"all the appearances of being innovative": NZ architecture in the 1970s: a one day symposium

Date: Friday 2nd December 2016
Venue: School of Architecture/Te Wāhanga Waihanga
[please note due to building work, the symposium may be held on the Kelburn campus at VUW, more details closer to the date].
Victoria University/Te Whare Wānanga o te Ūpoko o te Ika a Māui, Wellington
Convener: Christine McCarthy (christine.mccarthy@vuw.ac.nz)

Mike Austin's seemingly faint praise, in a 1974 review of a medium-density housing development, that the architecture had "all the appearances of being innovative," is echoed in Douglas lloyd Jenkins' observation that: "Although the 1970s projected an aura of pioneering individualism, the image disguised a high degree of conformity." The decade's anxious commencement, with the imminent threat of the European Economic Community (EEC) undermining our economic relationship with Mother Britain, was perhaps symptomatic of a risqué appearance being only skin deep. Our historic access to Britain's market to sell butter and cheese was eventually secured in the Luxembourg agreement, which temporarily retained New Zealand trade, but with reducing quotas, as a mechanism to gradually wean New Zealand's financial dependency on exports to Britain. As Smith observes: "Many older better-off Pakeha New Zealanders considered as betrayal Britain's entry in January 1973 to the EEC." The same year we joined the Organisation for Economic Co-operation and Development (OECD). As if in response, in architecture, colonial references were both recouped and abused, though lloyd Jenkins also credits the wider Victorian revival, dating from the mid-1960s, to its co-incidence with "a period in which most New Zealand towns and cities began to celebrate their centenaries."

Peter Beaven's Chateau Commodore Hotel (Christchurch, 1972-73), as an example, alluded to Stokesay Castle (Shropshire, 1285) and a thirteenth-century barn (Cherwill, Wiltshire), resulting in a "playful ... monument to pleasure," while both Athfield and Walker referenced New Zealand's more modest colonial past, with Athfield using finials, steeply pitched roofs, dormer windows and double-hung sashes "rescued from a demolition site." Demolition bricks, telephone poles and concrete pipes were also re-used or their use re-interpreted. Roger Walker made cottage-like forms with double gables sporting finials, and colonial verandahs, while "psychedelic William Mason wallpapers based on Victorian themes decorated the newly revamped dining and living spaces" of New Zealand houses. Lloyd Jenkins describes the appeal of old houses, and the old inner city suburbs they were located in, as being the "sense of community" that they offered: "It was a new urban culture based around film (foreign), music (various), art (contemporary), food (Italian) and politics (radical), and the shared bond of mostly young and university-educated New Zealanders who had some experience of life in more fully developed cities like New York or London."

The popularity of the colonial house also created the idea of shopping centres as "villages." Mitchell and Chaplin refer to Les Harvey's creation of Parnell in Auckland in a "mock-Colonial manner ... it was a raging commercial success. ... new shopping blocks were dolled up in Colonial garb, and even out on the mass housing estates whole streets were veneered in the Colonial style like sets in nineteenth-century television dramas." Lloyd Jenkins, likewise observes the rebranding of small main street shops as "villages" to fend off mall developments and to attract "a more exclusive clientele." In Wellington, Athfield's psychodelic upgrading of Plimmer's Emporium brought the neo-colonial right into town.

Community and heritage groups, such as the Thorndon Trust, developed from this context, which - as lloyd Jenkins notes - was one when "city councillors ... declared that the clusters of nineteenth-century houses in the centres of their cities were a scruffy embarrassment that had to go. In most large cities motorways were used as an excuse." In contrast, Martin Hill noted, of Thorndon's nineteenth-century houses, that "though few could be said to be architectural gems, all display the simple basic characteristics of the formative period in New Zealand history before stylism became popular." Similarly, Foster, Vasbenter and Mackay "discovered" Bluff Hill in Napier, and found it to be "unique ... [in] the manner in which the development is tailored to the site ... houses, roads, pedestrian paths and landscape blend together to form, what seemed to us, a residential environment of quiet beauty, intimacy, variety and convenience." Margaret Alington's *Unquiet Earth* (1978), emerging from the traumatic upearthing of the Bolton Street Cemetery, is of this period. The Wellington Urban

Motorway, which literally split the community, was an architecturally difficult proposition, with Helmut Einhorn, who Leach describes as "an active and powerful figure in the anti-motorway campaign," being "assigned ... the task of coordinating the architectural and aesthetic considerations of the Wellington Urban Motorway." His related 1975 article on concrete surface treatment echoes Charles Fearnley's photography and Joanna Margaret Paul's earlier filmic explorations of urban texture. Geoffrey Thornton was likewise an advocate for industrial heritage, and old farm buildings, while Don Donnithorne wrote about the Canterbury Provincial Council Buildings, the Trinity Pacific Church and the Old University Buildings as successful examples of the "preservation and re-use" of "interesting old buildings." He contrasted these with another three Christchurch buildings ("viz. The Theatre Royal, the Normal School, and the old Post Office") which, at the time, were all facing demolition.

The popular fascination with colonial reviving enabled Roger Walker, following his speculative Wood House (1973), to franchise the neo-colonial in 1974 when he "launched his "Vintage Homes."" Lloyd Jenkins identifies the popularity of Walker houses as due to this being "the first time in years [that the public] had a clear series of elements that immediately meant "architect-designed house." He astutely summarises the era: "Colonial had not yet become an intellectually bankrupt replica style that produced fake villas and cottages. The architects of the new colonial style designed modern houses in the materials and spirit of New Zealand's colonial pioneers, which they doused in orange and yellow gloss enamel."

The original of the Athfield/Walker version of the neo-colonial was not simply homegrown, with Shaw tracing a lineage - via Warren and Mahoney - to Scandinavia, while lloyd Jenkins sees this work as "the result of a cross-pollination of international influences such as Japanese Metabolism and the work of Beaven and Warren." Craig Craig Moller added "a knowledge of work by Auckland architects such as James Hackshaw and Peter Middleton" to the mix. Japanese connections would recur through the decade, with the visit of Kenzo Tange in 1973, and a "technical study tour," that same year, organised by the N.Z. Portland Cement Association.

Britain was only one of New Zealand's international relationships, with Norman Kirk forging "relations with China and the USSR." New Zealand architecture likewise made other international connections in the 1970s. Overseas buildings provided models for specific buildings, including the National Library (1974-86), with its reverberations of McKinnell & Knowles' Boston City Hall (1964-69), and the Aotea Centre's "unimaginative homage to Aalto's Finlandia Hall (1971)." West Plaza's debt to Gio Ponti's 1955 Pirelli Building, Milan, though, as Mitchell and Chaplin observe, was no simple copy:

> unlike Pirelli's, it is striped vertically with fins on the long "curved" walls. As one's viewpoint changes moving along the base of the building, the fins open and close together, making it a giant piece of Op art, and thrilling to look at from a moving car. In the most flattering sense, West Plaza might have been built anywhere in the world.

International connections also grew as a result of "the cost of air travel ... [falling] to the level of sea travel, with the effect that adventurers no longer had to spend a minimum of three months away from home." Following the economic distancing from Britain, our relationship to Australia became particularly important. With the 1965 New Zealand Australia Free Trade Agreement (NAFTA), and the context of Britain's anticipated joining of the EEC, trade barriers between Australia and New Zealand were increasingly reduced, with 80% of tariffs and trade restrictions removed by the late 1970s. In 1973 trans-Tasman travel arrangements enabled freer travel between Australia and New Zealand, and in 1978 the Australian PM (Malcolm Fraser) and New Zealand Deputy PM (Brian Talboys) issued the Nareen Statement, affirming "an expanded and more equitable international trade system." These agreements would later culminate into Closer Economic Relations (CER) considered to be "the major positive legacy" of Muldoon's government. Yet the freer travel between Australia and New Zealand also had its down sides: "[r]ising unemployment mingled with a sense of oppression, divisiveness, gloom and doom stirred thousands of young people to respond by departing for Australia in search of opportunities and a brighter future."

To maximise the increase in tourism by air, Whakatane commissioned a building which would win a Tourism Design Award (1975). Shaw describes Walker's Whakatane Airport Terminal Building (1971) as: "A shock for both tourists and travelling New Zealanders, the building's practical limitations are outweighed by its fancifulness. The exposed timber roof structure, tunnels, perilous circular stair and cottage-like rooms firmly contradict passengers' expectation of what an airport should be." International architectural visitors during the decade included Basil Ward (1973), Ernst Plischke (1975), and architectural historian William Storrer (1974), but perhaps the most notorious international

connection was that made between long time Architectural Centre member Bill Sutch and Dimitri Razgovorov, resulting in Sutch's 1974 arrest for breaching the Official Secrets Act. Sutch was a prominent citizen, known for his work as an economist, writer, public servant and diplomat. He had been a key player in the Architectural Centre's Centre Gallery (1953-1968). He was acquitted of the spy charges, shortly prior to his premature death in 1975. Three years later (1978) Soviet Russia made maps of Wellington and Christchurch, including marking fire and police stations "along with electricity substations, court buildings, telephone exchanes, railway yards and customs buildings." According to Charlie Gates, "blocks of Russian text ... go into incredible detail about the landscape, infrastructure and features of the two cities."

The decade had begun with evidence of economic improvement (over $NZ 1 billion overseas reserves and 5% inflation in 1972) and the slim verticality of Price and Associates 20 storey West Plaza tower in Auckland (1970-74), where "shape was partly dictated by the narrowness of the site," and the mirror-glass confidence of Davidson Architectural Group's Northern Society Building (1973) - "designed with a satisfying degree of attention to line, balance and site." Hodgson observes that the Northern Society Building's glass facade is "fitted to give the appearance of a continuous membrane which makes no reference to floor levels or structural elements. The use of tapering columns with their bases joined by graceful meniscal curves adds distinction to an already sparkling design, well befitting its advantageous site." Exterior appearance and interior reality was beginning to delaminate.

An economic downturn in 1974, following the first oil shock, caused the then Labour government to increase borrowing "to cushion [the] balance of payments deficit." Within a year the recession had deepened with more than 15% inflation, more than 5,000 unemployed and 4,000 other people on government work schemes. Increasing unemployment reduced the earlier need for labour, which had largely been met by Pacific immigrants, the numbers of whom had grown in New Zealand, "assisted from the 1970s by the building of airstrips in the Cook Islands, Niue and Samoa. From the 1970s, however, their labour was in less demand." The lack of jobs resulted in "crackdowns on "over-stayers"," which, under Muldoon, became the notorious dawn raids. The awfulness of the situation was highlighted by an Auckland University law lecturer (David Williams) who "confessed to stealing one of Auckland University's ballpoint pens" prompting a 1978 *Auckland Star* headline "Police won't arrest man for pen theft," in stark contrast to the arrest of a Niuean (Iki Toloa) for ""stealing" a 20 cent comb from his employers, Consolidated Plastic."

Pacific influence in architecture was not widespread, but an important Samoan building was built for Auckland's Karangahape Road late in the decade. Maota Samoa (1977), designed by JASMaD, incorporated "a fale, shopping arcade and offices" with the "pole-and-beam roof structure supporting an elongated domed roof." Its distinctive form continues to ensure an explicitly Pacific presence in K Road's built environment.

The New Zealand dollar was devalued by 15%. In 1976 inflation reached 18%, but it had reduced - but only to 10% - by 1978. This economic context no doubt contributed to the delays in completion of Stephenson and Turner's Bank of New Zealand Head Office, designed in the late 1960s, commenced in 1973, and proclaimed as: "the leader of the large-scale office blocks unashamedly suggesting commerce and possessing an almost ambassadorial stature." The building was finally finished in 1984, because of many prolonged industrial disputes, despite an initial completion date of 1977. It was complete with Brazilian granite from Sao Paulo and described by Miles Warren as ""wicked black"." Mitchell and Chaplin are equally evocative: "the BNZ building - the biggest in New Zealand - overpowers all ... The BNZ is like a cigarette packet among matchboxes. The walls are spendidly sheer, ... but the blackness of them sucks up the light so that the building feels sinister." Its controversial form was supplemented with a large subterranean shopping area, which "required a considerable diversion of subterranean drains, services and the rebuilding of the streets."

Above ground, Warren and Mahoney's The Oaks, recently described by mayoral hopeful Andy Foster as "not the greatest of buildings," was given, by Mitchell and Chaplin, the status of being "spatially the most pleasing arcade in the country, extraordinarily gracious inside. ... the tapering glass-roofed arcade evokes a street from Romanesque Italy in its spatial structure ... No other public space in the recent commercial architecture of New Zealand capitalizes quite so thoroughly on the opportunities at ground level that a city block offers."

Other buildings forming New Zealand's 1970s cityscapes included Warren and Mahoney's Canterbury Frozen Meat Company Limited (C.F.M.), and G.T. Weston buildings, Christchurch, ... and Jim Beard's podium and tower PSIS building (Wellington, 1977). The PSIS building was "[s]ited commandingly on a busy corner, its intricacy of componentry, use of unpainted concrete, extensive planting boxes to the parking floors and white fibreglass machinery pods on each floor suggest something much more than mere construction within a tight budget."

Early in the decade, New Zealand reached what remains an historic high in house building (with an annual average net increase of dwellings of 24,684 (a 12% increase) in the five years between 1970 and 1975). It is perhaps surprising then to note the pessimism in the architectural press which, in 1972, observed of BRANZ that "[t]o start doing research into housing in 1971 after the post-war building boom has tapered off is a bit like carrying out a post mortem to produce evidence why the patient died instead of diagnosing the obvious maladies of the building industry two decades ago."

Ferguson records that the government "pumped" money into house construction between 1972 and 1974 in response to a sudden population increase (1971-76). In 1972 special loans with concessionary interest rates (Home Improvement Loans) were also introduced for "the conservation and improvement of both tenanted and owner-occupied houses." These were "intended to conserve the housing stock to reduce the need for redevelopment." The *NZIAJ* published commentary on such programmes, including government decisions to take resources from its school building programme in order to increase the supply of housing. Perhaps it was this activity that eventuated in the commission for Structon Group's 1979 Housing Corporation building in Manukau. Hodgson describes the stepped ziggurat as:

> structurally coherent, visually engaging and not outlandishly expensive. The ziggurat form has allowed the wall glazing to be subserviant to the building's strong frame, almost like small jewels in a muscular setting. The main bracing component of the office is the central service core which rises above the top floor like a ship's funnel. And from this radiate a series of angles concrete columns, a convincing exoskeleton framework producing an appearance of strength and reliability.

Numerous architectural innovations in housing occurred. The most well-known are the culturally progressive designs of Roger Walker and Ian Athfield. Walker's Britten House (Seatoun 1973), distinguished by its colourful "cascade" of rooms over eight levels used "[g]lazed roofs like awnings, coloured steel roofs, cross bracing and a strong sense of geometry contribute to a feeling of invention and discovery," which is considered to be "[a] virtuoso set-piece in which the architect's dexterity is nicely matched by the hopes and confidence of his clients." While the "hallucinogenic" Britten House sprawled over the steep site, Athfield's own house sprawled over time in "a collection of rooms which change function as the family or the architect's ofice grows or shrinks." For lloyd Jenkins, "[t]his perpetually unfinished house is a personal artwork that, with each new component, illustrates the way Athfield has shifted over time from "alternative architect" to a fully fledged member of the corporate community."

This rambling Wellington architecture contrasted the singular Auckland clarity of Ron Sang's rectangular and cantilevered forms apparent in the Brake House (Tititrangi, 1976) and the Sargent House (Remuera, 1973), whose "pre-cast concrete panels, flying beams and previously cantilevered balconies were novel at a time when timber was becoming increasingly popular." Other notable houses of the decade included: James Hackshaw's Hackshaw House (Brilliant Street, St Heliers, Auckland, 1970), the Jo and Gordon Smith House (Waiheke, 1973-), John Scott's McKenzie House (Tukituki Valley, 1974), the Whitaker House, Alexandra (Francis Whitaker, 1979), and Marshall Cook's Osborne House (1979), which wove the exterior into the interior via an intermediary garden room. This was also the decade of the pole house, possibly the first architectural typology to be the star of a New Zealand film (*New Zealand Pole Houses* (1976)). Domestic lifestyle was also a star attraction, with 1970s television showcasing the culinary skills of Alison Holst (*Nice One* (1976-79); *The Sharon Crosbie Show* (1977-79)), the flamboyent, and later international, celebrities Hudson and Halls (*Hudson and Halls* (1976-1986), and Des Britten (*Thyme for Cooking* and *Bon Appetit*), the Roger Walker client who lloyd Jenkins describes as "perhaps the first New Zealand personality whose profile was built around notions of casual domestic sophistication."

Single detached houses though were only one aspect of 1970s domestic building, and townhouses, flats, and mews offered new ways of living distinct from the quarter acre section. These housing schemes included: Peter Beaven's Tonbridge Mews (Christchurch), Beaven's Habitat complex (Thorndon, Wellington, 1970-1976), and Park Mews (Wellington, 1974) by Roger Walker. Habitat is

"an architecture of controlled picturesqueness and skilfully concealed artifice" and a "finely modelled piece of urban renewal set at the end of a quiet cul-de-sac against the lush greenery of the city's town belt," which Mitchell and Chaplin identify as "probably the best development of its kind in the country ... The house units were interwoven with great complexity, yet they retained the sense of being discrete parts of a specific village. ... [mimicking] the collisions and adpations that occur over generations of vernacular housing in Europe." They identify a similar spatial complexity in Walker's Park Mews, which replaced "three houses of no victorian worth" with thirty townhouses. The *NZIAJ* described the complex as having a silhouette of "deliberate visual "fiddle"," while Bill Alington's review wonderously observed that "all the sacred cows of structural clarity and expression have been discarded in the making of a glorious pseudo-adobe pile."

In contrast to the aesthetic complexity and picturesque qualities of Walker and Beaven's medium density projects, Vladimir Cacala (b. 1926) and Walter Leu designed more typically modernist blocks of flats "most of them constructed out of Winstone Vibradec concrete blocks, which lent themselves to rapid construction at low cost." An example is the 60-unit development for the Lichtenstein family (now the Barrycourt Hotel) (Auckland, 1970). Shaw states that "Cacala, employing a musical analogy, advocated a certain amount of repetition of motifs in order to produce a unified effect in matters of form, texture and colour." Warren and Mahoney's Dorset Towers also used repetition astutely, repeating a floor plan of two flats; balconies and windowed-corners creating satisfying rhythms across the facades. Adams Dodd and Paterson's State Rental Apartments (Mt Albert, c1974) likewise exploited a repeating module to a very different effect - largely creditable to the 45˚ angle and "block walls masquerading as poured concrete sprayed with knobbly stuff." This was the pensioner housing project given the faint praise of innovation's appearance by Mike Austin in 1974.

The influence of housing extended beyond the domestic realm with projects such as Walker's Wellington Club (Wellington, 1970), which Mitchell and Chaplin described as "a Gothic concrete cottage ... at once genteel and frivolous, bristling with "features" like a pop temple." JASMaD's University of Auckland's Recreation Centre was "presented like a huge glazed house," and Ted McCoy's Hocken Building (Dunedin, 1972-1979), with its "[p]itched, rather than flat, roofs," had "an almost domestic-scaled roofline," or as Mitchell and Chaplin put it:

> the Hocken building appears as a row of outsize Victorian terrace houses. ... Eleven stories up, each shaft is topped with a sloping Victorian roof covered in asbestos-cement slates that look like the real slates on the little old buildings below. Dunedin, the home of the terrace house in New Zealand, is the only city where the Hocken building could be understood.

The Hocken building, and JASMaD's Rec Centre "with its carefully wrought timber rails and trim, owes a good deal to the post-war pioneers of domestic architecture in the Auckland style," were two of a number of significant building works for tertiary institutions in the 1970s. The JASMaD work, in particular, referenced domestic architecture to moderate the dominant institutional Brutalism. Ivan Mercep noted at the time that "We try to keep building forms fairly low key, as not to dominate the surroundings. The Auckland landscape is soft, so we use pitched roofs, soft edges. We're influenced by old houses. ... Perhaps high-rise isn't so devastating in a place like Wellington - it's pretty hard to dominate those hills."

With respect to other sectors within education, Smith writes that the "[e]ducation of the ... baby boomers, stretched public resources into the 1970s. Primary schools put up (and put up with) prefabricated classrooms to cope with swollen school rolls," but within architectural publications school buildings appear few and far between. Gerald Melling's Worser Bay School is notable, as is Bill Alington's earlier Wellington High School (1973). McAllum & Black designed the rebuilding of Mornington Primary School as 14 hexagon structures (Dunedin, 1973), while Ted McCoy designed Kaikori Valley Intermediate School (Dunedin, 1973) and new buildings at Otago Boys' High School. At the same time John Dickson analysed the spatial conceptions of primary school children.

This was more profoundly the time, as Paul Walker has noted, of "the confluence of the ... "boom period of campus building in New Zealand" and "the local peak of New Brutalist influence."" It produced Warren and Mahoney's Student Union Buildings (1965-73), McCoy and Wixon's Archway Theatre Building (c1972), Hocken Building (1972-76), and School of Surveying, University of Otago (Dunedin, 1979), Toomath's Karori Teachers College, and Chris Brooke-White's CIT Campus, Heretaunga (1970-73). Warren & Mahoney's Student Union Buildings was "insistent. The endless clarification of elements becomes a kind of featurism, and the repeated module a tyranny." It contrasted McCoy and Wixon's Hocken Building, which boldly used the diagonally-ribbed pre-cast

concrete panels that McCoy first experimented with in the lyrical Archway Theatres. For Hodgson, writing in 1990, the Hocken building "remains one of the country's more finely executed projects in a monumental concrete style. In no way squeamish, it offers its viewers an ensemble of ribbed concrete panels and smalled glazed areas arranged according to the dictates of the interior planning." Brooke-White's CIT Campus was equally not for the sqeamish, its three F Block lecture theatres lifted heavily and dramatically above a graphically vulnerable entrance way.

Structon Group's DSIR Laboratory at Gracefield (Wellington, 1975) was a research institution of a different kind. While Hodgson describes it as "dramatic," "intriguing," and "imaginative," Mitchell and Chaplin refer to "laboratories and architectural jokes. It looks like some scientific device, as if it were an enlargement of one of the laboratory machines that might be found inside it." Perhaps though, the most significant event in the tertiary and research sectors for the architectural community was the establishment of a second university-based school of architecture at Victoria University in Wellington (1975). The inaugural head, Gerd Block, was clear about the new school he was to head up:

> The present feeling is very much the environmental and sociological sphere and I think there is a place for it ... I want to complement the Auckland School rather than trying to compete ... my professional beckground is very much management, technology and science oriented, which I think is a considerable area of difficiency in architectural practice, and I think that in this way we will serve the country best. ... One of the ways of improving the image of the profession ... is probably by adding to the architectural courses the sort of finance awareness which is very much lacking among professionals.

His address "On Architectural Education" to the NZIA Wellington Branch in October 1974, concluded that:

> Our thinking and teaching in isolated categories of subjects must give way to a fully co-ordinated and balanced teaching program. ... a shift of emphasis in the aims of the professional courses is to my mind the logical and long overdue development which must take place in this decade; a decade which has given us new tools, such as computer-assisted management and operational research techniques, better communications and information handling methods, a vast range of new or improved building materials and construction methods, and the many promising attempts of interdisciplinary work which will enrich our knowledge and - we hope - improve our built environment.

In 1973, according to Smith, New Zealand saw "the end of Dominionism." The previous year (1972) the Dominion Museum had been renamed the National Museum. The following year (1974) the definition of Māori "broadened to include all persons of Maori descent who wished to be identified as Maori," and Waitangi Day, which had been a day of commemoration since 1960, became a public holiday. This occurred under the Kirk government, and Waitangi Day was briefly renamed "New Zealand Day" - until 1976, when Muldoon changed the name back. The first name change was intended to reflect "a peaceful agreement between two people," and an anticipated multiculturalism, which Muldoon "disliked," prefering "the virtues of sameness" and assimilation over difference. Earlier in the decade, from 1971 - the UN year for "the elimination of racial discrimination" - Ngā Tamatoa had protested on Waitangi Day, "declaring it a day of mourning," and drawing attention to "the loss of Maori language and to the treaty as a fraud." Later in the decade (1977) "God Defend New Zealand" would become our national anthem (with equal status to "God Save the Queen"), following the controversy caused when "God Defend New Zealand" was wrongly played during a medal ceremony at the 1972 Olympics, and a 1976 petition to Parliament to make the song our anthem. The same year (1977) the *Citizenship Act* removed "British subject" from New Zealand passports, granted citizenship on the basis of "length of residence in New Zealand, character, and knowledge of the English language," and established the "Seal of New Zealand."

Perhaps the natural consequence of this burgeoning nationalism was a centralised electronic database, which was proposed in the Wanganui Computer Centre Act 1976. At the time "[t]he Minister of Police, Alan McCready, described it as "probably the most significant crime-fighting weapon ever brought to bear against lawlessness in this country."" McGuinness and White state that it raised "questions about the state's ability to gather information on its citizens, with slogans such as "Big Brother is Watching" being quoted in the media." The building would later be damaged with the suicide bomb attack by 22 year old Neil Roberts. There appears to be no record in the architectural press of the designer of the building.

This conflicting teasing out of citizenship and identity seems to have been apparent to American architectural historian William Storrer who visited New Zealand in 1974, and argued that the failure of a New Zealand architecture was attributable to both our colonial past and an "adherence to a faceless International style as a means of rejecting that colonial past." He also referred to a "Disneyland

Dumbo" style, and found our housing to be "uniformly depressing in its undistinguished character," and, according to Shaw, proposed a New Zealand domestic architecture "which was original and organically related to the surrounding landforms." It seems that Storrer might have missed Athfield in Khandallah and the Brittens in Seatoun, though his dislike for the neo-colonial was explicit: "Architects who continue down the colonial-international path will be building not homes and offices and factories as monuments to their foresight and creativity, but tombstones to their own foolishness."

The year that Storrer visited was also the year that Christchurch hosted the Commonwealth Games and saw the building of Beaven Hunt Associates' Queen Elizabeth II Park Stadium (Christchurch, 1974) designed with the engineers Lovell-Smith and Sullivan and Associates. Twin grandstands create a spine between the swimming and the track and field events, this combination grew, according to Beaven "in a democratic manner through the influence of many people. It is doubtful if an established careful brief or normal client relationship could have produced the realistic value-for-money result of the back-to-back design." Mitchell and Chaplin describe the phenomenon of the interior as:

> splendid ... a huge social and physical mechanism ... Its effects batter the senses, the surfaces of water forever glaring with quicksilver reflections, the whole hall filled with the continuously bounced sounds of screaming spectators or swimming children and the thump of diving boards recoiling. Here, sensations not in themselves pleasant contribute to the power of the building. The place would be smaller without them.

Other civic buildings of the period included: the effervescent Putaruru Post Office, Bill Alington's Upper Hutt City Council Administration Building and Council Chamber (1969-71), Warren and Mahoney's Christchurch and Wellington Town Halls (1966-72; 1975-83), both benefiting from Harold Marshall's work on acoustics, later to be used internationally, including in Orange County. Marshall took up a professorship at the University of Auckland, following an Associate Professorship at the University of Western Australia, in February 1973. The Christchurch Town Hall was considered superior to Wellington's, and Mitchell and Chaplin attribute this to Warren and Mahoney's precise knowledge of "the social and physical setting." The Aotea Centre (Auckland, 1974-89), by Ewan Wainscott and Auckland City Council architects, was uniformly unappreciated, with Shaw writing that it was: "[d]ated, derivative, ill-planned and costly, this long-awaited building was the decade's major disppointment." Both Cathedral Square and Auckland Civic Square were redeveloped; the Auckland Civic Square Competition being held in 1971. Other community-oriented buildings built were Jim Beard's staunch Hannah Playhouse (1972-73), in which Helmut Einhorn's review concluded: "Joking aside - the miracle has been performed," and the seemingly more obedient Dowse Art Gallery (Lower Hutt, 1971). Churches, another community building type, "drew on and added to the geometries and dramatic use of angles anounced by their 1960s models - a response to a liturgical shift of emphasis from the celebrant to the whole congregation." They included Ted McCoy's re-modelling of the apse of St Paul's in Dunedin, Earles, Lamont and Bycroft's polygonally-planned St Mary's (Whanganui, 1974), James Hackshaw's Liston College Chapel (1977) and St Ignatius (St Heliers, 1978), Ted McCoy's Nightcaps Church (Nightcaps, 1978), and Dick Toy's designs to complete Holy Trinity Cathedral (Parnell, Auckland, 1966, 1978).

Internationally, McCoy designed the High Commission Building (Canberra, 1974), and Michael Payne the prescient Geyser Room Restaurant at Expo '70 (Osaka, Japan, 1970), its "bubbles of air and water ... sprouting in a central column to the ceiling and spreading in bands down the walls." Other government architecture included the Government Centre project, the Ferguson (1976) and Freyberg Buildings (1979)," the Wanganui Departmental Building (1979), the National Library (1974-86), and the Beehive (1964-82), which took a momentous 18 years to build.

During the short time that Waitangi Day was New Zealand Day, Whina Cooper led Ngā Tamatoa and many others on the Māori Land March in 1975: "they marched to parliament powerfully and silently in the rain, to deliver their message not merely about grievances over the loss of ancestral land - which had grown more, not less, important to urban people - but that the government should finally acknowledge property rights under the Treaty of Waitangi." This was the year that the *Treaty of Waitangi Act* (which established the Waitangi Tribunal in 1977), was passed, British nationality was removed as a qualification for voting in New Zealand elections, and Māori were able to register on either the Māori or General (changed from European) electoral roll. At this time (1976) Māori were a predominantly (77%) urban population, having transformed from 74% rural population at the end of WWII. 1977 also saw the beginning of the 506 day occupation at Bastion Point, led by Joe Hawke,

opposing a Crown decision to sell the land which had formerly been a Ngāti Whatua reserve. Smith attributes the medium of television as being key to arousing public consciousness, stating that:

> Television viewers were shocked to watch the Riot Act read and 222 people arrested. Through the prolonged dispute the public learnt about this case study of creeping dispossession, and plain unfairness: local people had been forced into state housing while the government proposed to sell the last of their heritage to the privileged.

The negative impact of television for the government was unusual, especially given PM Rob Muldoon's reputation as "[t]he first [New Zealand] politican to use television to his advantage."

This television image was likely to have been in colour - along with New Zealand classics: *Spot On* (1973-1988), *It's In the Bag* (1974-1992), *Romper Room* (1975-1980), *Close to Home* (1975-1983), *The Governor* (1977), *A Week of It* (1977-1979) and Count Homogenized (initially in *A Haunting We Will Go* (1979-1980)). Colour was introduced to New Zealand television in 1973, after *Pukemanu* (1971-1972), the first series of *Play School* (1972-1990), and the early days of *Country Calendar* (1966-), just as the Ray Horton's Avalon Television Centre ("the first building specially constructed for television in New Zealand") was being completed. Lloyd Jenkins attributes to television (*The Big Valley*, *High Chaparral*, *Wagon Train* and *Zorro*) the mid-1970s "renewed interest in Spanish mission ranch houses and their interiors." He similarly finds a filmic origin (*Cabaret*, *The Great Gatsby*) for the cosmopolitan, flamboyant, and attention-seeking Art Deco revival "among students at art schools," which "quickly expanded into their immediate circle;" its appeal being its "antithesis" to the new colonial. This increasing scope of New Zealand televisual production was matched by efforts to support New Zealand's film industry with the 1977 passing of the New Zealand Film Commission Act 1978 to establish a New Zealand Film Commission. The year the Act came into effect (1978) a documentary on the restoration of Rongopai (Waituhi) and Rukupo (Manutuke), *Te Ohaki o te Po* (*From where the Spirit calls*) (1978), was made.

Recently our television screens have seen the demolition of John Scott's Aniwaniwa Visitor Centre (1974-76, 1984). The building of Aniwaniwa commenced in 1974, and Scott's isometric of the project shows a series of pavilions within the bush. Less discussed are the cabins which were also part of the larger project. The building is perhaps most famous for the Colin McCahon *Urewera Mural* (1976) it once housed, and has come to represent bicultural architecture in the historiographical fashion attributed to Futuna and the Māori Battalion Hall. An engagement with modernism identified in Scott's work has also been identified by Brown in relation to Cliff Whiting's work:

> Whiting's schemes differed from earlier meeting house projects because they combined the forms and ideas of Western modernism with the concepts and philosophies of Māori art. His vision has been widely embraced, by the Māori community and general population, as demonstrated by the number of projects he has led, including ... Te Waiherehere meeting house (opened in 1972) at Koroniti.

Brown quotes Mani Waititi as specifically asking Whiting to work on the 1974 Whangaparaoa dining hall project, because Waititi wanted of Whiting ""not ... that old stuff - your new stuff"," which he did in 1974 with Paratane Matchitt.

While Scott was designing Aniwaniwa, and McCahon painted *Urewera Mural*, Mike Austin wrote his 1976 PhD thesis: "Polynesian architecture of New Zealand." His initial proposal, titled "Maori Architecture," was apparently declined by the University of Auckland senate because there was no such thing as Māori architecture. This era was also that of early urban marae, Whaiora (Otara, 1975) designed by Ivan Mercep and carved by Pakaariki Harrison" being a forerunner of many to follow. In 1974 Mercep described his method of developing a brief:

> We force ourselves to write it all down, and the clients to read it, then we talk about it and relate it to the site. Some of the marae work is interesting from that point of view, because of the difficulty of translating the activities into space. It took some time for us to become aware of what is actually required on a marae. The clients remember differently what the marae used to be like.

Michael Payne was also commissioned by Maori clients, including for the Putiki Kindergarten, which was the first building to be completed in the Putiki marae redevelopment. In a different engagement with Maori design, Rigby:Mullan "pinched" an idea "from the tracery employed on the sternposts of old time Maori canoes" in their window lacework for the Merck Sharp and Dohme building at Wiri.

The decade also formed a new understanding of environmentalism beginning as it did with the Royal Forest and Bird Protection Society presenting Parliament with a 265,000 signature petition opposing "the 8-metre raising of Lake Manapouri to generate hydroelectric power for a new aluminium smelter at Tiwai Point, Bluff" in May 1970. The campaign "raised critical questions of conservation versus development, domestic versus overseas capital, multinational corporations' threat to sovereignty, the role of the state, and the very values underpinning Kiwi culture." Shortly after (1972) the Values Party was formed by Tony Brunt, a student from Victoria University, and is argued to be "the first national "green" party in the world." The next year (1973) "Damn the Dam" by John Hanlon was released, became the official Manapouri campaign protest song. It reached number five on the national chart and was given a "Single of the Year" award. Smith describes the "Save Manapouri" campaign as "a major shift in public attitudes away from colonising the land, towards conserving natural resources," while McGuinness and White state that it marked "New Zealand's first widespread environmental movement." Tiwai Point Aluminium Smelter opened in 1971, and in 1972 legislation protecting the level of Lake Manapouri was passed.

Mitchell and Chaplin note that these issues, and specifically energy conservation, began to influence New Zealand architecture mid-decade, while lloyd Jenkins references Jo and Gordon Smith's house in Waiheke (1973-) as respecting the existing large pohutukawa tree, and reflecting Smith's investigation into "sustainable materials and ecologically apt forms and built the house from sustainable, renewable pine." Michael Payne, who designed an urban renewal scheme for Wanganui City Council to increase density from 25 people/acre to 60 people/acre, was explicit about these issues when he said: "The problem of the cities, especially as the energy crisis strikes us, is that the population density is too low, with the result that good public transport and other facilities become too expensive to maintain." Related articles appeared in the *NZIAJ*, including "Energy and the Home," "Energy and the Future," "Environmental Advantages of a Moderate Growth Rate," "Man's Responsibilities: Global Homoeostasis," "Environmental Planning and Design," "Ministry Men with Green Fingers," and "Coastal planning and Development." The opening address for the 1975 NZIA conference was given by the Minister of Tourism and Environment, Whetu Tirikatene-Sullivan, who began by stating that "The environment for most New Zealanders today is not the natural environment of trees, water and open space, but the man-made environment of towns and cities." She concluded saying:

> The responsibility of the architect goes beyond the individual and the community to our national resources. Energy, for example, is a scarce resource and must be used sparingly. Buildings ... can be designed to make maximum use of natural heat and lighting ... I feel that it is the responsibility of each one of you to promote this type of design in New Zealand.

This burgeoning environmental consciousness co-incided with the oil shocks, which began in 1973, and resulted in bans on weekend petrol sales, and with government approval to expand Marsden Point Oil Refinery, and the Maui pipeline, in order to transmit natural gas from Oaonui to Huntly, was commissioned. The 1973 oil shock saw prices rise from US$3 to US$20 per barrel and created "a serious balance of payments crisis" in New Zealand. The second oil shock in 1979 (US$13 to US$32 per barrell) resulted in New Zealand in carless days, and Muldoon's "Think Big" projects (introduced in 1980), which stimulated New Zealand expansions in fuel production.

1973 was also significant in New Zealand's development of its anti-nuclear stance. That year Norman Kirk sent two frigates, Cabinet Minister Fraser Colman, and a National Radiation Laboratory physicist to Mururoa Atoll in protest of French nuclear testing in the Pacific. New Zealand, with Australia, also took France to the International Court of Justice over the nuclear testing in 1974. Jackson and McRobie note that by 1977 there was "[g]rowing public opposition to presence of nuclear-propelled (and possibly nuclear-armed) foreign warships in New Zealand ports," while Smith records Ralph Hotere's combination of "art and poetry to protest against nuclear testing."

As significant as the growing critical mass supporting a New Zealand anti-nuclear stance was the *New Zealand Planning Act* (1977). It established the Commission for the Future and the Planning Council with the aim to study and publish ""possibilities for the long-term economic and social development of New Zealand"." Perhaps this was a reaction to what Peter Beaven had earlier in the decade identified as "an authoritarian approach to town planning," resulting in his mind in the "bloody little incubator runs" in which children were brought up. The Commission for the Future publications included: "Social processes in New Zealand's future: the relevance of European models" (1978), "The electronics age" (1979), "Resources and technology sustainability" (1979), "Fast-track self-sufficiency" (1980),"New Zealand in the future food economy" (1980) and "Contexts for development" (1981). Its

1982 "Future Contingencies: Nuclear Disaster" was "not well received by the National Government, which disbanded the Commission later that year, saying "recent publications show that the commission's work is no longer relevant to the issues facing New Zealand."" The Planning Council continued until 1991, presumably influencing the world-leading *Resource Managemant Act* (1991)

Smith states that "Nuclear free New Zealand was a woman's as well as a man's country," and in the early perhaps '70s gender equality might have seemed possible. The Equal Pay Act was passed in 1972 bringing the private sector into line with the public service, which had introduced equal pay twelve years earlier. The middle of the decade marked International Women's Year (1975), as well as "the arrival of "no fault" divorce" (1975). A "second wave" of feminism resulted from increased levels of education for women and greater female participation (including married women) in the workforce, though this was not simply a matter of women's liberation, as Smith observes. The costs of homeownership required women to work as "raising children could no longer be met by a breadwinner wage." The ideas that "Motherhood and domesticity were no longer imagined as empowering, but as a prison," no doubt also helped women vacate the home for the workplace.

Old patriarchal structures, such as the Wellington Club, appear to have been little affected by these social changes. Mitchell and Chaplin compare the Wellington Club to Roger Walker's boyhood Fort Nyte noting that both "had a sign reading "Girls Keep Out."" Yet the Wellington Club commissioned one of the most progressive buildings of the decade. Hodgson has heralded Roger Walker's Wellington Club (1970) as "[t]he first modern mannerist building in New Zealand," and "a building of some magic," which created a "village atmosphere, conglomerate composition and intricate detailing [which] made this a showcase of exciting architecture."

In architecture, however, any sense of gender equity was clearly absent. As Gill Matthewson has documented, in the decade from 1966 to 1975 only 1% of New Zealand registrated architects were women, and from 1976-1985 only 9%. Other shifts had occurred in the politics of feminism - once the preserve of prohibitionists - with the 1970s seeing women demanding the right to drink in pubs, which were cheaper than the lounge bars women were restricted to. Housework, illegal abortion and equal pay were also issues of feminist activism. A highpoint was Germaine Greer's arrest in March 1972 for saying "bullshit" when speaking at the Auckland town hall.

The decade closed with the graphic image of a body-strewn Antarctic landscape, white snow sullied by the Erebus disaster (28 November 1979). Everyone in our small country of 3 million was said to know, or know of someone, on that flight. All 237 passengers and 20 crew lost their lives.

Rob Muldoon was still Prime Minister. 1980 would see the approval of his "Think Big" scheme, including the expansions of a oil refinery and steel mill, and the construction of a methanol plant, which collectively led to significant national debt and sales of state assets. Saturday retail trading was also made legal that year, and Matiu Rata founded Mana Motuhaka.

Post Modern asserted itself, with Pete Bossley's 1979 competition entry for the Manukau City Botanic Gardens giving a hint of what would come. He:

> proposed to build as a monument a towering garden fork that was thrust into the ground at the street frontage of the garden. You simply drove in between the left-hand prongs and out between the right-hand ones. Here was art, commerce and local authority aggrandizement brought together in a single offering. But it looked as though he was taking the mickey out of all three.

Papers (15-20 min) presenting **new** research which examines **any aspect of this period of New Zealand architectural history** are called for from academics, practitioners, heritage consultants, and postgraduate students. The symposium is one of a series of annual meetings examining specific periods of New Zealand architectural history. Papers can be submitted in Te Reo Māori and/or English, but the conference will be in English. It is intended that papers comprising the proceedings will be made available through the VUW institutional repository within a year of the conference.

Symposium fee: The cost of the symposium (including proceedings) will be $60, to be collected on the day of the symposium. Additional copies of proceedings will be available on the day for a cost of $20.

Timetable:
Abstracts due: 5pm, Friday 16th September 2016
Programme announced: Friday 16th September 2016
Full Papers due: Friday 18th November 2016
Registration due: Friday 25th November 2016
Conference: Friday 2nd December 2016

References

Alington, William H. "Comment [Park Mews]" *NZIA Journal* (September 1974) 40(9):174.
Austin, M.R. "Mt Albert Housing Scheme: Critique" *NZIA Journal* (February 1974) 40(2):18.
Austin, M.R. "Polynesian architecture in New Zealand" (Auckland: University of Auckland PhD thesis (Architecture), 1976)
"Basil Ward to visit New Zealand" *NZIA Journal* (20 September 1972) 39(9):287.
"The battle for Auckland's Civic Centre" *NZIA Journal* (20 January 1972) 39(1):16-25.
Beaven, Peter "Queen Elizabeth II Park Stadium" *NZIA Journal* (February 1974) 40(2):3-9.
Beere, Jock "Wellington District Office: Capital Architecture" *NZIA Journal* (October 1975) 42(5):149-152
Block, Gerd E. "On Architectural Education" *NZIA Journal* (February 1975) 42(1):17-19.
Brown, Deidre *Māori Architecture: from fale to wharenui and beyond* (North Shore, New Zealand: Penguin Books, 2009)
Burnet, Macfarlene "Man's Responsibilities: Global Homoeostasis" *NZIA Journal* (20 March 1972) 39(1):84-89.
Cape, Peter "The Upper Hutt Civic Centre" *NZIA Journal* (20 November 1972) 39(11):334-335.
"Cathedral Square Redevelopment" *NZIA Journal* (June 1975) 42(3): 86-88.
Chapman, Katie "Wellington's Oaks building eyed for inner city park" (2 August 2015) http://www.stuff.co.nz/dominion-post/news/wellington/70655757/wellingtons-oaks-building-eyed-for-inner-city-park
"Christchurch Town Hall" *NZIA Journal* (20 October 1972) 39(10): 294-303.
"Closer Economic Relations - CER Australia New Zealand" *Australia High Commission New Zealand Cook Island and Niue* http://newzealand.embassy.gov.au/wltn/CloseEconRel.html
"Conversion of a building Plimmer Steps, Wellington for Rutland Freeholds Limited" *NZIA Journal* (July 1974) 40(7):126-127.
Department of Foreign Affairs and Trade, Australian Government "Historical Documents: 1. Nareen Statement" (20 March 1978) http://dfat.gov.au/about-us/publications/historical-documents/Pages/volume-23/1-nareen-statement.aspx
"Design for Mass Housing" *NZIA Journal* (20 February 1972) 39(2):48-49.
Dickson, J.D. "Primary School View of Architecture" *NZIA Journal* (October 1974) 40(10):196-199.
Donnithorne, D. "Disappearing Christchurch: Three Buildings Saved" *NZIA Journal* (April 1975) 42(2):40-42.
"Dowse Art Gallery, Lower Hutt" *NZIA Journal* (20 July 1972) 39(7):214-216.
"Dr Gerd Block" *NZIA Journal* (March 1974) 40(3):34-35
Einhorn, H. "Environmental Planning and Design" *NZIA Journal* (20 March 1972) 39(3):94-97.
Einhorn, H. "Surface Treatment of Reinforced Concrete" *NZIA Journal* (August 1975) 42(4):108-111.
Einhorn, Helmut "Downstage: a critical visit" *NZIA Journal* (August 1974) 70(8):152.
Ferguson, Gael *Building the New Zealand Dream* (Palmerston North: Dunmore Press, 1994)
Foster, T., A. Vasbenter and J. Mackay "Lessons from the past: Bluff Hill Environment" *NZIA Journal* (February 1975) 42(1):20-23.
Gabites, A.L. "Environmental Advantages of a Moderate Growth Rate" *NZIA Journal* (20 March 1972) 39(3):78-83.
"Gabites, Alington, Edmondson" *NZIA Journal* (February 1974) 40(2):19-23.
Gates, Charlie "Revealed: The Secret of Cold War maps of New Zealand made by Soviet Russia" (13 September 2016) http://www.stuff.co.nz/national/84037644/revealed-the-secret-cold-war-maps-of-new-zealand-made-by-soviet-russia
"Government's Low Cost Housing Programme" *NZIA Journal* (July 1974) 40(7):137-138.
"Hannah playhouse: James Beard & Co." *NZIA Journal* (August 1974) 70(8):147-151.
Hill, P.M. "Work of the Thorndon Trust" *NZIA Journal* (July 1974) 40(7):122-124.
Hill, Ted "Hamilton District Office: Striving for quiet excellence" *NZIA Journal* (October 1975) 42(5):140-143.
Hodgson, Terence *Looking at the Architecture of New Zealand* (Wellington: Grantham House, 1990)
Jackson, Keith and Alan McRobie *Historical Dictionary of New Zealand* (Auckland: Longman, 1996)

"Japanese Study Tour Itinerary" *NZIA Journal* (20 December 1972) 39(12):375.
"JASMaD" *NZIA Journal* (June 1974) 40(6):115-119.
Leach, Andrew *Campus Confessions: Architecture and the Central institute of Technology* (Auckland: Balasoglou Books, 2004)
Leach, Andrew "Helmut Einhorn: Dislocation and Modern Architecture in New Zealand" *Fabrications: The Journal of the Society of Architectural Historians, Australia and New Zealand* (2004) 14(1/2):59-82.
Lekner, J. "Energy and the Future" *NZIA Journal* (May 1974) 40(5):90-92.
Lekner, Marjorie "Avalon Television Centre" *NZIA Journal* (August 1974) 40(8):163-166.
lloyd Jenkins, Douglas *At Home: A Century of New Zealand Design* (Auckland: Random House, 2005; first published 2004)
McCoy, E.J. "Otago Boys High School" *NZIA Journal* (July 1974) 40(7):135-136.
McGuinness, Wendy and Miriam White *Nation Dates: Significant events that have shaped the nation of New Zealand* (Wellington: McGuinness Institute, 2012)
Marks, Charles "Énergy and the Home" *NZIA Journal* (May 1974) 40(5):88-89.
Matthewson, Gill "Take it to the Limit: Women as Breach in Architecture" *Limits: Proceedings of the 21st Annual Conference of SAHANZ* ed. Harriet Edquist & Hélène Frichot (Melbourne: SAHANZ, October 2004): 319-325.
"Michael Payne" *NZIA Journal* (March 1974) 40(3):26-33.
"Ministry Men with Green Fingers" *NZIA Journal* (20 October 1972) 39(10):304-305.
Mitchell, Terry "Cathedral Square, Christchurch" *NZIA Journal* (February 1974) 40(2):10-13.
"Mornington School" *NZIA Journal* (March 1974) 40(3):42.
"New Professor of Architecture" *NZIA Journal* (20 November 1972) 39(11):345.
Nixon, Chris and John Yeabsley "New Zealand, Britain and the EEC: Overseas trade policy" (11 March 2010) *Te Ara* http://www.teara.govt.nz/en/overseas-trade-policy/page-4
"Opening Address by the Minister of Tourism & Environment Mrs Tirikatene-Sullivan" *NZIA Journal* (June 1975) 42(3):67-68.
"Ownership Flats for Williams Development Holdings Ltd" *NZIA Journal* (April 1975) 42(2):47-49.
Paul, Joanna Margaret "Motorway" (1971) Ngā Taonga F60684.
"Principal Speaker for 1973 Conference" *NZIA Journal* (20 September 1972) 39(9):164-166.
"Rigby:Mullan" *NZIA Journal* (February 1975) 42(1):27-31.
Shaw, Peter *New Zealand Architecture: from Polynesian beginnings to 1990* (Auckland: Hodder & Stoughton, 1991)
Smith, Philippa Mein *A Concise History of New Zealand* (Melbourne: Cambridge University Press, 2005)
"State Rental Apartments, Mt Albert" *NZIA Journal* (February 1974) 40(2): 14-17.
Storrer, William Allin "New Zealand's Architectural Generation Gap" *NZIA Journal* (October 1974) 40(10):204-206.
"Teachers Training College Wellington" *NZIA Journal* (20 May 1972) 39(5):154-159.
Thornton, G.G. "Early Industrial Architecture in New Zealand" *NZIA Journal* (20 February 1972) 39(2):54-61.
Thornton, G.G. "Early Industrial Architecture in New Zealand" *NZIA Journal* (20 September 1972) 39(9):285.
Thornton, G.G. "Early Industrial Architecture in New Zealand" *NZIA Journal* (20 October 1972) 39(10):306-307.
Thornton, G.G. "Early Industrial Architecture in New Zealand" *NZIA Journal* (20 November 1972) 39(11):336-337.
Thornton, G.G. "Early Industrial Architecture in New Zealand" *NZIA Journal* (July 1974) 40(7):128-134.
Thornton, G.G. "Old Farm Buildings" *NZIA Journal* (November 1974) 40(11):228-233.
"Three Christchurch Office Buildings" *NZIA Journal* (20 September 1972) 39(9):267-279.
"Upper Hutt City Council Building" *NZIA Journal* (20 May 1972) 39(5):160-163.
"Upper Hutt Civic Hall" *NZIA Journal* (20 May 1972) 39(5):164-166.
"Vlad Cacala" *Lost Property* http://www.lostproperty.org.nz/architects/vlad-cacala/
Watt, Hugh "Coastal planning and development" *NZIA Journal* (February 1975) 42(1):24-26.