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The Shape of Knowledge: University Campuses as Historic Urban Landscapes through Experiences of the University of Auckland and Politecnico di Torino

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Abstract

This paper interconnects the diachronic development of two academies at geographical antipodes: the University of Auckland, Aotearoa New Zealand, and the Politecnico di Torino, Italy, in sharing the apparent contradiction between the words "urban" and "campus" at the crossroads of urban design, modern architectural tradition and historic urban landscape, critically tied with contemporary debates.

Offering readings of selected sites for each campus that encapsulate socioeconomic developments, urban and architectural morphologies, and cultural landscapes' international reputations, the paper draws from a hybrid methodological approach that combines the global guidelines of the UNESCO Historic Urban Landscape approach, focused on the preservation of the layers of heritage in the urban context, to the urban planning reading of programmes and achievements of the modern age in complex integration of urban history and academic physical spaces. In particular, it explores the contribution and influences of architects, urban planners, heritage conservation experts, decision-makers and community representatives within such developments.

The ultimate goal is to bring together historical and spatial inquiry towards a critical practice. On the one hand, it reveals a stimulating counter-history of a model university campus that is the site of cross-cultural exchanges rather than a colonisation template to be easily exported or imported. On the other hand, two antipodal university centres with endemic divergences – but comparable international appeal – appear as key representatives of the urban dimension and

history of their hosting cities with clear projects, shaping strategies according to opportunities, limits and contingencies.

Introduction: Rationale

There were two splendid ideals, one of a civic university, sited near city, library, art gallery, museum, closely related to the professional and commercial needs of the city as well as to the general educational and cultural requirements of the community. [...] On the other hand there was the ideal of an American campus, removed from urban noise and discord with an atmosphere contemplative, sedate.¹

This paper investigates the multifaceted relationship between university campuses and cities as the realistic representation of an architectural form connected with the social history of its context.²

In the American tradition, the mainstream campus "trend" represented within the international literature begins with the conquest of a plot on which to distribute buildings "removed from the corrupting forces of the city."³ During the transition towards modernity, the term "campus" travelled back toward the old continent, where the ancient cloistered model was rooted. The experiment confirmed the myth of an elitarian planning model for academic communities, but also stimulated arguments amongst those who considered the campus as an "urban phenomenon."⁴

Initiated within the University of Auckland (UoA) in Aotearoa New Zealand, this research explores its spaces, questioning if it could be read as an initially unexplicit urban planning project, since the "site row" allows the city and the university to relate permeably. Methodologically, the Politecnico di Torino (PoliTO), in Italy, offered an international counterpart as a web of urban blocks highly rooted within the historic and socio-economic ground of the city.

Intended as a first stage of a broader international project, this work concentrates on a binary case study comparison. Forming an architectural sample of comparison between two antipodes, we offer two freestanding readings composed of general analysis and three selected sites of focus, providing the opportunity to observe their diachronic development through modern and contemporary history.

The Historic Urban Landscape Approach: The Methodology

Assuming an international perspective, this paper looks at the non-governmental recommendations of the Historic Urban Landscape approach, adopted by UNESCO in 2011, and defined as:

A methodology that seeks to increase the sustainability of planning and design interventions by taking heritage into account, intended to branch beyond the preservation of the purely architectural environment, focusing on the holos of tangible and intangible qualities, cultural diversity, socio-economic and environmental factors along with local community values and historic layering of cultural and natural values.⁵

This paper offers two layers of evaluation of the urban campus: (i) as a historic urban landscape – a storyteller of national socio-economic developments; and (ii) as a "common design problem,"⁶ which in Auckland developed by anchoring along a "site row"⁷ system while in Turin developed via urban polarities.

Auckland City Centre Campus: The "Site Row"

The core of the Auckland campus shows a superimposition of layers of the pre-industrial, colonial and modern growth of Princes Street and Symonds Street, closely connected on one flank with the Auckland Central Business District (CBD) through historic Albert Park, and on the other to the rising of Symonds Street towards the sacred volcanic cone of Maungawhau (Mt Eden).

The first Auckland University College, an 1882 establishment by Act of Parliament comprising 95 students and four teaching staff,⁸ was housed in a few disused government-owned or temporarily built "quaim ramshackle wooden buildings."⁹ The settlement was always influenced by a longstanding quarrel regarding the Old Government House (OGH) acquisition by the University, with the opposition supporting the wish for the Governor's functions – and the capital – to return to Auckland.

Between 1908 and 1919, the University acquired additional old buildings in the area and land (the Metropolitan Ground or "cow paddock" adjoining the OGH Grounds). Here the campus was set in its original site when the new Arts Building (now known as the Clock Tower) opened, in 1926.

The construction marked the success of the first campaign to maintain the central seat (and the alignment with the OGH) on the premise that education should be accessible to workers employed in the town in the 1920s, considering the rapid growth of the enrolments.

The second wave of growth implemented a layout still visible today, the 1960 "Block Plan," featuring signature modern buildings on the banks of the Symonds Street artery.¹⁰

Leading to it, much debate on how to accommodate the foreseen exponential academic boom of the post-war period had included some realistic outskirt possibilities – lobbied by commercial groups – as the University had bought some more outlying lands. The decision was to maintain the Princes Street location, as more convenient than the ground works needed at the newly purchased Hobson Bay plots and closer to the hospital for the Medical School.

With the 1962 abolition of the University of New Zealand, the University of Auckland became an independent institution and initiated a massive building programme that spanned three decades, focusing on increasing student facilities as residential, recreational and shared spaces. In 1965 the University was operating over 80 buildings, mostly set around the original location. Seven new buildings, in particular, are a signature of late New Zealand architectural modernism of the Block Plan: General Library, Engineering, Science, Student Union complex, Thomas Building for biological sciences, School of Architecture and Planning and Maclaurin Chapel.¹¹ By the end of this period (ca 1988, marked by the construction of the Waipapa Marae complex), the student roll accounted for more than 13,000 inscriptions.

In the 2000s, another building programme saw large-scale developments filling the interstices, adjoining and connecting multiple buildings. The new builds included the Kate Edger Information Commons and Student Commons, the Engineering Atrium and library wing, the seven-floor extension to the Science Centre and the large and striking Sir Owen G. Glenn Building for the Business School, and the Maths and Physics buildings were all completed before 2011.¹²

Today, the University of Auckland is the largest in New Zealand, hosting over 40,000 students across five Auckland de-centralised campuses, with two of them in the process of being decommissioned, with consolidation to the Princes and Symonds Street site.¹³ The City Campus has become its historic heart, on which to implement ordinary and extraordinary maintenance and repair strategies encouraged by the guidance of local conservation

experts.¹⁴ This approach guarantees attention to the materials and minimised waste of resources, both physical and tangible – the materials themselves – and cultural and intangible – the techniques, the designs, and the layers of history embedded in the fabric. Heritage conservation consultancy highlighted, for example, Old Government House, Old Arts Building, Student Union Centre, Alfred Nathan House, Maclaurin Chapel, Old Choral Hall, Kenneth Myers centre, the former Auckland Synagogue, and more.

More recent buildings have needed repairs as well, sometimes due to the use of less durable materials in the increasingly harsh Auckland weather and other times due to the difficulty of detailing the intricate space filling – some roofs being vulnerable areas, especially flat roofs, multiple-levels and wall-to-roof junctions in an environment where there is consistent rainfall during the year.

On some occasions, the conservation policies have fallen short against the new development dynamics, like in the case of the Maidment Theatre demolition, an integral part of the Student Union Building, and the School of Architecture and Planning Library abandonment, demonstrating a lack of cultural heritage conservation perspective.

The following sample represents three highly decisive moments of the UoA as an urban campus: OGH (pre-university city catalyst), the Old Arts Building (first purpose-built building of the UoA) and the Student Union Complex (a high-profile student facility building with a peculiar architectural value and relationship with the site).

The Old Government House: The Core

The OGH is highly cherished by the UoA, which has expressed its vision for the future of the building acknowledging the benefits and the responsibility for the *kaitiakitanga* (guardianship)¹⁵ of this unique part of the nation's heritage in Auckland.¹⁶ The building sits within a historic landscape of prime value (from its grounds to the extended Princes Street landscape, including the early fortification of Albert Barrack's Wall, the early colonial buildings and St Andrew's Church).

Built in 1855-1856 to house the first Governor of New Zealand after the 1852 Constitution Act, before the relocation of the Government to Wellington, in 1965.¹⁷ It was the largest residence of its period. The architect, William Mason, was the first Superintendent of Public Works in New Zealand and established the first formal architectural practice in the country. The materials of the two storeys, "similar to large country houses in nineteenth-century Britain,"¹⁸

were mostly locally sourced and especially notable is the monumental kauri facade's elements fashioned to mimic a neoclassical masonry building, a feature that was criticised for being deceiving of its material's spirit,¹⁹ but which is now considered a specificity for conservation strategies. Several proposals for the use of the OGH and its grounds as a prestigious seat of the University were made during both the nineteenth and twentieth centuries, however, it was not until 1969 that it started hosting the senior staff common spaces and hospitality, temporary accommodation, a lecture hall in the former ballroom and events such as exhibitions.

Subject to maintenance and upgrading, the building has been modified for safety and response to disasters (like the 1916 fire, which destroyed the roof and upper storey) and to fulfil contemporary requirements. Unfortunately, some of these interventions have facilitated the loss of heritage qualities, and many of the later additions have deteriorated faster than the original parts.²⁰ To act on the decay of the materials, several programmes have been commissioned from experts between 2004 and 2016.

Despite its popularity and role as the spark of campus shaping, the building and its gardens appear somehow sleepy, under-utilised and under-maintained. A renewed vision could likely bring to light its potential, enhancing and implementing the conservation strategies already in place.



Figure 1. Old Government House entrance, 2015 (Candida Rolla for Salmond Reed Architects).



Figure 2. Old Government House interiors, 2015 (Candida Rolla for Salmond Reed Architects).

The Old Arts Building and Clock Tower: The Symbol

At 22 Princes Street, "still dominating any view of the University,"²¹ is the iconic Old Arts Building. Designed by American-born, Australian and New Zealand resident Roy Lippincott and his partner Edward Billson, it was built in 1923-1926.

Lippincott, involved with the "Chicago School" of architects influenced by Louis Sullivan and Frank Lloyd Wright, delivered several projects in Auckland, amongst which, in the university campus, are the Students' Association building, the north-west wing of Choral Hall, the Caretaker's Cottage and the Biology building, while in the broader city of Auckland, two main commercial buildings can be mentioned: Smith and Caughey's Department Store building and the Farmers Trading Company Tearooms and façade renovation.²²

The first major freestanding structure erected by the Auckland University College "was carefully sited: the prospect from Symonds Street, to the east, was impressive, while from the west side of Victoria Street the tower seemed a crown to Albert Park,"²³ effectively locking in the "site row" dynamic between Princes Street and Symonds Street, which the following era will develop further.

This design, so well-appreciated today, was criticized by the architect's peers, especially the characteristic tower, accused of being "un-British and out of harmony with our national

character."²⁴ The visually striking divide from the more usual English vocabulary of the surroundings (e.g. Old Choral Hall) aligned with the function of an Arts building, in the research of more expressive and progressive uses of form, as did the tributes to New Zealand's native environment within the Art Nouveau decorative apparatus (stone flax seed pods, ponga fronds, kaka or kea, which generated use of the term "Māori Gothic" for its styling) built in prestigious local materials, especially the Mt Somers and Oamaru stone cladding.



Figure 3. Princes Street view of Clock Tower Building, 2021 (Candida Rolla).

The Student Union Centre and Maidment Theatre: The Brutalist

The 1968 Student Union complex, a staple of New Zealand brutalist architecture, is a posttensioned, precast concrete structure clad with aggregate panels and concrete blocks, with steel details and connections between elements that host students' facilities and services in a filtering public space, designed for pedestrian routes from Albert Park to Symonds Street, and through later buildings.

It gained Warren & Mahoney a regional architecture award in the heritage category in 2001 for its quality of impressive late modern design, with its geometric arrangement which elevates circulation, access and open space to be more crucial than the buildings themselves, like the

two freestanding staircase bridges, framed in precast concrete columns and beams, which divide the main space into three, with the large open court spaces.²⁵



Figure 4. Student Union Building, 1999 (Salmond Architects).

The U-shaped complex was disfigured when its northwest wing, the Maidment Theatre, was recently demolished. When in November 2016, the news of the theatre's destiny was revealed, public opinion most strongly opposed the proposed demolition. The Maidment had been closed for almost a year due to seismic concerns and the University had just then revealed management's scepticism about both cost efficiency and efficacy of the strengthening works required and the introduction of a redevelopment proposal, including a new performing arts facility.²⁶

The 1976 building was a crucial centre for Auckland's theatre community, which released some comments in response, disagreeing with the "non-fit-for-purpose" definition, with scepticism towards the promise of a new venue. As of today, the building has been demolished, and the new performing arts facility is still waiting for funding to become available.²⁷



Figure 5. Maidment Theatre interiors, 1999 (Salmond Architects).



Figure 6. Maidment Theatre demolition plot, 2022 (Candida Rolla).

Politecnico di Torino: City Campus and Urban Polarities

Turin urban landscape was the seat of the Kingdom of Savoy and the first capital of Italy; the city was also a keystone for the Italian post-war development strategies, culminating in the economic miracle of the 1960s. Perhaps all readers would have in mind the images of the iconic Lingotto Building with its large helicoidal ramp that runs up to the roof shaped like a car's testing track. It appeared in the British cult movie directed by Peter Collinson, *The Italian Job (Un colpo all'Italiana*), of 1969.

The great moving force of mass motorisation embodies Italy's industrial progress and major social challenges, such as the south-to-north migration, from the agricultural sector. In 1959, planning strategies were conceived to adapt the urban structure to the massive workforce coming.²⁸

In the same years, the city of Turin was also the stage of university protests for institutional reform; and the Politecnico, through the Student Association and the National Secretariat, initiated a series of self-organised conferences named "Facoltà di Architettura e Territorio" (Faculty of Architecture and Territory) on 5-7 May 1962.²⁹ These compelling debates demonstrated the need to reform the urban culture of architectural design through three key points: (i) the use of the term "territory" as a subject of ideological contention between architects and planners; (ii) the publishing, in that year of a famous article written for *Casabella* by a not even thirty-year-old Aldo Rossi exposing the "new problems" in designing Italian territories and his design proposal for the Centro Direzionale di Torino; and (iii) the conference venue, Valentino's Castle, the iconic seat of the Politecnico di Torino.

It is generally recognised by historians and critics that the crucial intellectual switch within Italian post-war discourse on the city dates back to the early 1960s.³⁰ A local debate arose around the "new dimension of the city" centred on the contrast between the *city-region* and the *city-territory*.³¹ Both decentralisation strategies "continued to be conceived as a remedial practice for urban congestion,"³² but while the *city-region* relied on economic plans elaborated by multidisciplinary groups, the *city-territory* was sustained by architects who reclaimed the importance of physical formations over regulations and codes. Amid this dispute sits the notion of *Centro Direzionale*, that is, a large-scale infrastructure of tertiary services situated between the city and its countryside, imagined as the most concrete materialisation of the new dimension of the city.

Amongst the different voices animating the debate of those years – Samonà, Quaroni, Aymonino, De Carlo and Tafuri – Aldo Rossi had the strongest argument in defence of the unity between architecture and urbanism, firmly convinced that only architectural forms could have successfully expressed such an experimental season. Rossi's critique emerged between the lines of his 1962 article and into the competition entry for the Centro Direzionale di Torino, a "radically urbanized architecture" consisting of a giant square ring – 300 meters long and 127 meters high – suspended on towering hollow columns and penetrated by the road's infrastructures, named by the authors "Locomotiva 2."³³

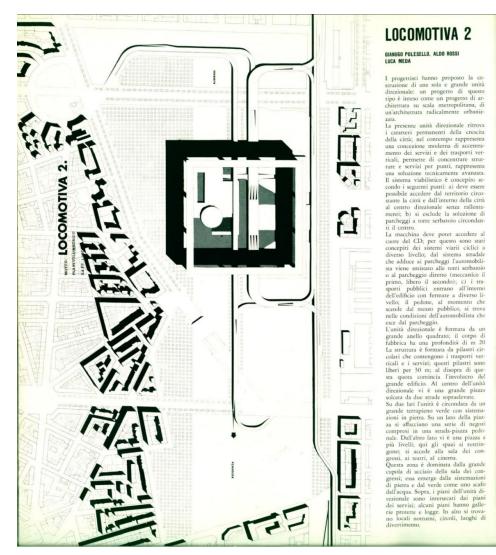


Figure 7. Locomotiva 2, design proposal by Aldo Rossi, Gianugo Polesello and Luca Meda (1962) for the Concorso per il Centro Direzionale di Torino (*Casabella*, no. 278, 1963).

With this project, the designers were affirming the permanence of everyday urban life, "the production of further actions and the adaptation to unpredictable events."³⁴ Turin required a

civic polarity to connect economic power and production logic, struggling to recognise, acknowledge and emancipate the workforce, but the design was criticised and rejected for its rigidity and the inadequate sense of self-confinement.³⁵

The Politecnico had been essential in this context of turmoil; the self-organised conference was the first of many initiatives – before and during the student occupations – which took place in Valentino's Castle.³⁶



Figure 8. Students protesting (Casabella, no. 287, 1964).

This site of historical transformations and episodic adaptations has been operating in the city as a *fatto urbano* (urban fact), as Aldo Rossi's upcoming and successful theory about "the architecture of the city" (1966) describes this concept. Sometimes translated as "urban events" rather than "urban artefacts," to emphasise collective will behind the object-form, Rossi's *fatto*

urbano is the main constituent of the city and its partial nature, or the only concrete manifestation of the myth of continuity through which the city forms itself.³⁷

Valentino's Castle: A Monument and a Symbol, from the Royal Application School for Engineers to the Headquarters of Architecture

A UNESCO World Heritage Site since 1997, the castle was purchased by the Savoy family in 1564 as a suburban villa overlooking the river Po. After substantial transformation in the hands of its royal owners, the nineteenth-century interventions determined frequent changes of use and a radical re-orientation of the symmetrical C-shaped composition, turned towards the city.³⁸ In 1859, it became the headquarters of the Royal Application School for Engineers. Since then, the building has been conditioned by the constant use of students, teachers, scholars, and researchers and several experiments of architectural transformation. This made it a constantly inhabited place and in 1906 it became the first seat of the Politecnico, identified by the university as one of the most present institutional agents in urban dynamics, and represented on the official logo.



Figure 9. Castello del Valentino, new main entrance, 2011 (Candida Rolla).

For a time, the university authorities considered the idea of abandoning the castle for future expansion, but the outbreak of the First World War and the subsequent economic depression saved the historic site.³⁹

Over the last 150 years, this striking monument of the historic city has involved a search for balance between conservation and active use, according to a vision that we could define as

"integrated conservation." The main building saw the addition of different architectural bodies, which compatibly interact with the pre-existing but gradually take on a distinctly contemporary language, to form a real material and spatial palimpsest of ongoing architectural research and education, traditional for the Politecnico.⁴⁰

The first significant addition was the 1869 construction of the "Chevalley sleeve," designed by Prospero Richelmy and Edoardo Pecco, perpendicular to the southeast court tower and parallel to the course of the river. The sleeve rises to house the hydraulic engineering laboratories, with "the efflux tower and the turbine," also exploiting the difference in altitude between the court of honour floor and the level of the quay along the Po.⁴¹ The budding of spaces around the castle has continued over time, with the construction since 1890 of the "comb sleeves" buildings with new classrooms responding to the growing number of students and the offices of the academic departments. This part is characterised, as is the former, by the use of brick wall texture in continuity with the historical architectural language. During the Second World War, the castle was severely damaged by bombing and underwent the first cycle of important restorations in 1961, marking the official passage to the headquarters of the School of Architecture.⁴²

In 1947 Ottorino Aloisio designed two new "orthophonic" classrooms in reinforced concrete, which today house the bar, the canteen and some computer labs. Due to the lack of classrooms and offices,⁴³ in 1991 the Politecnico commissioned Sisto Giriodi to design a new wing, which today contains the Central Architecture Library and offices. This intervention concludes the colonisation of the free spaces contextual to the Castle, according to a dialectical relationship "old/new."⁴⁴



Figure 10. Castello del Valentino in 2022, showing the Aloisio and Giriodi projects (Candida Rolla).

In recent decades, the Castle has been involved in conservation works of the monumental rooms (also made suitable from the services' point of view with innovative elements), intended for meeting rooms, and reception rooms and open to the general public in fascinating tours, while the nineteenth- and twentieth-century additions pose some problems of obsolescence of construction technologies and energy adaptation, whose resolution is faced according to sustainability criteria.

Engineering Building: The Sober Monumentality of the Grand Modern Tradition

Since 1939, the need of constructing new headquarters for the academic function encouraged modern, efficient, rational and economic solutions, like the complex Palazzo della Moda – presently known as Torino Esposizioni – by Ettore Sottsass senior and Pier Luigi Nervi, for the area south along the river Po, in line with Valentino's Castle. The industrial players operating in the city, however, pushed for the flat area of the former Stadium in Corso Duca Degli Abruzzi.⁴⁵

On these premises, the new Engineering Building was inaugurated in 1958, in a functional pavilion-type layout obtained by the repetition of identical linear blocks connected by orthogonal longer volumes. Since technological innovation was the basis of this investment, some generous spaces were dedicated to applied research, in conversation with the city's industrial sector.⁴⁶ Symbolically, a precise sequence along the central axis was arranged from the Rectorate to the above-the-ground Aula Magna, passing through the Valentino's Castle-inspired *cour d'honneur*. This building introduced a precise architectural principle of

coexistence within the city: the highly functional comb-like structure – also derived from the world of production – overturns the typically closed city block and intersects with a ceremonial promenade producing a dense urban atmosphere accompanied by a sense of sober monumentality.⁴⁷ One of the most interesting experiments of densification in this newly invented urban block was coordinated by Roberto Gabetti in 1988, divided into three specific interventions thickening the interstitial spaces of the existing structure and its interface with the surrounding urban landscape in continuous transformation.⁴⁸

Ex-OGR and "Cittadella Politecnica": In the Footsteps of a Simple Civil Architecture

The urban nature of the Polytechnic of Turin university campus soon became inseparable from the planning instruments. While the university aimed to reach 40,000 students, the New Town Plan of the City of Turin (1987-1995) identified a strategic "urban transformation area" in the surroundings of the new Engineering Building. The adjacent lot, a disused railway area known as OGR (Officine Grandi Riparazioni), became the site for the expansion that would double the space available. With the 1994 project Cittadella Politecnica (Polytechnic Citadel), the university campus began operating as an urban regenerator. The main goal was to implement academic activities in a variety of spaces for students, teachers and researchers. At the same time, it became a place of exchange with cafes, libraries and common services open to the city. The first phase aimed at the recovery and conversion of existing buildings - former turneries and former forges used in the past for the repair of railway vehicles (the external shape of the shed-roofed blocks is fully maintained while their interior is completely refunctionalized and the in-between space excavated to create a public courtyard); the second completed the expansion with a multi-storey square ring that rises above the ground level on the two sides crossed by a major traffic artery. The architect and urbanist, Vittorio Gregotti, was just like Rossi, among the protagonists of the Italian debate of the early 1960s, which is the reason why this architectural form evokes the visionary proposal by Rossi-Polesello-Meda of 1962 for the Centro Direzionale di Torino, materialising it into radical (university) projects able to act as the main agent of the new territorial dimension.49



Figure11. Aerial view of Politecnico Engineering Building, 1958 ('Politecnico di Torino. Nuova Sede', Provveditorato delle Opere Pubbliche per il Piemonte, Ufficio del Genio Civile di Torino).

Conclusions

It is not safe to extrapolate recent changes into the future: in other words, it is not clear which changes will be seen to be phases and which will prove to be trends.⁵⁰

Considering the context of global crises involving cities, within the campus design literature, urban iterations have been relegated, more often than not, as a secondary appendage to a mythical tradition of planning experiments, or, with the explosion of campuses and multifunctional higher-education buildings, as experiments of the most followed "university trends."⁵¹ In this space lies the novelty of the present paper, which aims to encourage a discussion about the relationship between the city and campus through the lens of tangible and intangible heritage, as the international guidelines suggest.

The two case studies compared, Auckland and Turin, whether condensed in the reinforcement of a road axes system crossing a peculiar and evocative landscape (Auckland) or the strategic dislocation of urban polarities within the city social fabric (Turin), embody the metamorphosis of the university's missions over time in response to the unique opportunities and restraints the city provides.⁵² The reconquest of urban areas by campuses is a chronicle of complex

architectural interventions imagined to make a certain idea of the city survive while providing the spaces and services allowing the university to thrive.

This paper highlighted how the urban university campus represents a different archetype to the usual pre-packaged and pre-planned contemporary "trends": it "conquers" the territory, produces dynamics, reconnects to historic facts and events, and acts as the theatre of historic urban landscape narratives. In both cases, the new image responds to the logic of the Historic Urban Landscape approach.

The Auckland City Campus story showcases strengths, weaknesses, opportunities and threats for the future enhancement of historic urban landscapes of international value and the consolidation of a sense of *kaitiakitanga* of this citadel of knowledge and its tangible and intangible heritage layers.

The ethos of the Politecnico's case, well summarised by Carlo Alberto Barbieri, shows three strategic criteria of expansion: (i) densification of functions around excellent nodes of the territorial framework and mobility; (ii) enhancement of urban, environmental and landscape qualities or achievement of new ones; and (iii) implementation of widespread quality, environmental and landscape protection and regeneration. In such a view, the role of Politecnico is to "enable and develop Turin as a city in which the university is a strategic urban function, character, value and competitive and internationalization factor of the city."⁵³ A possibility for future development of the present research is trying to translate these strategies to other urban city campus realities in different geographical contexts, or to focus on the different elements of historic urban landscapes, highlighting the effectiveness of the approach in consolidating the urban campus as a crucial element of symbiosis with the city development. If the urban university campus is *de facto* utilised to drive the development of the hosting city - a "trend" that reveals itself in different "shapes" internationally during the modern-tocontemporary era - then it would be useful that the institutional stakeholders focused on the social and environmental values, including proper heritage conservation strategies that can pivot on international tools and influences, harmoniously implementing knowledge in the existing city fabric.

Endnotes

¹ Keith Sinclair, *A History of the University of Auckland: 1883-1983* (Auckland: Oxford University Press, 1983), 239.

² The current research and this paper are the result of the shared work and reflection of the authors, with a transdisciplinary gaze. However, the section "Auckland City Centre Campus: The 'Site Row'," is

to be attributed to Candida Rolla; "Politecnico Di Torino: City Campus and Urban Polarities" to Marco Moro; and "Valentino's Castle: A Monument and a Symbol, from the Royal Application School for Engineers to the Headquarters of Architecture" to Monica Naretto.

³ From Paul V. Turner, *Campus: An American Planning Tradition* (Cambridge: MIT Press, 1987), 4.

⁴ Sharon Haar, The City as Campus: Urbanism and Higher Education in Chicago (Minneapolis: University of Minnesota Press. 2010).

⁵ UNESCO World Heritage, The UNESCO Recommendation on the Historic Urban Landscape: Report of the Second Consultation on its Implementation by Member States, 2019.

⁶ Tom Avermaete and Cathelijne Nuijsink, "Architectural Contact Zones: Another Way to Write Global Histories of the Post-War Period?," Architectural Theory Review, 25, no. 3 (2021): 350-61.

⁷ Sinclair, A History of the University of Auckland. Originally, the term "site row" referred to the debate about the campus relocation, in that instance "row" meant argument. This paper is utilising it as a play on the linear geometry of the campus.

⁸ University of Auckland, Main Campus Development 1987 (KRTA limited Engineers Architects Scientist Planners NZ), 8; and University of Auckland, "The University History," "Key Developments 1883-2000s," www.auckland.ac.nz/en/about-us/about-the-university/the-university/universityhistory/key-developments-1883-2000s.html (accessed 19 March 2023).

⁹ Sinclair, A History of the University of Auckland, 29.

¹⁰ University of Auckland, *Main Campus Development* 1987, 8.

¹¹ Julia Gatley (ed.), Long Live the Modern: New Zealand's New Architecture, 1904-1984 (Auckland: Auckland University Press, 2008), 179.

¹² University of Auckland, "History of the University of Auckland,"

www.calendar.auckland.ac.nz/en/info/history.html (accessed 19 March 2023).

¹³ University of Auckland, "Key Developments 1883-2000s."

¹⁴ Salmond Reed Architects has been curating several maintenance and repair projects on the existing buildings of the University of Auckland campus.

¹⁵ Kaitiakitanga is "duty of customary trusteeship, stewardship, guardianship, and protection of land, resources, or taonga." ICOMOS New Zealand Charter for the Conservation of Cultural Heritage Value, 2010, 10.

¹⁶ Jasmax and Salmond Reed Architects for the University of Auckland, "Old Government House, Auckland: Conservation and Improvements; Application for Government Funding" (draft), November 2004.

¹⁷Jasmax and Salmond Reed Architects, "Old Government House," 13.

¹⁸ Heritage New Zealand Pouhere Taonga, "Government House (Former)," www.heritage.org.nz/listdetails/105/Government%20House%20(Former) (accessed 20 March 2023).

¹⁹ John Stacpoole, William Mason. The First Colonial Architect (Auckland: Auckland University Press, 1971)

²⁰ Jasmax and Salmond Reed Architects, "Old Government House," 8.

²¹ University of Auckland, "A History of the University of Auckland, 1883-1983: A Panorama of the University of Auckland"

www.thebookshelf.auckland.ac.nz/docs/Sinclair/pg18 utview m1 lbIA%20Panorama%20of%20the% 20University%20of%20Auckland.pdf

²² Heritage New Zealand Pouhere Taonga, "Old Arts Building, University of Auckland" https://www.heritage.org.nz/list-

details/25/Old%20Arts%20Building%2C%20University%20of%20Auckland.

²³ Sinclair, A History of the University of Auckland, 127-28.

²⁴ Conversation between Lippincott and the Education Department's architect J. T. Mair reported in Sinclair, A History of the University of Auckland, 127-28.

²⁵ Warren and Mahoney, New Territory: Warren and Mahoney; 50 years of New Zealand Architecture (Auckland: Balasoglou Books, 2005), 206, 207.

²⁶ Hannah Bartlett, "University of Auckland's Maidment Theatre to Close for Good," News Talk ZB, 2 November 2016, www.newstalkzb.co.nz/news/national/university-of-aucklands-maidment-theatre-toclose-for-good/ . ²⁷ University of Auckland, "History of the University of Auckland."

²⁸ See Città di Torino, Ufficio Tecnico LL.PP., "Il Piano Regolatore Generale della Città di Torino approvato con Decreto Presidenziale 6 Ottobre 1959," Atti & Rassegna Tecnica, n.s., XIV, no. 3-4 (1960): 2-5; Carlo Olmo, Cantieri e disegni, architetture e piani per Torino 1945-1990 (Torino: Allemandi, 1992).

²⁹ See "Torino. Monopolio e depressione culturale," Casabella, no. 287 (1964): 24-27.

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³⁰ See Mario Ferrari, *Il progetto urbano in Italia: 1940–1990* (Florence: Alinea, 2005).

³¹ While the expression "*nuova dimensione*" was introduced by Giuseppe Samonà in 1959, the two alternative ideas are well documented via Italian architectural journals such as *Casabella*, no. 27 (1962). Among the recent contributions on this debate, see Francesco Zuddas, "The Eccentric Outsider: Or, Why Reyner Banham Dismissed Giuseppe Samonà's Mega-Project for the University of Cagliari," *Histories of Postwar Architecture* 1, no.3 (2019): 50-71.

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³² Zuddas, "The Eccentric Outsider," 60.

³³ In collaboration with Gianugo Polesello and Luca Meda. The project is published in *Casabella*, no. 278 (1963).

³⁴ Pier Vittorio Aureli, "The Difficult Whole," *Log*, no. 9 (2007): 39-61.

³⁵ Although no explicit mention appears in architectural specialised magazines, we could consider it more than a coincidence that the same year (7 July 1962) a huge mass of FIAT workers famously marched from the Mirafiori plant to the central Piazza Statuto, literally bringing the struggle from the factory to the city core.

³⁶ These initiatives are accurately reported in Elena Dellapiana, "*Architettura e/o Rivoluzione*, up at the Castle. A Self-Convened Conference in Turin (April, 25-27, 1969)," *Histories of Postwar Architecture*, 1, no. 2 (2018): 1-16.

³⁷ The suggestion of *urban event* is from Pier Vittorio Aureli, "The Difficult Whole," 39. Rossi's view on the architecture of the city is notably related to Padua's Palazzo della Ragione: "I remarked on its permanent character before, but now by permanence I mean not only that one can still experience the form of the past in this monument but that the physical form of the past has assumed different functions and has continued to function, conditioning the urban area in which it stands and continuing to constitute an important urban focus." In Rossi, *The Architecture of the City* (Cambridge MA: MIT Press, 1982), 59.

³⁸ The VI National Exhibition of Industrial Products (1856) is among the transitory occupations that instigated the overturning of the main front of the castle.

³⁹ New buildings were designed, but never built, by Prof. Ing. Angelo Reycend and later by the engineers Giacomo Salvadori of Wiesenhoff and Stefano Molli. See Giuseppe M. Pugno, *Storia del Politecnico di Torino: Dalle origini alla vigilia della seconda guerra mondiale* (Turin: Stamperia Artistica Nazionale, 1959).

⁴⁰ Annalisa Dameri, *II Politecnico al Castello. La Regia Scuola di Applicazione per gli Ingegneri al Valentino*, in Costanza Roggero, Annalisa Dameri (a cura di), *II Castello del Valentino* (Torino: Allemandi, 2007), 73.

⁴¹ Vittorio Marchis, *Disegnare Progettare Costruire. 150 anni di arte e scienza nelle collezioni del Politecnico di Torino* (Torino: Fondazione Cassa di Ripsarmio di Torino, 2009).
⁴² La Facoltà di Architettura was established in 1929.

⁴³ Dameri, *Il Politecnico al Castello*, 75-76.

⁴⁴ Alberto Ferlenga, Eugenio Vassallo, Francesca Schellino (eds), *Antico e nuovo: architetture e architettura* (Padova: Il Poligrafo, 2007).

⁴⁵ On the architecture competition, in which take part various exponents of Italian modernism such as Giovanni Muzio and Adalberto Libera, see *60: il Politecnico di Torino e la costruzione della città nel Novecento : la sede di corso Duca degli Abruzzi nel sessantesimo anniversario della sua inaugurazione*, ed. Marianna Gaetani (Turin: Politecnico di Torino, 2018).

⁴⁶ While general consultancy was entrusted to architect Giovanni Muzio, in collaboration with Carlo Mollino, the executive stage of the singular projects was in the hands of engineer Vittorio Bonade Bottino, then in charge of the Plant Construction Section of FIAT after he had taken part in the Lingotto Building project.

⁴⁷ A sizeable private donation from the Agnelli family was provided to complete the most expensive but also the most representative interventions.

⁴⁸ See Roberto Gabetti, 'Una protratta epoché', *Zodiac*, no. 7 (1992): 184-89.

⁴⁹ The same year of Rossi's *L'Architettura della Città*, Vittorio Gregotti published the seminal *II Territorio dell'architettura* (Milano: Feltrinelli 1966). On the season of 1970s university projects in Italy, see Francesco Zuddas, *The University as a Settlement Principle: Territorialising Knowledge in Late 1960s Italy* (London: Routledge, 2019). In late 1980s, when Gregotti was in charge of the New Town Plan of Turin and the project of Cittadella Politecnica, his office had just begun one of the first urban regenerations of Milan in the Bicocca university district remembered as "a simple civil architecture." In 'Gli enzimi dell'architettura', *Domus*, no. 895 (2006).

⁵⁰ Sinclair, A History of the University of Auckland.

⁵¹ Jonathan Coulson, Paul Robert and Isabelle Taylor, *University Trends: Contemporary Campus Design* (London: Routledge, 2018).

⁵² In Turin's case, the urban intervention strategy still in progress is coordinated by the Masterplan team of the Politecnico, also illustrated in Caterina Barioglio, Antonio De Rossi, Giovanni Durbiano et al, "Verso un'università della città: il caso studio del Masterplan per i campus del Politecnico di Torino," *Eco Web Town*, no.17 (2018):198-209.

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⁵³ Carlo Alberto Barbieri, Analisi dei sistemi territoriali: Ateneo e Città, in Politecnico di Torino, Masterplan di Ateneo. Processo per l'elaborazione di una strategia di Ateneo per lo sviluppo armonico e funzionale dei suoi campus in relazione al territorio, V3/171221, 35, nota 2.