Ultra: Positions and Polarities Beyond Crisis

The Role of Architectural History Research: Auckland’s NZI Building as William Gummer’s Attempt at Humanity

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Abstract

In response to the third thematic sub-stream of the 38th Annual SAHANZ Conference, this paper will discuss the role of architectural research in the architecture of Gummer and Ford, the Auckland-based practice, often described as one of the most prolific bureaus in interwar New Zealand. The paper is a fraction of a three-staged project, “Gummer and Ford,” developed by a team of researchers from the Unitec Institute of Technology in response to an event recognised as a milestone in the New Zealand architectural calendar – the 2023 centenary of the firm’s establishment.

This paper explores the design principles of William Gummer, the principal designer of the firm. From 1914 to 1935, Gummer consistently published his view that the goal of the architect was to cater to humanity’s highest instincts. He was unwavering but vague on how this is achieved; through composition, unity, contrast, proportion and scale, appropriate use of materials is all needed to produce buildings of good character. But what did he really mean by this? A close reading of three books Gummer considered invaluable to architectural students – The Essentials of Composition as Applied to Art by John Vredenburgh Van Pelt, Architectural Composition by Nathaniel Cortlandt Curtis, and The Mistress Art by Reginald Bloomfield – offers a direct insight into the influences behind his thinking about architecture and his architectural production. Directly traceable to Gummer, the three titles include clear, precise instructions on both the functional and artistic nature of architectural design.

Interestingly, this paper employs a method not dissimilar to Gummer’s design method. These books taken together, along with Gummer’s own writing, a study of renderings and construction drawings, and close observation of the buildings, an architectural analysis of Gummer’s work becomes possible – it is what Gummer himself referred to as Architectural Research. This historically focused study will bring a new perspective to understanding the value and contribution of traditional architects, not only in New Zealand but other English-speaking countries.
Introduction: The NZI Headquarters, a 'Fine Modern Building'

The erection of the new NZI premises (1913-1917), (known since the early 1980s as the Guardian Trust Building), is widely considered as a significant accomplishment of early 20th-century Auckland architecture. It was designed by Hoggard, Prouse, & Gummer, who, as the period press proudly claimed, ‘adopted the best principles of commercial structures and the most modern methods of construction.’¹ A true architectural ‘celebrity,’ the building was, by far, the most famous of the period commercial structures constructed in Queen Street, the teeming throughfare of Auckland’s central business district. The decision by the board of directors to erect a new building on the site of an old city landmark – the 1870s NZI headquarters designed by Richard Keels – was described as ‘one of the best evidences of the faith of business men in the future prosperity of Auckland is the splendid type of buildings that are replacing the structures of earlier days in Queen Street.’² The march of progress was unstoppable, and architecture was its most tangible embodiment.³

Listed by the Heritage New Zealand as Category 1 Historic Place, the NZI building is widely recognised for its architectural value in the country’s architectural historiography.⁴ However, although regularly included in overviews of New Zealand’s early twentieth-century architectural history, the NZI building is, as a rule, concisely described and characterised as a valuable Queen Street commercial building – without contextualisation or deeper consideration. This paper aims to understand the design principles of William Gummer, the lead designer of the NZI building, who later became the principal designer of Gummer and Ford. Thus, the paper will explore in detail various aspects of the NZI Queen Street premises, Gummer’s first major commission in Auckland. The paper will illustrate Gummer’s creative motivation, ambitions and design mechanisms which informed his architecture. It will be shown that, like most of his contemporaries, Gummer was dedicated to accomplishing beauty in his designs and, ultimately, to impacting the public ‘spirit’ through architecture.

Gummer’s own explanation of ‘architectural research’ presented at his 1920s paper ‘The Threefold Application of Architectural Education’ will guide the discussion.⁵ The method employed will help study the NZI building ‘from point of view of the architect, his purpose, opportunity, his limitations of material.’ The research will attempt to follow Gummer’s ‘mind at work on the problem, evolving carefully the plan to meet all practical considerations, feeling and picturing his walls and piers, feeling in his mind’s eye tenderly, yet strongly, lovingly, almost prayerfully, a sequence of forms which, at such instances in plan and heights in section form those magnificent interior spaces, magnificent before any decorative works is added, and blossom out in façade in a totality of silhouette, composition, rhythmic proportion, studied light and shade.’⁶

The Beaux-Arts Tradition and Dual Understanding of Architecture: Challenging The ‘Easier Paths of Financial Enterprise’

The early 20th century New Zealand architects who were educated abroad most often studied in the U.K. or the U.S.A., where they learned

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about the École des Beaux-Arts methodology. In his paper presented at the 30th Annual SAHANZ Conference, Cameron Moore illustrated the exposure of William Gummer to the Beaux-Arts during the time he spent in London. Moore noted that, having served articles under William Alfred Holman in Auckland from 1900 to 1907, Gummer travelled to London in 1908. Arriving to London, Gummer immediately enrolled in lectures and evening classes, while working for Sir Leonard Stokes. A year later, in 1909, Gummer got accepted at the Royal Academy of Arts where he became familiar with the general teachings of the French Ecole des Beaux-Arts, and in particular, those of Sir Reginald Blomfield and his predecessor, Richard Phene Spiers. In 1911, while still at the Royal Academy, Gummer was presented with the opportunity to spend seven and a half months in the office of Edwin Lutyens, who also had a strong connection with the French method.

Since Labrouste, who was the first to make a distinction between structural principle and decorative form, the latter was supposed to be rationally induced from the former – the materials, methods of construction, and from the specification of programme. As a result, by the early 20th century, non-modernist architects conceived of architecture dually, as a unity of two distinct components – art and technology. In the words of Nathaniel Curtis, whose Architectural Composition Gummer recommended as essential reading to the aspiring architects, the dual nature of architecture is determined by two objects... the satisfaction of the requirements of use; the second is the satisfaction of the requirements of beauty.

Dual understanding of architecture informed the period distinction between the engineering and architectural professions. Gummer echoed these attitudes, noting that the engineer and contractor can build as far as strength, durability, and weathertightness go just as well as we [the architects] can. He continues, if we have the creative instinct of design, then should the knowledge of the principles of architecture in plan, section and façade make our buildings not once removed from engineer or builder’s effort (whose work in his own field I am not minimising), but so many times removed in its effect on the human mind that no considerations of comparison will be suggested. On a different occasion, in the address delivered to architectural students, Gummer stressed that technical knowledge is essential, yet explained that it alone is not sufficient for becoming an architect.

If, then, architecture differed from engineering, requiring specific knowledge and skillset, what was its essence in the minds of the pre-Second World War non-modernist architects? According to Reginald Bloomfield, under whom Gummer studied, an architect’s immediate concern is with the beauty of a beautiful building and the means by which that beauty is attained. To Bloomfield and his like-minded contemporaries, beauty was the central tope of architecture, its ultimate end and the essential tool. The Beaux-Arts teaching instilled the belief that without beauty – equated with the notions of art and meaning – architecture is reduced to a mere piece of construction which caters for physical needs, not much different than an animal shelter.

But, to which end was beauty of architecture used? Van Pelt's Essentials of Composition – another title which Gummer deemed the elementary
read of architects – helps with finding the answer. According to Van Pelt, architects should attempt at creating a work of art, which ‘having been intentionally created, is capable of producing the sentiment or impression aimed at by the artist, and in all persons able to respond to such sentiments or impressions.’\textsuperscript{16} Thus, for the early 20th century non-modernists, architecture was capable of touching the minds of the people who interacted with it. Ever since the 19th century, architecture was considered an essential tool for the betterment of the society. Consequently, the selection of a suitable architectural style was not simply a matter of aesthetic preference, rather, as Mari Hvattum explains, ‘it was a vehicle for moral improvement as in Pugin, a symbol of national renewal as in Schinkel and Klenze, an expression of rationality and progress as in Hubsch, or the self-representation of a new social class as in the Vienna Ringstrasse.’\textsuperscript{17}

For Gummer, (the art of) architecture ‘a live thing, a thing we cannot do without. It caters to our noblest and highest instincts.’\textsuperscript{18} Appealing at the humanity of his profession, Gummer asserted that architects had a responsibility towards the community, to express the ‘intimate relationship existing between architectural and human progress... to turn dry bricks and mortar into things with a soul, the soul of the people.’\textsuperscript{19} Gummer maintained that ‘in a truly civilised State design should be as necessary to the mind as food is to the body, and art should not be regarded as one of the luxuries of life but as an instinct for beauty that every man and woman possess. The general need is for that instinct to be generously moulded, in other words, to educate it... The public should look to us for guidance and should get it. Only by this means can a culture of a country progress.’\textsuperscript{20} Buildings were, according to Gummer, the chief means by which architects could educate the public and they, therefore, had to feature ‘an element of the spiritual investing it with higher qualities than just those of mere creature comforts.’\textsuperscript{21}

However, as Bloomfield warned, at the beginning of the twentieth century, architecture has strayed from the path of art into the ‘easier paths of financial enterprise.’\textsuperscript{22} According to Bloomfield, its essence and justification as ‘the serious art of building’ were in danger of being overlooked during the progress of Machine Age. Similarly, Gummer criticized ‘Mr. Public,’ who forced a firm grasp of misunderstanding on architects, preventing them from achieving architectural excellence in New Zealand. Making a comparison with the situation in the United States, he quoted a certain businessman who, allegedly, said to Sir Ashton Webb in New York, ‘Do you know, I constantly go out of my way in order to see McKim’s Library which he built for [J.P. Morgan]. Looking at that building always does me good.’ Gummer concluded that ‘when folk in New Zealand go out of their way to get good from buildings then will our cities possess not only commercial value, but aesthetic and moral values and that intimate connection with human effort and aspirations that may be called architecture.’\textsuperscript{23} Thus, it could be argued that Gummer attempted humanity, wishing to design architecture which would inspire people and aspired not only to create buildings – and cities – which were economically feasible, but to imbue them with aesthetic and moral values.

According to period sources the NZI building compelled Aucklanders to stand in awe before it, reminiscent of the skyscrapers of New York. The

\begin{footnotesize}
\footnote{17. Hvattum, Gottfried Semper and the Problem of Historicism, 154.}
\footnote{19. Gummer, “The Threefold Application of Architectural Education,” 43.}
\footnote{20. Ibid, 46.}
\footnote{21. Ibid, 46.}
\footnote{22. Bloomfield, The Mistress Art, 3.}
\end{footnotesize}
building can be considered one of Gummer's earliest efforts to make an imprint on the culture by educating the people through means of architectural art, while, at the same time, responding to the need of an office building to be functional.\textsuperscript{24}

Designing NZI Building in Response to 'The Requirements of Use' Though, as discussed above, they favoured beauty as the essential trait which made the difference between building and architecture, the early 20th century non-modernists recognised functionality as the primary condition of 'good' architecture. To quote Curtis, 'the requirements of habitation and the satisfaction of material necessities are the first and earliest objects of architecture.'\textsuperscript{25} So, what were the functional imperatives which informed the NZI design? The client, New Zealand Insurance Company, needed to expand their Auckland branch office, to include a public area, and to install the New Zealand head office with a boardroom and executive offices. Additionally, there was to be as much rentable office and retail space as possible. Architecturally, the client required the new building to promote an image of solidity and wealth to help enhance their image.\textsuperscript{26} Bruce Petry notes that the desire to project strong architectural statements was an important period mechanism in establishing status among companies.\textsuperscript{27} Indeed, there was a good budget to achieve this for the new NZI premises, but of course, not an unlimited one.

The client's requirements also needed to be balanced with the requirements of their future tenants. The clients required the building to show their wealth and stability to the New Zealand public, while the client's tenants necessarily did not. Gummer was certainly aware of this dichotomy and used it to be strategic about how to manage the resources allocated to him to realise the brief, but not necessarily at the disadvantage of the tenanted spaces. The building is a study in what John Ruskin wrote about the purpose of architecture, 'The first thing required of a building – not, observe, the highest thing – is that it shall answer its purpose, completely, permanently, and at the smallest expense.'\textsuperscript{28}

The building was to be erected at an 'L' shaped site between Queen St to the east (20m site frontage), Mills Lane to the west (40m site frontage) and Exchange Lane to the north (20m site frontage). The other three

\begin{figure}[h]
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\includegraphics[width=\textwidth]{nzibuilding.jpg}
\caption{Floor Plans of the NZI Building by Hoggard, Prouse, and Gummer held by the Auckland Council Archives}
\end{figure}
boundaries are without access to open space – the most impactful being the 50m boundary to the south and the 34m boundary to the north. The Mills Lane ground level is eight metres higher than the ground line on Queen Street. As a result, the ground and first floors have only a single aspect to Queen Street. The site conditions impacted the design response in two ways – it had to resolve the tension between allowing natural ventilation and light into the building and the need to maximise the rentable floor area (1) and to allow ease of access to all parts of the building (2).

How did Gummer respond to these challenges? The lessons Gummer offered in his ‘The Study of Architecture,’ can be considered a map of his design process – one that the paragraphs below will follow:

When a building is being considered, the plan should instantly show the relative importance and use of the various apartments, access to these should be of the easiest, and a true architectonic feeling obtained in the whole by allowing the nature of the site and its position with regard to the compass, the character of the materials used in the building, and the habits of the people to use it, together with the personal temperament of the designer shown in his use of mass, line, proportion, light and shade, scale, etc., to express themselves fully. ... The above set of circumstances determines the style. 29

Internal Composition and the Sequence of Spaces

Inspired by the Beaux-Art tradition, the overall proportion and composition of the interior spaces is organised around the main axis, allowing for site and functional constraints. The floor plan is divided into two parts, the Mills Lane end at the back of the building that is almost entirely taken over by the client, and the Queen Street end with the grand entrance and smaller rentable office and retail units. The two parts are separated by the centre circulation space and two internal courtyards that allow light and ventilation into the middle of the building. After allowing for the main and cross axis, the spaces are then organised around the structural grid that divides the space equally in the rear area by approximately 6.5m x 5.5m, and in the front 3.8m x 5.9m. The average ceiling height is about 3.3m with the ground floor and second floor levels to be around 4m. In the area below the mezzanine space in the branch and head offices the head height jumps to approximately 7.3m. The floors are layered on top of each other in levels 5-8) for the efficient use of the circulation space.

Gummer controlled the spatial experience of the building to unfold in three dimensions – height, breath, and depth, something he implored architecture students to in ‘The Study of Architecture.’ 30 This approach helped form overall impression on the visitor that the building is much bigger and more luxurious than it is by carefully controlling the visitor’s attention on the sequences of spaces along the main axis as they pertain to both the insurance company, and the rentable offices. For example, if the visitor had an appointment in the board room in the head office he would ascend three flights of the marble and wrought iron stair off the circular cross axis, and land gracefully on the third floor to similar

30. Ibid, 298.
circular vestibule, turn left on the main axis, through heavy rimu and oak double-doors with lead-glass highlights and into the “handsomely appointed” oak panelled anti-room and dome-ceiling boardroom. Gummer carefully developed the sequence of spaces to translate the visitor’s spatial experience into a vision of progress and prosperity – from Queen Street façade and portico, through the internal vestibile, the cross axis with the bronze door elevators and staircase, to the oak and rimu panelled board room and the two double height public spaces in the branch and head offices.  

**Lighting, Ventilation, and Circulation**

Gummer resolved allowing adequate natural light and ventilation into the building in several ways. By placing the stair as centrally as possible, at least diffused light and air can enter the centre of the building at all levels. The second response was Gummer’s use of a steel frame structure to allow the walls to be much thinner, and the openings much wider than the traditional ferro-cement technique common at the time. A steel frame lets openable windows on the Mills Lane façade to be a far higher proportion of wall space than with ferro-cement construction. Additionally, on this façade pavement lights were designed to allow light eight meters down into the branch office on the ground and first mezzanine floor, although there is no indication that this made it past the design phase. Lastly, another technique Gummer employed on this façade was to scallop out the external wall approximately three metres into the building from the first to fourth floors to allow light both deeper into the building and to top-light the ground floor.

The circulation is efficient – comprising just 13 – 15% of the overall floor area, but is not cramped or pinched. Gummer gives ample width to the entrance corridor (4m wide). The vertical circulation is provided by a two-metre-wide circular interior stair and two elevator shafts in the centre of the building, and a secondary entrance area with stairs and a single elevator that services both Exchange Lane on the ground floor and Mills Lane on the first floor. This secondary entrance is more utilitarian and humbler than the main stair being for tenants only. The grand circular stair is marble with a wrought iron balustrade is wide with a shallow slope. It terminates on the third level where it stops servicing the New Zealand Insurance Company and is replaced by a narrower but elegantly humble stair for the building’s tenants. Gummer places the primary stair off the main axis to keep the axis clear, to allow freer more direct access to the rest of the building. The primary axis is terminated inside both the branch and head offices with grand solid oak bifurcated stairs that Building Progress described as “massive, solid and substantial. They are not overburdened with enrichment and decoration; the beautiful grain of oak is shown off in the straight lines, plain faces and bold curves of the stair.”

What was written in Building Progress can well be ascribed to the rest of the internal treatment of the building. In the public and client spaces, Gummer mainly uses the grain, shine, and colour of the material pallet - marble and timber in the lower treatment of the walls to contrast against the white plaster of the upper walls. What ornamentation there is on the walls is restricted to the basic detailing of the base and the plaster.
cornice. The ceiling is white plaster coffered to simply give an impression of the structure of the ceiling in simple geometric shapes. For the most part the floor is chequered tiles in the public areas with a mosaic in the lower circulation space. In the tenant spaces, he uses simple floor covering and plaster wall finishes with minimal decoration.

Designing NZI Building in Response to ‘The Requirements of Beauty’: The Queen Street Façade

Echoing the ideas of the Beaux-Arts tradition discussed above, Curtis maintained that a building’s façade is resultant on its plan and structural system, also allowing ‘ample latitude for the expression of character.’ In terms of the former, the NZI façade needed to accommodate retail and the building’s entry way on the ground floor with seven storeys of offices above. The retail must have its own separate entries and the offices as much window area as possible. In terms of the latter, the composition of the façade is the starting point. There are six general design principles that Gummer follows that will be briefly discussed here.
The first is to achieve balance through symmetry. Not only is the composition of the NZI building's facade symmetrical, but each bay has a vertical line of symmetry, and the middle bay and the middle of the side bays also have a horizontal line of symmetry. The second is the tripartite groupings of elements. The three-motive composition is seen in the base-middle-crown motif, the three vertical bays, the three spaces formed in the portico, and the number of windows in the side bays. The third is overlapping compositional elements. Gummer blurred the distinction between the portico, side bays and middle bays to ensure a more coherent façade, as advised by Curtis.

The fourth principle is the establishment of a dominant focal point in the composition. The entry portico is the façade's focal point. Standing 12m across and 8.2m high, Gummer used canonised Corinthian Order proportions (900mm diameter wide, 9-diameter tall columns).
to establish the height and width of the portico, the width being 4 four column spaces between the elements¹⁹ - as far apart as possible and still conform to classical façade design. Gummer was surely influenced by Curtis in deciding on a Corinthian portico where Curtis states, “An entry portico may have little excuse for its existence except to create an impression — to give a monumental character and dignity to a façade. This use when justified by the program takes precedence over purely material necessities.”⁴⁰ Gummer’s portico sets the proportions and composition for the rest of the façade with the middle bay radiating from it, and the side bays framing it. The middle bay comprises levels 3 – 7, in the centre of the building, with rented offices behind. To allow as much light and air into these offices this part of the facade consists of deceptively large steel-framed openable windows divided vertically into three even parts. Horizontally, the windows are separated at the floor plates with bronze spandrel panels. The proportions of the middle bay are derived from the Corinthian order below but are not subject to the exacting nature of employing the full order. The lightness and openness of the portico and middle bays are visually supported by the heaviness and solidity of the bays on either side. At their base, two marble rusticated piers with alternating rectangle and disk motives frame the entrance into the retail spaces and support a stone lintel. Above, the bays protrude out forming a stronger shadow line on the middle bay. Finally, a Corinthian cornice without the entablature forms the bottom of the building’s one-storey crown. Little entablatures finish off the side bays of the crown and ‘hold’ the roof.

The fifth principle is the expression of the apparent vertical and lateral loads inherent in the building on the façade.⁴¹ In reality the steel frame is supporting the roof and floors, but to rely on a steel structure to inform a building’s character “tend(s) to encourage excessive and vicious proportions,”⁴² or, as Van Pelt more directly put, it is ‘bad architecture.’⁴³ As discussed, the overall composition expresses these loads with a weightier portico, base and side bays predominately made up of Kairuru marble from the Nelson area,⁴⁴ a material with literal and instinctive impressive compressive qualities, while the middle bay consists of steel framed windows and bronze spandrels, materials with a perception of having strong tensile qualities.

The ornamentation reinforces this impression of structure. The stone is stacked in layers on the side bays, and the glass and bronze span the space between the stone facing in the middle bay. Aside from the stacking, there is little stone ornamentation, Gummer using both shadow lines and the coarse grain of the highly polished marble that gives a desirable, vibrant sheen.⁴⁵ Where more ornate ornamentation is required, bronze is used, as suggested by Van Pelt.⁴⁶ Gummer himself also implored students to ‘use materials according to their natural possibilities and limitations.’⁴⁷ The ornamentation also highlights the proportions of the openings that in turn reflect the general proportions of the façade. Or as Gummer puts it, ‘notice how frequently in good buildings the details such as doors and windows reflect the line of the general building.’⁴⁸

These design principles help form building’s character, imbuing the architecture with a meaning developed by Gummer’s attention to the client’s requirement of promoting wealth and solidity. He only applies
historical architectural canon in the formulation of the Corinthian portico, the rest of the façade is a rational response to the brief whilst not contradicting a tripartite composition or expressing apparent structural loads. Keeping within the client’s budget, the NZI – Gummer’s early attempt to imbue with humanity the Auckland architecture– was considered a major success, liked by the clients and the public alike.

**Conclusion**

The discussion of the NZI building has shown that, accepting the premise of architecture’s dual nature, like many of his contemporaries educated in the Beaux-Arts tradition, Gummer’s design approach comprised dedication to functional planning, the use of most recent technologies, and careful selection of materials, finished with historically legitimised forms that communicated a specific meaning. Whether he managed to mould and educate the ‘instinct for beauty’ of the early 20th century New Zealanders is impossible to determine. However, it is possible to conclude that he produced architecture which qualifies as a work of art, according to the standards set by Van Pelt – without a doubt, the NZI is capable of ‘making impressions’ on most humans who interact with it. A 1922 article notes that it was a common sight to see pedestrians pause outside the new building and gaze skywards, ‘admiring a façade which, with its fine columns and suggestion of extra height, is still one of the best in Queen Street.’ Years after it was constructed, the public recognised it as a structure that ‘set a new standard,’ and more than half a century later, Terence Hodgson described it as one of the landmark steel-frame buildings, featuring a tripartite composition, which provided a compositional basis for many subsequent tall New Zealand buildings. Finally, one can observe that the NZI was indeed a lasting success, which, to quote Stacpoole and Beaven, ‘confirmed the hard-won freedom architects had now gained from the 19th-century stylistic dilemma – the historical styles were still thought to provide the best solutions to particular problems, but architects were no longer bound by them.’


