services was constructed, catering for extensive video-conference facilities and for hosting the University's digital data centre.[38]

Fig. 36: New buildings and open spaces as part of the campus extension
Figs 38 and 39 (overleaf): The Faculty of Information and Communication Technology (ICT) building

Envisioning the Future

'Change is usually sad, but it is dangerous to live too much in the past, and to overstate the past at the expense of the future.'

Graham Dawbarn, Norman & Dawbarn, architects

During the past twenty-five years, the campus has developed considerably, transforming itself with the addition of new buildings that did not form part of the original master plan. The ever-increasing student population and changes driven by technology and the digital era have been the catalysts for change and unbridled expansion. The exteriors of some of the older buildings have remained virtually unchanged while others, such as the Administration block, Sciences and Engineering buildings have been extensively modified with incremental extensions and, at times, ad hoc construction of additional floors. Changing requirements will result in further extensions and new buildings in the years to come. This will undoubtedly lead to lively debates about aspects relating to design and functionality, environmental impacts, and the conservation of specific buildings, architectural details, and spaces.[39]

The campus is slated for yet further expansion over the next few years with at least four major projects in the pipeline. In 2018–19, works have started on the University Hub which will be situated near the main entrance to the university. The project, which is a public-private partnership operated by Campus Residence Malta Limited, will comprise an eight-block student village with student residential accommodation and various outlets and ancillary facilities situated around a central plaza. A tree-lined boulevard will link the University building to the plaza. The new complex will also house the University's child-care centre and language school. Other supporting facilities will include a leisure pool, fitness gym, squash court, music practice rooms, study rooms, and a multi-faith space. The project also envisages the provision of commercial and entertainment areas housing food courts and an underground car park comprising three levels.

Another major project is the so-called Transdisciplinary Research And Knowledge Exchange (TRAKE) project which will provide various specialized engineering laboratories and research facilities hosted in three underground floors, and a smaller-in-footprint free-standing structure above ground level that will accommodate various offices and study and research areas for post-doctoral students. The underground laboratory spaces have been designed in an energy-sustainable manner whereby there is a continuous perimeter shaft for natural ventilation and a series of vertical solar tubes that will provide a source of natural lighting. The design is by a university design team headed by Professor Alex Torpiano and the project is being part-financed through the European Regional Development Fund.

A third project is the Sustainable Living Complex Project which will host, amongst other facilities, the Faculties for the Built Environment, the Faculty of Education, the research labs of the Faculty of Engineering, and various other institutes. The building itself, intended to be a resource-efficient prototype building in a real-life context, is designed by the 'Team Two' architectural group led by Professor Alex Torpiano. The project, sited on land that fronts the Birkirkara Bypass on one side and the ring-road on the other, comprises two distinct superstructure buildings separated by an internal road. The higher building houses various offices and small labs whilst the lower one will accommodate the Built Environment design studios. There are two underground levels dedicated to various engineering laboratories and workshops, whilst at ground-floor level, accessible from the internal pedestrian street, are lecture halls and tutorial rooms. Externally, the main building envelope will have a glazed curtain wall with a *brise soleil* covering other parts of the exterior. The lower building which will host the design studios is planned to have a distinctive serrated roofline.

Another project that the University is investing heavily in is the total upgrading and redevelopment of the sports

Fig. 40: University Hub project – Artist's impression

Fig. 41: University Hub project – Artist's impression

Fig. 42: TRAKE project – Artist's impression

facilities which have been neglected over the years and left in a state of degradation. The project will provide facilities for the Institute for Physical Education and Sports as well as for the School of Performing Arts. The complex will include offices, lecture rooms, and a black box theatre. An eight-lane athletics track and an artificial football pitch are planned above an underground car park, and a redeveloped spectator stand. The project will accommodate sports research facilities, an indoor track, a sports clinic, a gym, and changing rooms. Its design and supervision are being coordinated by the University Estates, Facilities, and Capital Development Directorate.

Once implemented, all these projects will transform the campus. The realization of the university residences and sports complex projects should enhance student presence on the campus beyond the formal lecture schedule. It will be interesting to assess the impact that these projects will have in hopefully stimulating more active and vibrant spaces on campus. The campus combines a wide range of buildings, structures, and open spaces that have evolved over the past fifty years. It is important that the right balance is achieved between preserving the architectural ethos of old buildings while embracing new buildings that contribute in a meaningful manner to a better quality of life for students, academics, and staff alike.

The campus cannot be considered a static and closed architectural entity as it will have to continually adapt and respond to the every-changing needs and requirements of a modern society. In many ways, the campus is a microcosm of a miniature city with a wide spectrum of needs. It has to be fluid, dynamic, and responsive to societal needs and requirements. On the other hand, the growth and transformation of the campus will have to be skilfully managed and planned. Physical space has always been at a premium. Ever since the University's inception at the former Jesuit College in Valletta, spatial constraints have conditioned the University's ability to grow and to provide more facilities. When the new campus was established at

Fig. 43: Sustainable Living Comples project – Artist impression

Tal-Qroqq, it seemed that spatial constraints would no longer be a critical issue in the future expansion of the University but the rapid urbanization of the island over the past few decades has changed this scenario completely. Paradoxically, the University is now again facing that very same challenge of restricted physical space that it experienced fifty years ago when it sought a new location.

It is abundantly clear that, following the completion of the projects in the pipeline, there will be very limited space available for any further new development on campus. The authorities ought to engage in some soul-searching to possibly consider alternative models for future growth. For example, it could be the case of retaining the present campus as the main nodal hub but then establishing new satellite premises elsewhere for certain faculties and departments. This would alleviate the ever-increasing physical-space pressures besides also disseminating the ethos of the University of Malta beyond the Tal-Qroqq enclave. Considering the recent advances made in digital technology and communications, there is no compelling justification for all the Faculties and Departments to be physically located in one campus. The real risk of overdeveloping the present campus is that it would lead to the further diminishment of the limited open spaces, exacerbate traffic and parking, and ultimately compromise the quality of the University environment. It is a challenge that needs to be addressed and resolved, with a degree of urgency.