

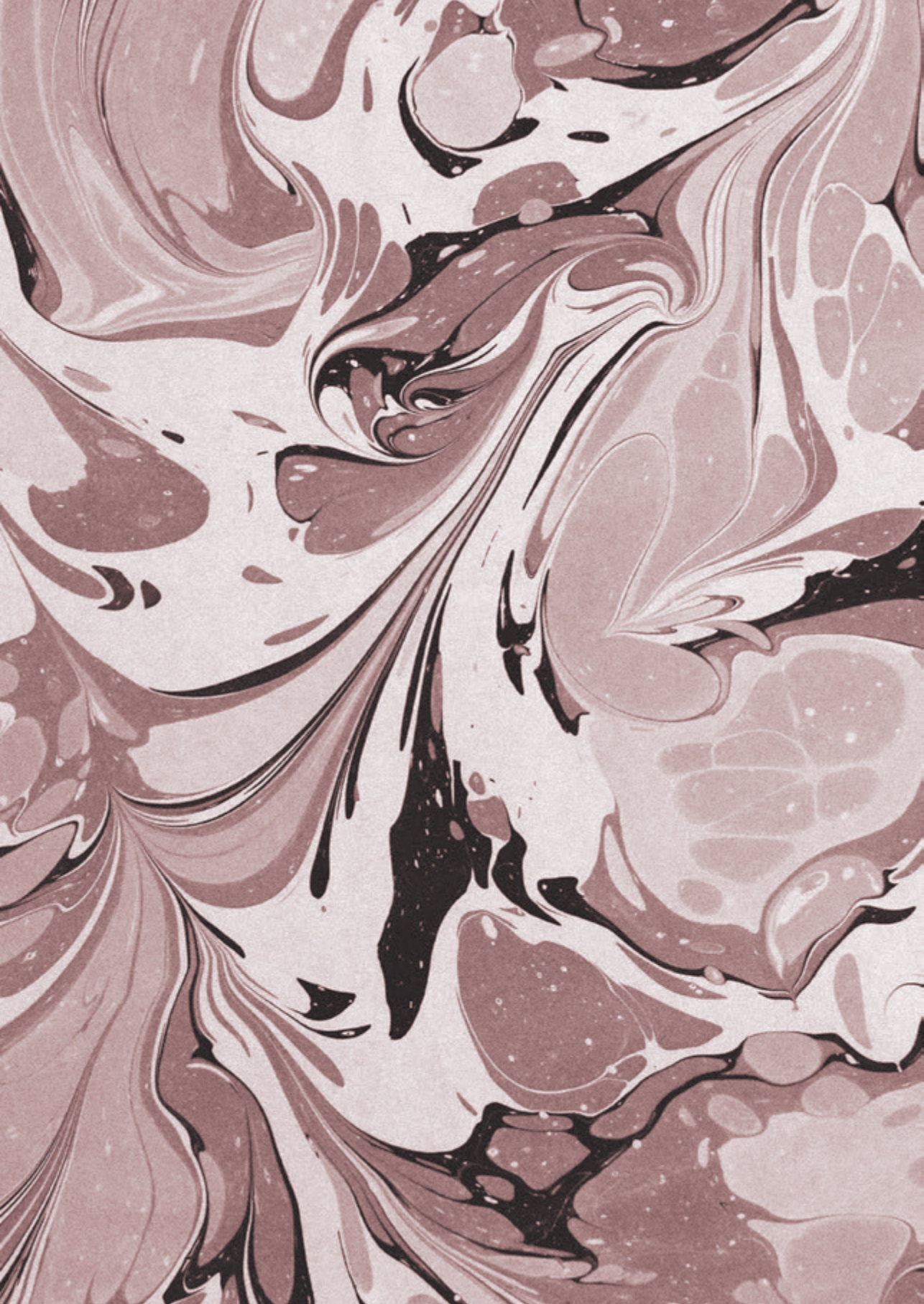
BACK ³ STORY

DEC 2017

ISSUE 3

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JOURNAL OF NEW ZEALAND ART,
MEDIA & DESIGN HISTORY



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Editorial

The stories in this issue have a serendipitous link concerning our design history and the ongoing project to foster in this country distinctive and indigenous design. We lead off with an appropriate article for a publication produced in December. Peter Gilderdale examines the birth of the New Zealand Christmas card. In 1883 a Dunedin newspaper commented on the folly of sending back to the 'old country' Christmas cards that were made there. But if we were to produce our own cards what would be appropriate designs to represent New Zealand at Christmas. The answer can be found in some lines of verse, or is it doggerel, printed on an early local card:

"Summer scenes and flowers are ours at Christmas time,
Not wint'ry frost and snow, as yours in Northern clime."

Although the author notes that New Zealand cards struggled to compete with the flood of imported cards some local examples were marked by elaborate and well-constructed design.

Crude and direct were the design features that marked the bulletins, pamphlets and cartoons by those supporting the strikers during the 1951 Waterfront Strike. Patricia Thomas looks at the text, typefaces and imagery that were used to portray the strikers' position against what they viewed as "police thuggery, fascist regulations and the international pirates that called themselves ship-owners". Thomas examines this underground media to "form a picture of one side of the story of what was, arguably, the most disruptive and divisive 151 days in the history of the New Zealand labour movement".

The value of design has often been contested. The influential twentieth century British designer Gordon Russell was clear on its importance. He stated in a *Times* supplement produced for the 1951 Festival of Britain: "Quality has three facets: workmanship, material, and design". He went on to lament that: "In many trades the first two are better than the third". In his article on the historic emergence of 'design thinking' in New Zealand, Alan Young notes among other markers, the importance of the Festival of Britain in underpinning the idea that 'good' design was based on wide-ranging research.

Research in the United States was pivotal to the success of Robert Laidlaw. In 1909 this twenty-four year old hardware salesman launched New Zealand's first mail order business. It was closely modelled on the American business of Aaron Montgomery Ward who pitched his catalogue to the rural household promising cheaper goods if they paid cash. The article about Laidlaw's 'new way' of shopping looks at the mail order catalogues he produced as 'Laidlaw Leeds' and later the 'Farmers' Trading Company', as media that tell us something of the age that produced them. In particular it focuses on how they reflected changing norms when addressing the female audience.

It is the contention of the authors of our next article that printed matter and artifacts in libraries, archives and museums can be 'reinvigorated' by using the potential of 3D printing and interactive technologies. They propound that these emerging technologies are influencing "the shape of society, how we interact with the world, how we learn, how our activities create new knowledge and how we can contextualise old knowledge in new ways". The projects they are undertaking are a collaboration between the National Library of New Zealand and the Victoria University of Wellington School of Design. They show with examples from the First World War, early waterfront reclamation in Wellington and other archive material how 3d technologies can free the library user from the limitations of text and two dimensional images.

Nan O'Sullivan asserts in her article that it is critical we revisit design's history from a less Eurocentric perspective. In this country's case she believes that the early recognition of the use of nature's harmonies to achieve beauty in aesthetics by Maori and Pacific peoples has been either forgotten or, perhaps, conveniently ignored. She draws on work undertaken by first year design students who, having identified their own cultural affiliations, make patterns from the individual cultural symbols they have designed. They have then sought to express these as collective and complex group identities.

All the content in this edition speaks to our identity as a nation and the role our use of design, archives and our media play in forming that identity. Importantly as well, this edition demonstrates how our 'back stories' are central not only to our understanding of who we are but also how we might design or shape our future.

Alan Cocker

Summer Scenes and Flowers: The Beginnings of the New Zealand Christmas Card, 1880-1882

Peter Gilderdale

Keywords: #Christmas traditions #card sending #New Zealand identity
#cultural colonisation #photography

In October 1883, just as New Zealanders began the annual ritual of buying seasonal tokens of esteem to post overseas, Dunedin's *Evening Star*, quoting local photographers the Burton Brothers, posed a question that had exercised immigrants for some years. "Does it not seem folly," the paper asked "to send back to the Old Country Christmas cards which were manufactured there and exported hither?"¹ This was a rhetorical question and the *Evening Star* went on to respond that "a few years since we should have replied 'No'; but in view of the experiences of the last two years we say most decidedly, 'Yes, it is folly.'" The newspaper, clearly, saw the period of 1881 and 1882 as pivotal in the establishment of a small but important industry, the New Zealand Christmas card business.² My paper examines why these years are significant and what lies behind the debate, identifying a number of early cards and documenting the accompanying developments, primarily via the lens of newspaper advertising. The 1880s Christmas card may not have been an industry on the scale of lamb, but what it lacked in bulk it made up for in symbolism, providing a discrete window into the web of entangled emotional, commercial and design imperatives that attended the way immigrants imagined and constructed this important cultural celebration.

For European immigrants to New Zealand, now as well as then, the move to the other side of the world has an unwelcome side-effect. December 25th falls squarely in the middle of summer. As nineteenth century colonists discovered, regardless of how desirable sun and heat might ordinarily be, the strangeness of southern hemisphere Christmas celebrations foregrounded any lurking sense of dislocation.³ According to Alison Clarke, who has particularly focused on New Zealand Christmas traditions, the transition from a winter to a summer celebration was deeply challenging to settlers' expectations.⁴ Their normal response to such a challenge would have been to reshape it into a form more akin to what they left behind.⁵ The seasons obdurately resisted such a process, but customs were more amenable. Practices like Christmas card exchange allowed settlers a choice about whether to import or redefine traditions. As Clarke notes, card sending pitted nostalgia for deeply felt English traditions against nascent local pride.⁶

Yet the 'traditional' English Christmas, whose enforced absence unsettled the colonists of the 1870s and 80s, was a more recent cultural construct than perhaps they realised, and it is necessary to understand something of its background before contextualising New Zealand practice. English Christmas customs had, in fact, altered considerably over the preceding forty years in response to processes of urbanisation and industrialisation.⁷ Originally a community-based, boisterous celebration aligned to the rhythm of the agricultural year, Christmas increasingly gave way to a more privatised celebration, centred on the middle class family, and framed as more of a patriotic, social and commercial celebration than a religious one.⁸



Figure 1: John Callcott Horsley (artist) & Henry Cole (publisher - under the name Felix Summerly), *The Earliest Commercial British Christmas card*, 1843, hand coloured engraving, 12.7 x 7.62mm. Courtesy of Wikimedia Commons. This card sold for a shilling. Although now widely feted, at the time it was not a success.

This newly reframed Christmas provides the context within which the British Christmas card gradually evolved. The imagery in Henry Cole's first commercial Christmas card from 1843 sums up the revitalised conception of Christmas, with its convivial family gathering, flanked by yuletide acts of charity (Figure 1). Yet, while Christmas annuals and other seasonal publications flourished after the 1840s, reinforcing the emergent secular and nationalist themes of the English middle-class Christmas, the initial Victorian formulation of Christmas customs did not include Christmas card exchange.⁹ Though there were precedents for associating cards with Christmas, and Valentine cards were already wildly popular, the Cole/Horsley card singularly failed to spawn an industry.¹⁰ Sporadic, small-scale attempts occurred through the 1840s and 50s, primarily with similarly convivial imagery, but when, twenty years later, the genre began to have marketplace success, the imagery had consolidated around northern hemisphere seasonal references such as "robins perched on snow-laden trees."¹¹

In late 1861, at exactly the same time that commercial Christmas card production was establishing itself in Britain, Auckland bookseller and stationer George Chapman advertised "Christmas Note Paper and Christmas Cards of Good Wishes," heralding a flurry of interest in imported Christmas cards over the next year among New Zealand retailers.¹² After 1862, however, they disappeared from newspaper adverts for the rest of the decade, reappearing in 1870. Although doubtless sold and used during this early period, their absence in newspaper adverts suggests that they commanded limited cultural capital. A graph showing card sales (Figure 2) shows that even after 1870 their progress towards becoming a staple of New Zealand Christmas celebrations was relatively slow. 1876 marked the first noticeable increase, with cards advertised widely outside the main centres for the first time. The *New Zealand Herald* that year used the appearance of Christmas cards in booksellers' windows as an augury of the approaching season, an indication of their increasing cultural significance.¹³ Yet this appreciation was not universal. Alison Clarke notes that holiday traditions varied amongst different settler communities, and Christmas was not celebrated as a religious holiday by Presbyterians.¹⁴ Hence it is not surprising to find the *Otago Daily Times* still having to educate its predominantly Scottish readers (who were more familiar with New Year than Christmas traditions) on card usage, advising that "in the Old Country [Christmas cards] are exchanged between friends at Yule-tide."¹⁵

Two factors, in particular, help clarify these findings. Until 1870, Christmas was primarily celebrated as a social event, but Mark Connolly argues that this date was pivotal in the rise of commercialisation and the institution of Christmas shopping.¹⁶ In tandem with this trend, the dates 1870 and 1876 correspond with key events in postal legislation. 1870, when card advertisements reappeared in New Zealand newspapers, was the year the postcard was introduced in Britain, and unsealed letters were able to travel domestically at the same reduced rate.¹⁷ This provided the catalyst for increased Christmas card exchange in Britain, since people could now send printed cards cheaply to their friends and relations in other parts of the country. This trend was evidently noted in New Zealand, but the marked rise in card advertising after 1876 coincides with the introduction of postcards here that year.¹⁸ Cheaper postcard rates only applied nationally, however, and cards sent internationally still had to be sent at the expensive sixpenny letter rate. These rates applied throughout the period, and would have acted as a disincentive to international card sending. Consequently the pattern of card advertising during the 1870s was, predictably, targeted solely to the local market, with card adverts first appearing in late November and December.¹⁹

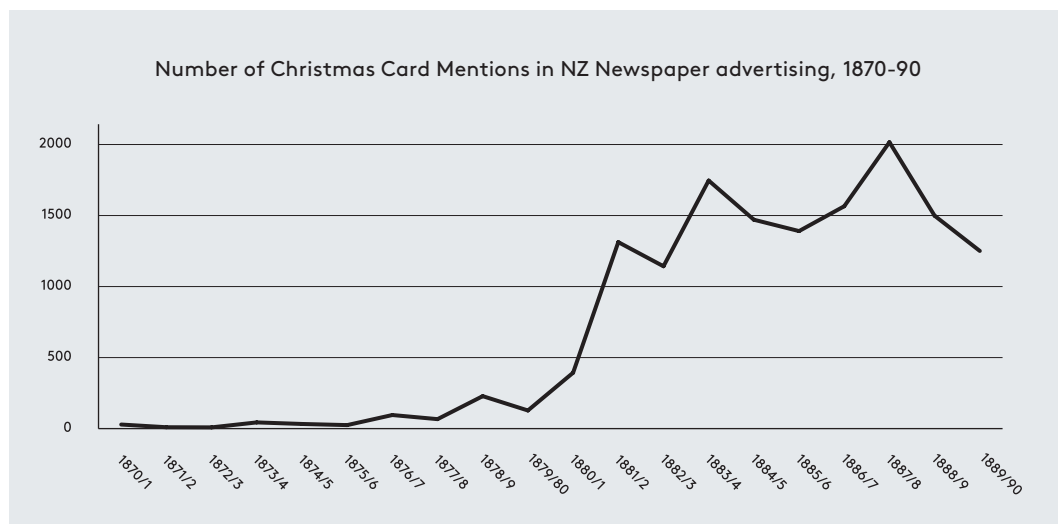


Figure 2: Graph showing the number of advertisements for Christmas cards appearing in the National Library's newspaper archive, Papers Past, between 1870 and 1890. Its trajectory mirrors what we know from other sources about the Christmas card's rapid rise to 'craze' proportions in the early 1880's, peaking around 1888. Here, the Christmas card year is treated as occurring between March of one year and March of the next. This is to acknowledge the fact that, once typeset, adverts for booksellers were routinely repeated for some months after the New Year, regardless of aspects of those adverts being out of date. The figures relate to numbers of cards found in July 2017, and it should be noted that this graph is only intended to be indicative, as it may be distorted, owing to the number of digitised pages in the archive varying over time.



Figure 3: Louis Prang, Christmas card, 1875, Chromolithograph, 104 x 65mm. Collection of the Author.

Yet, during the same decade, perhaps as many as 200,000 Britons had immigrated to New Zealand.²⁰ This meant an influx of people imbued with contemporary British Christmas customs that increasingly included the newly-minted expectation of sending cards to absent friends and relations. With such a burgeoning potential market of migrants, all with overseas family and friends expecting to receive cards, it is not surprising that at some point, price notwithstanding, there would be a demand to send more Christmas cards 'home.' To accommodate such a demand, adverts would need to appear earlier, in time for the October Christmas post deadline. And, in 1880, adverts duly began to be placed during September, heralding an exponential increase in Christmas card advertising during 1880-2 (Figure 2).

This trend mirrors the pattern of the broader craze. Christmas card sending had, by 1879, reached the point of being accepted as "a permanent and recognised institution."²¹ The following two years would see the Christmas card custom and trade become completely entrenched.²² Internationally, the business was burgeoning. As a measure of this, the New Zealand press reported on two major publishers, Louis Prang in Boston and Raphael Tuck in London, who, during 1880, held heavily publicised competitions for Christmas card designs and then aggressively marketed the winning cards as 'prize designs'.²³ As a strategy, this worked. Prang and Tuck quickly became marketable brands, and the *Lyttleton Times* was the first to carry adverts where Prang's cards were specified by name.²⁴ Prang is widely recognised as having popularised the Christmas card in America in 1875.²⁵ The bulk of the company's early cards (Figure 3) featured the highly popular language of flowers – the Victorian equivalent of emojis.²⁶ However, at least by 1879, he was starting to link flowers to more nationally specific scenery (Figure 4).²⁷



Figure 4: Louis Prang,
New Year Card, 1879,
Chromolithograph, 127 x 86mm.
Collection of the Author.

Both Prang's competition concept and the broader nationalistic impulse struck an Antipodean chord. In 1881, Sydney firm John Sands instituted a Christmas Card competition, whose rationale effectively defined the path New Zealand publishers would subsequently take. The Sydney Morning Herald reported it thus:

Up to the present time, the Christmas, New Year and Birthday Cards used in the colonies have been illuminated only by English or European subjects, this state of things arising from the want of sufficient enterprise among colonial manufacturers to offer any inducement by which more appropriate designs might be produced. The want was almost universally felt, as for an Australian born to gravely despatch to his friends and relatives a Christmas Card upon which were pretty pictures representing scenes of snow and ice, was an anomaly which must have struck every one.²⁸

This argument clearly struck home in New Zealand where it was quoted in full in the press.²⁹ But what constituted 'appropriate' designs? Culturally, the tendency was for Christmas customs to cohere around a single English imaginary conception which emphasised the British centre.³⁰ Cards coming from Britain inevitably used imagery that reinforced this. The problem for New Zealand manufacturers was two-fold. To create cards that mimicked the British was to invite unfavourable comparison. But to try and re-imagine Christmas in a new environment was no easy task, especially when a large segment of the audience for such cards lived in Britain.

The popularity that saw the Christmas card become an institution made it a potentially attractive option for local publishers, but it also served to increase competition from well-resourced overseas competitors. As "Verges" in the *Star* pointed out, "Everyone has noticed the artistic excellence which is at present attained in the production of these little gifts of the season," and "the marvellous advance in the goods of this kind." Then followed a telling critique of the Australian offerings that had resulted from John Sands' competition:

Though, like most things in this vale of tears, they are not quite perfect, we may hail them as the dawning of a brighter day in Antipodean art. The figure drawing in most of them is very bad, but the native flowers and little landscapes will, in many instances, quite rival the productions of great London houses.³¹

Competing with major overseas producers on their own terms in offering seasonally specific imagery was risky. But while flowers and landscapes were already staples of the overseas genre, native flowers and Antipodean landscapes were subjects that gave European firms no great advantage.³² Unsurprisingly, therefore, these elements dominated early New Zealand attempts to enter the market.

The first of these occurred in September 1880, as New Zealand retailers for the first time targeted the international Christmas market. The *Otago Witness* reported that "we have received from Messrs J. Wilkie & Co. some admirable specimens of Christmas cards, consisting of photographs of choice bits of New Zealand scenery, tastefully mounted, and forming elegant presents to send to friends outside the Colony."³³ An advert in the *Wanganui Herald* tells us these were known as "Zealandia Christmas Cards" – a brand which Wilkie, as the agent for photographers the Burton Brothers, would continue to promote through the 1880s.³⁴

Wilkie was the only manufacturer to test the market in 1880, but the following year saw tentative signs of an increase. At the niche end of the market, T. Rae was offering cards with mounted ferns as suitable for Christmas cards.³⁵ In Wanganui, Mr P. Bell was reported as sending his customers "very pretty Christmas cards, enclosed in covers tastefully lithographed by Mr A.D. Willis, and which contain the almanac for 1882."³⁶ Willis was no stranger to Christmas cards. As a bookseller he had first advertised with them almost a decade earlier.³⁷ This, however, was his first tentative step towards printing them himself. Meanwhile Wilkie and the Burtons, in Dunedin, were again

producing Zealandia cards, with the *Evening Star* reporting that they were “remarkable for unique treatment and fanciful designs. They make handsome pictures for scrap albums.”³⁸

By 1882, the market for Christmas cards was intensifying. The *Poverty Bay Herald*, speaking from a consumer perspective, critiqued it thus:

This fashion, which was pretty enough in its commencement, is, however, likely at any time to be discredited by the spirit of vanity and competition which threatens to raise continually the money value of these trifles until they are no longer esteemed or sent unless purchased at a comparatively large price.³⁹

A consumer-led price-spiral was, on the other hand, catnip to the entrepreneur. 1882 proved to be the flashpoint for New Zealand cards. In Wanganui, A.D. Willis put out two lines of cards, reflecting the two most promising types mentioned earlier. One, a hand-painted series of cards of New Zealand flowers, ascribed to a “Wanganui lady,” (probably Lydia Harding), was touted as removing “any necessity to import such mementos from Home for the purpose of sending them to friends at Home.”⁴⁰ Complementing these was a series of photographs of New Zealand scenery, mounted on cards printed with three-coloured depictions of ferns and nikau and captioned “A Merry Christmas and a Happy New Year.”⁴¹ Some of the images were taken by Wanganui photographer, William James Harding, with others “procured from Dunedin.”⁴²

Though Willis and Wanganui would later form the centre of Christmas card production, in 1882 Dunedin, with its reputation as a progressive centre of the arts and its thriving photographic industry, formed the locus of card activity.⁴³ Unlike the expensive and complex chromolithographic printing techniques used by Willis and European Christmas card companies, photography was a more accessible and affordable entry-level medium.⁴⁴ But the Otago cards shared one feature with Willis’s offerings: cross-disciplinary collaboration. Though reproduced photographically, they were primarily assemblages of photographic and illustrative elements – an affront to later modernist sensibilities which perhaps accounts for their almost complete absence from discussions of any of the various photographers’ oeuvre.

The Otago Christmas cards spanned a variety of subjects. One somewhat surprising Christmas offering was a pair of cartoons showing the retiring Dunedin mayor, James Gore, and the race for his successor,



Figure 5: W. R. Frost (photography), Nathaniel Leves (artwork), Saunders, McBeath & Co. (publishers), *Comet Christmas Card*, 1882, Albumen silver print, 194 x 138 mm. Courtesy of Te Papa. Copy purchased 1999 with New Zealand Lottery Grants Board Funds. Te Papa (O.021671). The Te Papa reference entitles it “A Merry Christmas and a Happy New Year.”

both drawn by Arthur von Meyern and photographed and published by Robert Clifford.⁴⁵ Here, photography was the mechanism of distribution, but the conception was illustrative. A more integrated approach was used by D.S. Jolly of Cromwell, who designed the floral border for his card, to complement photographs of Dunedin’s Knox Church and its pastor taken by Dunedin photographer Frank A. Coxhead.⁴⁶

Coxhead was also the photographer for a card by Nathaniel Leves, which was heavily promoted at the Benevolent Institute’s 1882 Carnival.⁴⁷ It included a ‘Christmas anthem’ with words by John Barr and music by the organist of Knox Church, A.J. Barth.⁴⁸ This is probably the same card described elsewhere as follows: “The music and words of “Our New Zealand Christmas Song” has been beautifully photographed, cabinet size, with a pretty view of Otago Harbor, encircled with ears of corn and flowers.”⁴⁹ A report on the carnival mentioned Leves’ offerings as including “an assortment of his photographic Christmas cards.”⁵⁰ This implies multiple cards, but only one other design received press

attention – his collaboration with photographer W.R. Frost, also an exhibitor at the Carnival. Indeed, by the time they were exhibiting their card was already a cultural phenomenon, receiving national attention as ‘the Comet Christmas Card,’ (Figure 5).

The 1882 comet had been visible from September. This timing meant that it was not possible for northern hemisphere publishers to produce and export cards of it back to New Zealand.⁵¹ Local producers, of whom Leves was the first, must have known that this made it ideal subject matter for Christmas cards, whether sent overseas or not, and Leves sounded a familiar note in justifying the card. As the *Evening Star* reported:

Mr Leves was struck with the absurdity of New Zealand residents sending to friends at Home cards which had in the first place come from there, and which were typical of a Home Christmas; he therefore set to work to produce a card which should be representative of Christmas in New Zealand, and has obtained a very happy result.⁵²

This intent was spelt out by the verse on the reverse of the mount, which provided captions for the scenes and said, in part:

Summer scenes and flowers are ours at Christmas time,
Not wint’ry frost and snow, as yours in Northern Clime.
But still our hearts commingle, and kindly thoughts arise,
Recalling distant lov’d ones who dwell ‘neath other skies.⁵³

The *Star* noted that the card was sold for a shilling (the normal price for such cards), and the firm Saunders McBeath had the rights to sell it.⁵⁴ Although the cards appears photographic, night photography was not, at this period, viable.⁵⁵ The artwork was actually skilful black and white painting by Leves showing the comet over the Otago Peninsula Hills, with flanking scenes of other Otago beauty spots, Purakanui Bay and Mount Earnslaw.⁵⁶ In format, the triptych is similar to the Cole/Horsley card (Figure 1), but here the resemblance ceases. It does not try to narrate Christmas as a social experience, or show different ways of celebrating Christmas in the summer. Rather, the three scenes serve to advocate for the new colony, portraying New Zealand as an enviable destination – the idyllic Britain of the South.⁵⁷ The design highlighted the Romantic aspects of the New Zealand landscape, foregrounded the novelty of the comet, and topped it off with the mix of local and imported flowers and plants that might

decorate Christmas celebrations during a New Zealand summer. At least two different versions of the card exist, with different types of flower on each.⁵⁸ The design was widely celebrated. Gisborne’s *Poverty Bay Herald* was particularly enthusiastic, saying “scarcely anything more acceptable to Home acquaintances could be imagined,” before praising Leves’ “charming sketches” and noting that “the views are set in an embroidery of flowers and ferns, in the design of which much taste has been displayed.”⁵⁹

The card may have been a triumph of design, but the country-wide acclaim testified to a triumph of marketing. No other card to date had been sold so widely, with Saunders McBeath & Co. mustering a network of agents and licensees. For example, Wanganui draper Joseph Paul, in direct competition with Willis, was offering 1000 cards, while newspaper adverts show it also on sale in Invercargill, Milton, Riverton, Christchurch, Hawera and New Plymouth.⁶⁰ Auckland retailer W. Rattray was a particularly active agent, advertising the card in Gisborne, Thames and Hamilton.⁶¹ Many of the retailers involved were drapers and fancy goods sellers, and thus reflected a current trend whereby a range of merchants began muscling in on booksellers’ traditional territory by offering Christmas cards.⁶²

The adverts nevertheless share a complete confusion around authorship. Most only credited the retailer, whilst those that went further named Saunders McBeath, not Leves, despite the *Evening Star* piece stating that Saunders McBeath had purchased the right to sell them.⁶³ But the agents’ name was on the back of the card, which is why Alison Clarke also credited them, not Leves, as the author.⁶⁴ Greetings card artists were routinely anonymous, with publishers rather than artists normally being credited, so this may account for the lack of consistency.⁶⁵ Nor is this situation helped by the photographic firm of W.R. Frost & Co. subsequently claiming to be “Publishers of the Original Comet Christmas Card.”⁶⁶

The same lack of clarity appears in the relationship between the Burton Brothers and Wilkie, who were once again publishing scenic “Zealandia Christmas Cards.”⁶⁷ Their respective roles as photographer and agent were, however, spelt out on the central panel of their Comet card, (Figure 6) and both names appeared on the reverse where, despite the card not having a Burton Brothers number, that company figured more prominently (Figure 7).⁶⁸

Regardless of ultimate authorship, neither Wilkie nor the Burtons can have been thrilled when Leves beat them to comet glory by a mere three days. Their Five Comet Card (Figure 6) had a central image

of the comet over Dunedin's Knox Church, which was situated both historically and geographically by the flanking images. Photographs by the Burtons of four iconic South Island scenes (Mount Cook, Mitre Peak, Milford Sound and Lake Wakatipu), were interspersed with drawings of four historical comet appearances. Like Leves' offering, this card received a positive press response, with the *Otago Daily Times* noting that it had "a scientific and historical value as well as a local interest" and that it was a "charming and characteristic card."⁶⁹ However, it was only advertised in the Otago region, and although its scenes were of better known New Zealand tourist landmarks than the more local scenes drawn by Leves, it was Leves' card that proved more marketable. Though both advertised the beauties of Britain of the South, a sumptuous and well-constructed design, giving greater prominence to the local scenery evidently appealed more to Christmas sensibilities than the more fragmented mix of comets and scenes.

Nevertheless, the similarities between the two cards are significant. Both combine landscape and foliage. Both combine native plants and imported flowers. Both cater to English and Scots sensibilities by mentioning both Christmas and New Year. Both were either created as series, or ran to more than one edition, with different versions characterised by differing floral treatments.⁷⁰ Both have a mix of illustrative and photographic elements that are then reproduced photographically. Both eschew the easier route of simply showing a single New Zealand scene with a Christmas message, instead opting for a composite, montaged, multiview treatment with floral borders. The overall effect was lavish. The Burtons' card, in particular, visually mimics the layout of an album page and, in its construction, can be seen as analogous to the way periodicals applied the 'frame story.'⁷¹ Although a well-established print format by 1882, the multiview would retain a link with Christmas well into the twentieth century, suggesting that these cards were either applying a pre-existing Christmas visual trope, or that they themselves may have exerted a real influence on later visual formulations of the season.⁷²

At all events, both cards connected the comet experience with imagery that aimed to convey a Southern Hemisphere Christmas, and they shared the desire to communicate this difference with people overseas. But, while the Leves and Burton cards were the most prominent comet cards, they were not the only ones. The most novel Dunedin card, showing the comet, a lighthouse and an eclipse, was produced by Fermor Willson and was luminous – for viewing in the dark.⁷³ Willson was likely using this to promote a new "Balmain's"

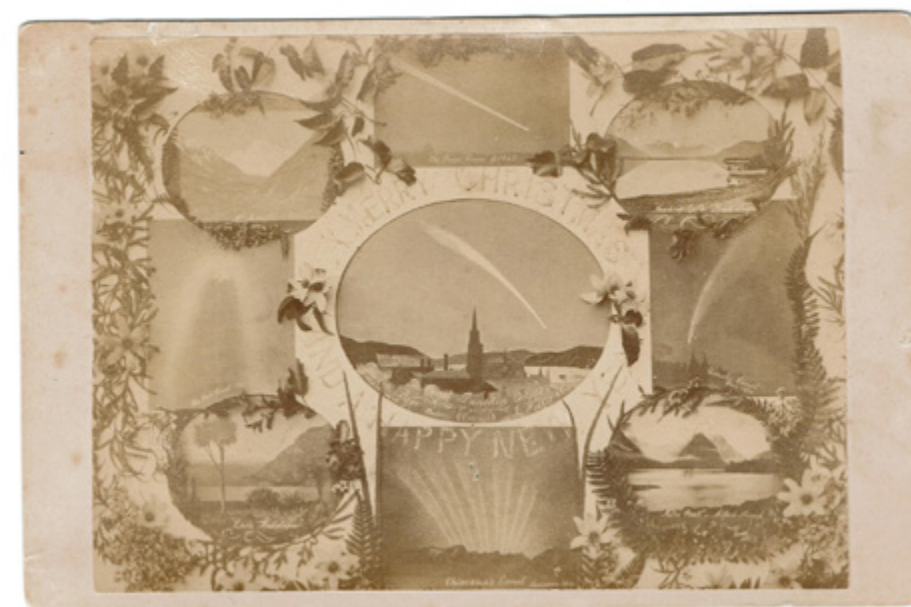


Figure 6 (top): Burton Brothers (photography), J. Wilkie & Co. (Agents), *Five Comets Christmas Card*, 1882, Albumen print (?), 137 x 101mm. Courtesy of the collection of Jenny Long.

Figure 7 (bottom): Reverse of Figure 6, showing the Burton Brothers and Wilkie credits and suggesting that the Burton Brothers were the primary mover in creating the card. Card, 164 x 108mm. Courtesy of the collection of Jenny Long.

luminous paint, which he had started to stock earlier in the year.⁷⁴ Other photographers created comet cards in both Auckland and Wellington. Wellington's William Brickell Gibbs published two.⁷⁵ Their success is arguable, since by mid-December a Lambton quay jeweller was offering his own card, consisting of a photograph of the comet over the Wellington Hills taken by Gibbs – suggesting that Gibb may have offloaded surplus stock.⁷⁶ In Auckland, a single advert speaks of a "Comet Christmas card with views of Auckland and [the] North Shore."⁷⁷ Nevertheless, until examples of these cards are located, it is hard to know how they negotiated the balance of seasonal and local elements.

Only one 1882 card appears to have bucked the trend and envisaged the variety of colonial Christmases. This card has similarly murky authorship issues, but was published by Dunedin drapers Mollison, Duthie and Co., with artwork by George F. Fodor and photography by the Burton Brothers.⁷⁸ It was described in detail by the *Bruce Herald*:

The centre of the card contains a pair of clasped hands with the mottoes, "Hands all round" and "Should auld acquaintance be forgot." Above is a view of a street in Egypt. On the left, Christmas in Australia, with a couple of wild bushmen on horseback shaking hands. To the right, Christmas in New Zealand, represented by some tents, several rough characters jollifying around, with a tin billy occupying the place of honor in the foreground. Below is Christmas in Old England, with its festive gathering, social board, and Christmas tree.⁷⁹

The November publication date shows that this card was aimed at the New Zealand market, so its somewhat caricatured contrast of the outdoor colonial Christmas with the nostalgic depiction of Old English celebration is particularly telling. It was normal, in Christmas periodicals, to frame the colonial Christmas as an Arcadian outback feast.⁸⁰ Yet, though the format of this card potentially connotes a fractured identity, its colonial focus and normative English scene ultimately locate Christmas within the broader unifying framework of 'Greater Britain', a concept that was itself a response to the changing base of Britishness.⁸¹ For individuals, however, the heavy emotional toll involved in negotiating this territory is well articulated by the *Bruce Herald*' writer who, prior to describing the "pretty" card, had noted that "we thank [Mollison, Duthie & Co.] for the card, but are not thankful to

them for suggesting reminiscences which have brought on the 'winter of our discontent' in this country." The piece concludes by saying:

Christmas in the colonies always stir[s] up in our mind a host of recollections which, though pleasing in themselves, are exquisitely painful by contrast, and Messrs Mollison, Duthie, & Co. have been good enough to bring on that feeling of wretchedness which visits us every year more than a month before the time. It is not kind of them. The only way in which a British born subject can enjoy a merry Christmas in this "new world of ours" is by forgetting all about Christmas in the old world, and that he can hardly do without getting outside of enough whisky to produce mental oblivion.⁸²

By the 1880's, and despite continuing immigration, increasing numbers of New Zealanders were not British born, providing a tension between those for whom a summer Christmas was normal, and those for whom it was an aberration. Had Mollison, Duthie & Co., as a local firm, opted to show only a New Zealand and an English Christmas, they might have highlighted this fractured New Zealand experience. Instead, by adopting a multiview format to show a variety of traditions pivoting around core English practices, they ultimately created an image that exemplifies the colonial ideal.

For Greater Britain, with its assertion of the British cultural continuity across the colonies, to be a reality, common forms of celebration were necessary. Christmas had to be both embedded and maintained. The English Christmas card's post-1860s' focus on imagery of the seasons complicated the process of establishing a common colonial Christmas vocabulary. Imported cards, with their winter scenes, appealed because they spoke to immigrants' memories and their enduring sense of the proper way to celebrate a distinctly English holiday. New Zealand card producers, however, regarded the Christmas card as a venue to foreground New Zealand's distinctive summertime celebration, allowing locals to advertise the country's charms and differences to their friends. Of the fourteen 1882 New Zealand-produced cards (or card series) identified here, the majority opted to frame a New Zealand Christmas by using flowers and landscapes. But such subject matter was standard for cards around the world, and consequently the local cards maintained enough similarity to avoid fully transgressing recipients' expectations. In other words, the specific content provided a flavour that allowed New Zealanders to differentiate

without disassociating. This aligns with Mark Connelly's conclusion that the colonial Christmas was typified by a "co-existence of themes and traditions" that allowed a "nascent sense of nationhood" while bolstering a broader sense of Britishness.⁸³ Despite this, although the marketing rhetoric of the Christmas card entrepreneurs appears to fit with a narrative of emerging nationalism, their choice of visual rhetoric closely follows Peter Gibbons' prescription of what cultural colonisation might look like.⁸⁴ Circulating carefully labelled images of native flora and unspoilt, iconic natural landscapes was a method of establishing possession, one that integrated settler experience within the broader colonial framework. It was no coincidence that the signifiers chosen were drawn from New Zealand's nature rather than its culture.⁸⁵ Māori as well as Pākehā celebrated Christmas.⁸⁶ Yet they did not figure in any of the cards' imagery, and could rightfully have been a little cynical about a debate that excluded them while pitting one form of cultural colonisation against another.

Ultimately, the fact that the local Christmas card industry quickly gained momentum between 1880-82 shows that a sizeable group of pākehā New Zealanders wanted to support local enterprise and responded to narratives that asserted the distinctiveness of their Christmas experience. This was why, from 1883, A.D. Willis trumpeted the message of supporting local industry as he advertised his fully chromolithographic coloured Christmas cards of New Zealand landscapes.⁸⁷ But, for all his nationalist fervour, he was not able to compete with the flood of imported cards.⁸⁸ Within a Greater British framework, there was intrinsically no reason for colonists to avoid sending back images of an Old English Christmas, since the imagery on imported cards would remain meaningful to recipients in Britain, as well as reinforcing a shared cultural reference point if sent locally. By exploring the ways designers and manufacturers adapted the Christmas card craze to New Zealand, this paper has shown that, despite the attempt to localise, they were unable to escape the broader apparatus of colonialism. Tempting as it is to frame the development of New Zealand Christmas card as an example of embryonic nation-building, the narrative is better interpreted as a smaller chapter in a different yuletide story – one bearing an indelibly imperial stamp.

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ENDNOTES

- 1 Evening Star, "Christmas Cards," 5 October 1883, p.2, quoting Burton Brothers promotional material.
- 2 Two authors have examined the history of NZ Christmas cards in an introductory sense, though neither in academic venues. G. I. Robertson documented some of the primary sources for a study of the Christmas card, G. I. Robertson, "The Christmas Card: Its Origin and Early Use in New Zealand," *The Mail Coach* 51, no. 1 (2014). Barry Hancox published two papers on the subject of chromolithographic and photographic New Zealand Christmas Cards, and their broader context, Barry Hancox, "Southern Hemisphere Christmas Greetings Cards: Part One," *NZ Ephem-erist*, no. 1 (2008); "Southern Hemisphere Christmas Greetings Cards - Part Two," *NZ Ephem-erist*, no. 2 (2009). Rosslyn Johnson also covered aspects of the early trade in her study of A.D. Willis's cards, Rosslyn Joan Johnston, "Colour Printing in the Uttermost Part of the Sea: A Study of the Colour Print Products, Printers, Technology and Markets in New Zealand, 1830-1914" (Doctoral Thesis, Victoria University of Wellington, New Zealand, 2002), 311-20.
- 3 Jude Piesse, *British Settler Emigration in Print, 1832-1877* (Oxford: Oxford University Press, 2016), 54. In particular Piesse focuses on the role played by popular periodicals in absorbing and containing the threat to British identity posed by colonisation.
- 4 Alison Clarke, *Holiday Seasons: Christmas, New Year and Easter in Nineteenth-Century New Zealand* (Auckland, New Zealand: Auckland University Press, 2007), 1-2, 23, 34, 40-41. Other works on the NZ Christmas include Shirley Maddock and Michael Easther, *A Christmas Garland* (Auckland: Collins, 1980). and Sarah Ell, *A New Zealand Christmas: Three Centuries of Kiwi Christmas Celebrations from the Alexander Turnbull Library* (Auckland, NZ: Godwit, 2008).
- 5 Peter Gibbons, "Cultural Colonisation and National Identity," *New Zealand Journal of History* 36, no. 1 (2002): 7-8.
- 6 Clarke, 46.
- 7 John Storey, *Inventing Popular Culture: From Folklore to Globalization* (Malden, MA: Blackwell, 2003), 17.
- 8 Stephen Nissenbaum, *The Battle for Christmas* (New York: Alfred A. Knopf, 1997), 6. Ronald Hutton, *The Stations of the Sun: A History of the Ritual Year in Britain* (Oxford: Oxford University Press, 1996), 112-14, 21, 487. Mark Connelly contests the widespread belief that the Victorians reinvented Christmas, saying that they reshaped it in the spirit of antiquarian protection. Mark Connelly, *Christmas: A History*, Paperback ed. (London: I.B. Tauris, 2012), 2-3. It is worth noting, as an antidote to the academic consensus that Christmas was not a religious holiday, that Christmas card collector Arthur Blair found numerous examples of early cards with religious subject matter. Arthur Blair, *Christmas Cards for the Collector* (London: B.T. Batsford, 1986), 30.
- 9 On the nature of Christmas in the periodical press, see Piesse, 49-80.
- 10 On earlier Religious Tract Christmas cards, see Robertson, 13. On other forerunners to the Christmas card, see George Buday, *The History of the Christmas Card* (London: Spring, 1954). Although old, Buday's book remains the most comprehensive piece of original research on the history of the Christmas card.
- 11 The Otago Daily Times, "News from Home," 23 January 1875, p.6. This quote gives a New Zealand perspective on typical British Christmas card imagery, remarking on "time honoured representations of robins perched on snow-laden trees." Buday also sees robins as the dominant motif of the period. , 100. whilst Ettlinger and Holloway focus more generally on winter scenes. L. D. Ettlinger and R. G. Holloway, *Compliments of the Season* (London: Penguin, 1947), 25.
- 12 *New Zealander*, "Christmas Gifts," 21 December 1861, p.3. Buday gave 1862 as the date for the first serious commercial Christmas card publishing, but this advertising suggest we should put the date at least a year earlier. Buday, 100. This 1861 reference predates the earliest mention found by Robertson by a year. Robertson, 13.
- 13 *New Zealand Herald*, "Spectemur Agendo," 13 December 1876, p.2. Mark Connelly uses an 1881 quote from the *Lady's Pictorial* to show Christmas card display as being the indicator of the impending season. Connelly, 192.
- 14 Clarke, 15, 37.
- 15 Otago Daily Times [untitled], 21 October 1876, p.2. On Scottish unfamiliarity with Christmas, see Clarke, *ibid.*, 37.
- 16 Connelly, 189.
- 17 Buday, 53.
- 18 Alan Jackson, *New Zealand Postcards: Rates & Regulations to 1939* (Auckland: Postal History Society of New Zealand, 1984), 2. This was evidently not known to all. As late as 1881, papers were belatedly advising readers that they could send cards half price nationally (at "book rates") for a penny, if the envelope was left open. Thames Advertiser, [untitled], 29 December 1881, p.3.
- 19 A list of postal rates that applied during this period can be found in the *New Zealand Herald*, "Postal Rates, &c.," 1 January 1883, [supplement]. Letters within New Zealand and Australia were 2d, whilst it cost 6d to send a letter to the rest of the world.
- 20 Jock Phillips and Terry Hearn, *Settlers: New Zealand Immigrants from England, Ireland and Scotland 1800-1945* (Auckland: Auckland University Press, 2008), 41.
- 21 *The Globe*, [untitled], 26 April 1879, p.2.
- 22 Buday, 57-8.
- 23 E.g. *Lyttleton Times*, "Literary and Art Notes," 18 January 1881, p.5; Otago Daily Times, "Advertisements," 26 December 1881, p.1. On Raphael Tuck's competition see Peter Gilderdale, "Hands across the Sea: Situating an Edwardian Greetings Postcard Practice" (PhD, Auckland University of Technology, 2013), 225-6. On Prang's competition, see Penne L. Restad, *Christmas in America: A History* (Oxford: Oxford University Press, 1995), 121-2.
- 24 *Timaru Herald*, "Christmas at Home," 20 October 1880, p.1.
- 25 Restad, 118.
- 26 On the language of flowers, see Gilderdale, 180-3, 434-8.
- 27 Although Restad notes that Prang's cards catered to American taste, there is no evidence that nationalism was a driver of the competition itself, which was framed around issues of making good art more available for the masses. Restad, 120-22. Nevertheless, cards like figure 4 were arriving in the New Zealand market.
- 28 *Sydney Daily Telegraph*, "Mr. John Sands' Fine Art Competition," 28 May 1881, p.3.
- 29 *Bay of Plenty Times*, "Fine Art Competition in Sydney," 16 June 1881, p.2. (N.B. this *Papers Past* item is only locatable under the misspelling 'competiton'); *Ashburton Guardian*, "Our Sydney Letter," 11 June 1881, p.2.
- 30 Piesse, 57.
- 31 *Star*, "Random Gossip," 29 December 1881, p.3. The author misattributes the Australian competition cards to another early entrant into the Australian market, Gibbs, Harland and Co.
- 32 Roslyn Johnston makes this point in relation to A.D. Willis's cards: Johnston, 315.
- 33 Otago Witness, "News of the Week," 18 September 1880, p.18.
- 34 *Wanganui Herald*, "Advertisements," 8 December 1880, p.2. Christine Whybrew's extensive PhD thesis on the Burton Brothers' work does not address their Christmas card production in any detail, perhaps because the negatives have not survived. Christine Whybrew, "The Burton Brothers Studio: Commerce in Photography and the Marketing of New Zealand, 1866-1898" (Doctoral Thesis, University of Otago, 2010). They nevertheless fit well into her overall argument that the Burton's work needs to be understood within an international culture, where images were commercial products that were mediated by accompanying texts.
- 35 *Evening Post*, "Advertisements," 15 October 1881, p.3.
- 36 *Wanganui Chronicle*, "Local and General," 26 December 1881, p.1.
- 37 *Wanganui Herald*, "Advertisements," 19 October 1872, p.3. 1872 was Willis's first year in trade as a bookseller. Johnston, 292.
- 38 *Evening Star*, [untitled], 5 December 1881, p.2.
- 39 *Poverty Bay Herald*, "Small Courtesies," 18 November 1882, p.5.
- 40 *Wanganui Herald*, "The Taupo Road," 21 November 1882, p.2. Robert Coupland Harding noted his cousin Lydia had done flower paintings for later Willis cards. Johnston, 317. As yet, I have not been able to positively identify any of this series of cards in museum collections.
- 41 *Wanganui Herald*, [untitled], 16 October

- 1882, p.2. The card of the previous year was lithographed. It is unclear whether the three colour printing here is an early introduction of chromolithography on Willis's part. It is generally thought that Willis did not introduce the technique until 1883. *Ibid.*, 302.
- 42 *Ibid.* The Herald did not mention Harding by name, while the Wanganui Chronicle's reportage on the same day mentioned Harding, but not Willis. Wanganui Chronicle, "Local and General," 16 October 1882, p.2. Willis's involvement with the Herald probably accounts for this.
- 43 On Dunedin's photographic trade, see Whybrew, 27.
- 44 Hancox, "Southern Hemisphere Christmas Greetings Cards - Part Two," 23.
- 45 Evening Star, [untitled], 22 December 1882, p.2; Otago Daily Times, [untitled], 23 December 1882, p.2.
- 46 Evening Star, [untitled], 24 November 1882, p.2.
- 47 Leves' art has been largely overlooked in New Zealand, where he is noted as a glass embosser and photographer <https://teara.govt.nz/en/biographies/2f24/fraser-rob-ert-henry>; <http://canterburyphotography.blogspot.co.nz/2009/03/leves.html?m=0>. However, in 1876 he was advertising that he had thirteen years' experience in London as a house decorator, Otago Daily Times, "Advertisements," 28 August 1876, p.5. For the Carnival, he labelled himself a signwriter and decorator, Evening Star, "Advertisements," 31 October 1882, p.3. This is the same occupation listed in the probate notice when he died in Australia. Melbourne Argus, "Advertising" 27 March, 1890, p.10. On the 1882 Carnival itself, see Otago Benevolent Institution, [1882], "Twentieth Annual Report of the Committee of Management of the Benevolent Institution," p.43, in the Pamphlet Collection of Sir Robert Stout, Vol 49, <http://nzetc.victoria.ac.nz/tm/scholarly/tei-Stout49-t21-body-d11.html>
- 48 Evening Star, [untitled], 22 November 1882, p.2.
- 49 Ashburton Guardian, [untitled], 21 November 1882, p.2.
- 50 Otago Daily Times, "The Carnival," 27 November 1882, p.2.
- 51 Gilderdale, 234.
- 52 Evening Star, [untitled], 14 October 1882, p.4. Given that the view of the comet is dated October 8th, the time between creation and publication was very short.
- 53 The Auckland Star published the full poem, Auckland Star, [untitled], 4 November 1882, p.2. This text is also quoted by Alison Clarke, Clarke, 44.
- 54 Evening Star, [untitled], 14 October 1882, p.4.
- 55 Alan Cocker cites an 1881 source on the impossibility of night photography, Alan Cocker, "Photographers Hart, Campbell and Company: The Role of Photography in Exploration and National Promotion in Nineteenth Century New Zealand," *Backstory*, no. 2 (2017): 97.
- 56 The modern spelling is Purakaunui, but the card uses the normal nineteenth century spelling.
- 57 James Belich, *Making Peoples: A History of the New Zealanders from Polynesian Settlement to the End of the Nineteenth Century* (Auckland: Penguin, 1996), 282, 302-3.
- 58 The other version, from the Otago Settlers Museum, is reproduced in Clarke, 44.
- 59 Poverty Bay Herald, [untitled], 24 October 1882, p.2. The *Herald's* piece amplifies the views of the Otago Daily Times, [untitled], 14 October 1882, p.2, where they also talk about a tasteful "embroidery of flowers and ferns."
- 60 Southland Times, [untitled], 17 October 1882, p.2; Bruce Herald [untitled], 20 October 1882, p.3; Western Star, [untitled], 25 October 1882, p.2; Lyttleton Times, "Advertisements," 3 November 1882, p.4; Taranaki Herald, "Advertisements," 22 November 1882, p.3.
- 61 Poverty Bay Herald, [untitled], 24 October 1882, p.2; Thames Advertiser, [untitled], 7 November 1882, p.2; Waikato Times, "Notices," 7 November 1882, p.2.
- 62 Gleeson White noted this trend, blaming drapers for the introduction of cheap cards. Gleeson White, *Christmas Cards and Their Chief Designers* (London: Studio, 1895), 44. Mark Connelly's quote from the 1881 *Lady's Pictorial* (cited above in note 13), mentions the market expanding to Drapers, Milliners and Toy Sellers, away from its "legitimate" setting of the bookseller. Connelly, 192.
- 63 Evening Star, [untitled], 14 October 1882, p.4.
- 64 Clarke, 44.
- 65 Gilderdale, 227-30.
- 66 Evening Star, "Late Advertisements," 7 November 1882, p.2.
- 67 North Otago Times, [untitled], 18 October 1882, p.2. The paper credits the cards to Wilkie, and comments that they received a "selection of" the cards, thus showing that there were multiple designs created. Christine Whybrew notes that the Burton Brothers were themselves a group of photographers operating under a single label, so authorship is thus further clouded. Christine Whybrew, "Text and Image in Alfred Burton's Photograph of the Scene of the 'Hursthouse Outrage' at Te Kumi (1885)," in *Early New Zealand Photography: Images and Essays*, ed. Angela Wanhalla and Erika Wolf (Dunedin: Otago University Press, 2011), 62-4.
- 68 On the company's use of numbers see Whybrew, *ibid.*, 62. It is worth noting that some other composite images like their "Great Composite" appear to be unnumbered. Hardwicke Knight, *Burton Brothers: Photographers* (Dunedin: John McIndoe, 1980), 17.
- 69 Otago Daily Times, [untitled], 21 October 1882, p.2. The card was first advertised on the 17th. Evening Star, [untitled], 17 October 1882, p.2.
- 70 The image in Barry Hancox's collection differs from that reproduced here. See Hancox, "Southern Hemisphere Christmas Greetings Cards - Part Two," 28. The fact that both Leves' and the Burtons' cards have more than one version makes it more likely that this was a marketing ploy, rather than a result of the glass plates both requiring reshooting after damage - though this remains a possible explanation, as does their being reshot at a later time.
- 71 On the analogy with album pages see Gilderdale, 251. On the frame story see Piesse, 58-9.
- 72 Cathy Tuoto'o Ross notes that what she terms a photomontaged form was most prominent in Christmas numbers of the periodical press. Cathy Tuoto'o Ross, "'Water Babies in Maoriland': Photomontage in the Illustrated Press," in *Early New Zealand Photography: Images and Essays*, ed. Angela Wanhalla and Erika Wolf (Dunedin: Otago University Press, 2011), 139-40.
- 73 Evening Star, [untitled], 13 November 1882, p.2.
- 74 Otago Witness, "News of the Week," 11 March 1882, p.9.
- 75 Evening Post, [untitled], 18 November 1882, p.2.
- 76 Evening Post, [untitled], 12 December 1882, p.2; Marlborough Express, "Local and General News," 16 December 1882, p.2.
- 77 Auckland Star, "Wanted," 13 November 1882, p.3.
- 78 Evening Star, [untitled], 13 November 1882, p.2.
- 79 Bruce Herald, [untitled], 21 November 1882, p.3.
- 80 Piesse, 75-7. On the Arcadian concept in New Zealand, see Belich, 304-5.
- 81 Duncan Bell, *The Idea of Greater Britain: Empire and the Future of World Order, 1860-1900* (Princeton: Princeton University Press, 2007), 33-4. Jude Piesse notes the way that Christmas periodicals created an international sense of Christmas synchronicity centred round the English hearthside experience. Piesse, 54.
- 82 Bruce Herald, [untitled], 21 November 1882, p.3. The comment about whisky may be ironic, given that the preceding editorial section, pp.2-3, was about the dangers of the colonial drinking culture.
- 83 Connelly, 108, 31-2. See also Piesse, 80.
- 84 Gibbons, 10-11.
- 85 *Ibid.*
- 86 Clarke, 26-30.
- 87 Willis's card production from 1883 and through the rest of the decade is so extensive as to warrant separate study. This has been begun by Rosslyn Johnston, Johnston, 311-20.
- 88 Gilderdale, 232-4, 468-70.

The Other Side of History: Underground Literature and the 1951 Waterfront Dispute

Patricia Thomas

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In February 1951, industrial discord between New Zealand watersiders and British ship-owners led to a dispute that was seen by each as a lockout and a strike respectively. Throughout the duration of the dispute, the Trades Union Congress and Wellington Waterside Workers' Union Action Committee produced and distributed substantial amounts of printed material to stiffen the struggle among its members, vilify strike-breakers and the National Government – whose ultimate aim it was to crush the Union – and to ridicule the police – who were the instruments of enforcement against the newly-minted Waterfront Strike Emergency Regulations. In defiance of Regulation 4(d), which banned the production and distribution of 'seditious' literature, a steady stream of illegal leaflets, pamphlets, lino-cut illustrations and cartoons emerged from the Gestetners and small presses in the homes of members and supporters of the watersiders. While printed material is touched upon in the documented examination of the dispute as a political and industrial struggle, it is never the focus of discussion. This article examines the multi-modal rhetoric of the underground literature to form a picture of one side of the story of what was, arguably, the most disruptive and divisive 151 days in the history of the New Zealand labour movement.

As a means to empower those whose voices would not otherwise be heard, underground literature has long been a tool for protest, sedition and dissent. Its ephemeral nature and quotidian function often lead to its quick disposal.¹ If it survives it offers a rich source of evidence from which to build a narrative of history that differs from official histories; those versions of events usually filtered through traditional power bases.² A selection of the underground literature related to the 1951 Waterfront Dispute is held in the Turnbull Library.³ These records, and the narratives they provide, would have been lost had it not been for the “pack rats of the New Zealand labour movement” who collected the material, kept it safe, and so made its acquisition by publicly-accessible institutions possible.⁴ There have been a number of written accounts of the dispute: accounts that approach it generally or specifically and from both sides.⁵ There are also oral histories that add the personal reflections of the participants: reflections that were recorded *after the events* of 1951.⁶ But, there has been little close attention paid to the underground literature produced *at the time* of those events, by the same participants.

This article explores how the multi-modality of this literature – the confluence of text, type and image – was used to maintain a position against “police thuggery, fascist regulations and the international pirates that called themselves ship-owners.”⁷ Recognition of the value of multi-modal analysis of texts is fairly recent within linguistic and literary scholarship.⁸ It has directed our attention to the richer and more diverse possibilities of analysis that examines texts and images as corresponding parts of the same message. Lately, scholars have pointed also to the usefulness of understanding how type – the ‘dress’ of a text – contributes to the rhetoric of a message.⁹ Texts seen through this lens, and examined in conjunction with narratively-connected images, can reveal an expanded semantic network that further enhances the message.¹⁰ The article specifically examines how the Wellington Waterside Workers’ Action Committee and the Trade Union Congress (TUC) used such multi-modal messaging to vilify and ridicule their adversaries during the most disruptive and divisive 151 days in the history of the New Zealand labour movement.¹¹



Figure 1: Max Bollinger, Holland 'Canute' attempting to hold back the rising tide of militancy. Wellington Watersiders' Official Bulletin 6 (detail), 27 March 1951. Herbert Roth papers, MS-Group-0314, Alexander Turnbull Library (0314 ATL).

THE DISPUTE

Melanie Nolan points out that the Dispute, which began on 15 February and ended on 15 July 1951, was as much political as it was industrial.¹² Disputes over wages and conditions, and a struggle for control, were the catalysts for frequent antagonism between waterside workers and their employers (mostly British shipping companies) in the years immediately following the Second World War. The Federation of Labour (FoL) set up in 1937 to provide unity among disparate trade unions, sought to gain some control over decision-making through cooperation: a kind of soft socialism.¹³ It worked closely with the Labour Party, which was founded in 1916 as “largely, although not exclusively, a union party.”¹⁴ The first Labour Government came into power in 1934, but by the 1940s, its working-class base was eroded as its membership and parliamentary representation progressively become more middle class.¹⁵ This had the effect of de-politicising the unions. The FoL became preoccupied with the “bread and butter” issues of day-to-day needs, rather than of union control over its own affairs.¹⁶ In the latter years of the 1940s, the New Zealand Waterside Workers’ Union (NZWWU), along

with the Carpenters', Miners', Tramwaymen's and Drivers' Unions, broke from the FoL and formed the more self-avowedly militant TUC. Rather than take cases to arbitration, a system put in place as a piece of anti-strike legislation in the 1930s, it opted for direct negotiation. This was the situation in early 1951 when the NZWWU refused to work overtime – an action the ship-owners deemed a strike – and the shipping companies dismissed them – seen by the Union as a lockout. The issue became overtly political when the newly-elected National Government assumed control of the Dispute, welcoming the opportunity it presented to curb the Union's militancy and curtail its power. By weakening this strong Union, it hoped to rid the labour movement in general from what it saw as the influence of communism (Figure 1).

The FoL was alarmed at the militancy of the action and did not support the Union. Nor did the Labour Party, though it spoke against the Government's methods. This left the NZWWU and its supporting unions completely isolated.

THE MATERIAL

Due to its isolation, the Union was left with very little ammunition save "hurling words at the Tory attacks."¹⁷ Dick Scott, editor of the *Transport Worker*, estimated that the Action Committee distributed 650,000 bulletins, 400,000 pamphlets and an additional 400,000 miscellaneous pieces. Less than ten per cent was printed legally, resulting in over a million pieces of literature reaching readers through clandestine production and distribution networks.¹⁸ One of the pack rats, Rona Bailey, recalled that the diversity of people working at some time on the wharves provided a lode of capability available to swing into action when the time came to organise against the Government, the police, the ship-owners and the mainstream press.¹⁹ Some could write, some were talented cartoonists, and others knew how to print. The most numerous and consistent among the productions were the Information Bulletins, produced two or three times a week in print runs of between 2000 and 9000. Along with the text, edited and typed up by Chip Bailey, nearly every bulletin contained a cartoon by Max Bollinger. Neither Bailey nor Bollinger were watersiders; at the time, Bailey was a taxi driver and Bollinger, a freezing-worker. It was not until 1984, when he no longer needed to hide the fact, that he confirmed that it was he who produced upwards of a hundred cartoons for the bulletins

and other assorted polemics.²⁰ According to Bailey, the bulletins were "the only publication that brought, and still brings, the truth about the Wellington waterfront to the public."²¹ The Government labelled the Union's material "inflammatory, unbridled, scurrilous, poisonous, malignant, savage, filthy and foul."²²

Rona Bailey thought that the bulletins were produced well, and generally they were, given the constraints under which they were produced. They were carefully designed with a consistent masthead and a hierarchy that directed readers to specific items and allowed for emphasis of any issue they addressed (Figure 2).

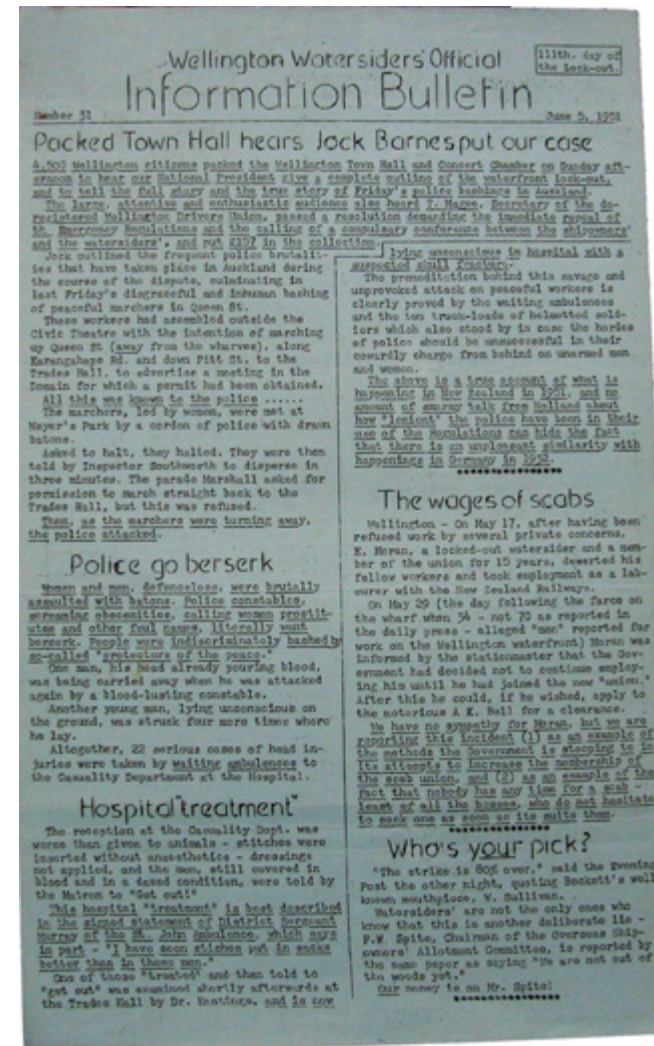


Figure 2: Wellington Watersiders' Official Bulletin 31, 5 June 1951. ATL. This demonstrates some attention to the detail of design, hierarchy and visual emphasis. It is likely to be a first edition of the same bulletin in figure 12, which is dated 6 June 1951 and printed on different coloured paper. (0314 ATL).

The characteristic handwritten lowercase 'e' that runs throughout all the issues suggests a single designing hand at work, though whose it is, is unclear. The bulletins were printed on either quarto or foolscap paper of a variety of colours, which speaks to the contingent nature of supply. One shortage was remedied by the mysterious appearance of reams of paper from Government offices supplied, in an ironic twist, by their employees.²³ The bulletins were printed, at times hurriedly, on a noisy Gestetner that moved from house to house. To avoid detection, it was operated in rooms that were



Figure 3. Wellington Watersiders' Official Bulletin 41, 2 July 1951. (0314 ATL)

Figures 3 & 4: Max Bollinger. None of the mainstream communication networks were available to the Union throughout the dispute. Like the image in figure 6, it pits the government against both the workers and New Zealand.

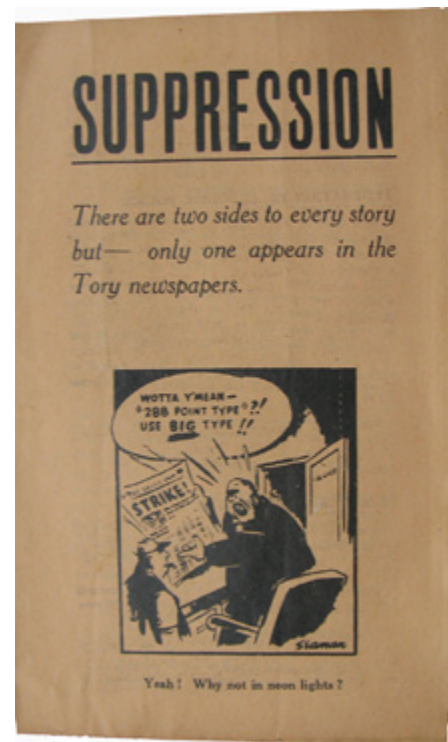


Figure 4. Flyer printed for the Union by C.E. Rose & Co. (0901 ATL).

neither close to the street nor to neighbours. Neither the equipment nor what it produced ever fell into the hands of the authorities who made considerable efforts to find them. Distribution was a multi-faceted and clandestine operation that used elaborate decoy manoeuvres. Each day, bulletins and other material were smuggled past the police on duty and into the Trades Hall for distribution through diversions and the friendly assistance of sympathetic supporters. Some were bus or taxi drivers, and others were irreproachable citizens whose identity Bollinger later noted would cause some surprise.²⁴ So, why the need for such tactics?

EMERGENCY REGULATIONS

Jacqueline Dickenson comments that it is not surprising that groups who line up against the power of the status quo are mistrustful and "riddled with insecurities."²⁵ The watersiders had good reason to be so.²⁶ The anti-strike legislation that followed earlier industrial disputes dictated that funds could not be diverted to striking workers and that striking unions could suffer deregistration. In addition, the Waterfront Strike Emergency Regulations, set in motion without Parliamentary debate at the outset of the Dispute, closed down all the Union's conventional communication lines (Figures 3 and 4).

Specifically, it states that anyone commits an offence against Regulation 4(d) if he or she

prints or publishes any statement, advertisement, or other matter that constitutes an offence against these regulations, or that is intended or likely to encourage, procure, incite, aid or abet a declared strike or the continuance of a declared strike or that is a report of any such statement made by any other person.²⁷

Distribution of such material was also subject to regulation with writing, carrying, displaying or causing to be written, carried or displayed an arrestable offence. The Union protested that this left workers no right of reply to the many accusations levelled against them and no legal or mainstream means to air their grievances. So, the protest went underground, and despite Regulation 13 [1] that forbade offensive or insulting words (images are not mentioned), the TUC and the Union fought back vociferously and immoderately.

FASCISTS, RATS AND SCABS

The TUC's opening gambit labelled the Emergency Regulations "fascist" and "the most disturbing attack on the rights of individuals and trade unionists, as set out in the United Nations Charter of Human Rights, since the advent of Adolf Hitler."²⁸ Much of this rhetoric was designed to push back at the public's endorsement of the Government whose platform of personal freedom and individual enterprise appealed to those weary of the collectivist years of Labour Government.²⁹

Designed to stiffen the struggle and to gain support against what it deemed later to have been a barrage of lies and distortions broadcast through the "prostitute" press and radio, the Action Committee's references to Hitler and Fascism were a dominant trope throughout the material.³⁰ Forcefully reminding readers of very recent events in their lives, they became probably the most offensive epithets the Union could raise to counter the actions of the Government and those, like the FoL vice-president Fintan Patrick Walsh, who supported its actions. The literature declared in a variety of ways that the Government was following in the footsteps of Hitler and Mussolini; that Fascism was alive and flourishing in New Zealand.³¹ For example, in June, the Minister of Works William Goosman said that the watersiders were worse than "transferable diseases" and that they needed to be dealt with. When told that Hitler talked that way, Goosman apparently replied "Hitler was right!" (Figure 5). The Union, its "comrades and womenfolk" vowed to fight with the same degree of "strength and fortitude" they demonstrated during the war.

The Committee suggested that Goosman's words warranted heeding by anyone whose sons gave their lives in the fight against Hitler. "He is a believer in Fascism! He thinks Hitler was right!" it shouts below the cartoon in Figure 5.³² The cartoon itself contains all the expected tropes: the marching lines of anonymous Stormtroopers, identifiable by their German helmets; a cheering and waving member of the public; swastikas along the route; and Goosman himself offering a Nazi-salute to the Prime Minister, Sid Holland. References in a variety of pamphlets mention Fascist methods, gas chambers, Japanese Fascism, the Government that walks "in Hitler's steps", the "iron heels" of Hitler and the "outrageous lies" that were modelled on those of Hitler himself. At the same time, the Union declared that the Government also was beholden to Wall Street, and dupes of the war-mongering United States. It argued that the U.S. sought world domination, citing the Korean engagement as an example. Bollinger often conflated the

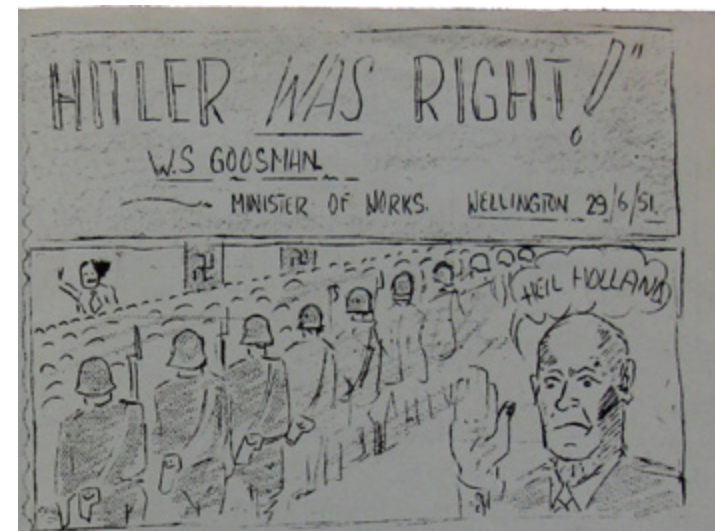


Figure 5: The Union's response to William Goosman's comment on the rightness of Hitler's behaviour. Roth papers, 94-106-10/06, ATL (hereafter Roth papers/a).



Figure 6: Max Bollinger. "Workers v Holland: Holland v. New Zealand". Pamphlet that pits Sid Holland against New Zealand workers and the country itself, with references to the Cold War, the mainstream communication networks and multi-modal references to fascism. (Roth papers/a).



Figure 8: Len Gale. A caricature of Fintan Patrick Walsh constructed from rats. Ministry for Culture and Heritage.

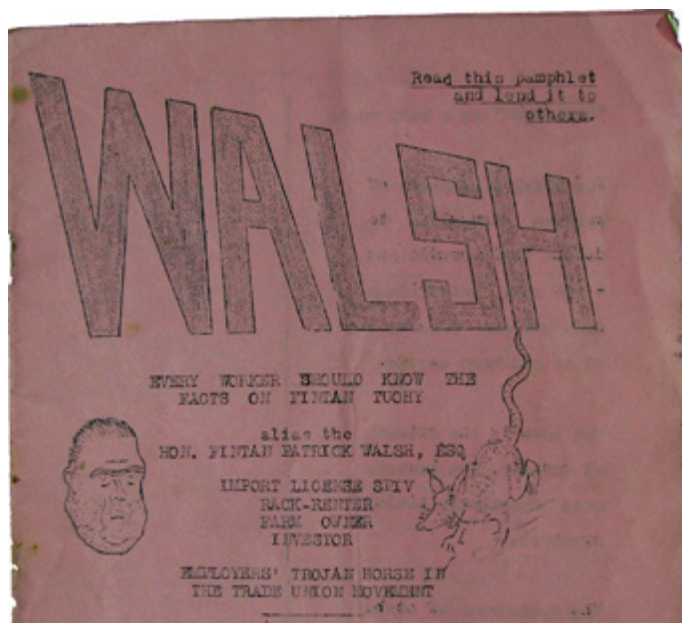


Figure 7: Max Bollinger. While the image again uses fascist symbology, it also comments, through the rat and the list of Walsh's business activities ("Import Licence Spiv, Rack-renter"), on his lack of union credentials. Roth papers, (Roth papers/a).

interests of workers with those of New Zealand in this way. His cartoon in Figure 6, for example, contorts an image of Holland himself into the form of a swastika, which by then had come to signify malevolence.

The image casts Holland, the media, the Cold War and Fascism as both against workers and anti-New Zealand.³³ Those who supported the Government's stance towards the dispute were equally vilified, and none more so than Walsh (Figure 7).

As President of the FoL, Walsh was an obvious target. The Action Committee painted him as a rat with Nazi connections. As the term used to describe a betrayer who abandons its colleagues, the rat has a long history, beginning with Shakespeare's reference to rats and sinking ships. But its characterisation is nuanced. Rather than an instrument of treachery against the working class, *per se*, the rat represents a betrayal of the ideal of working-class solidarity, and to some extent, of a shared ideal of manhood.³⁴ Union solidarity, core to male-dominated industries, was seen as a respectable masculine activity.³⁵ Auckland illustrator Len Gale's lino-cut pictures Walsh textually and visually as a group of rats (Figure 8).

The image de-humanises the FoL vice-president, renders him less than a man and more of the despicable animal that the Union argued he was. In another cartoon Bollinger articulated 'Walsh' as a

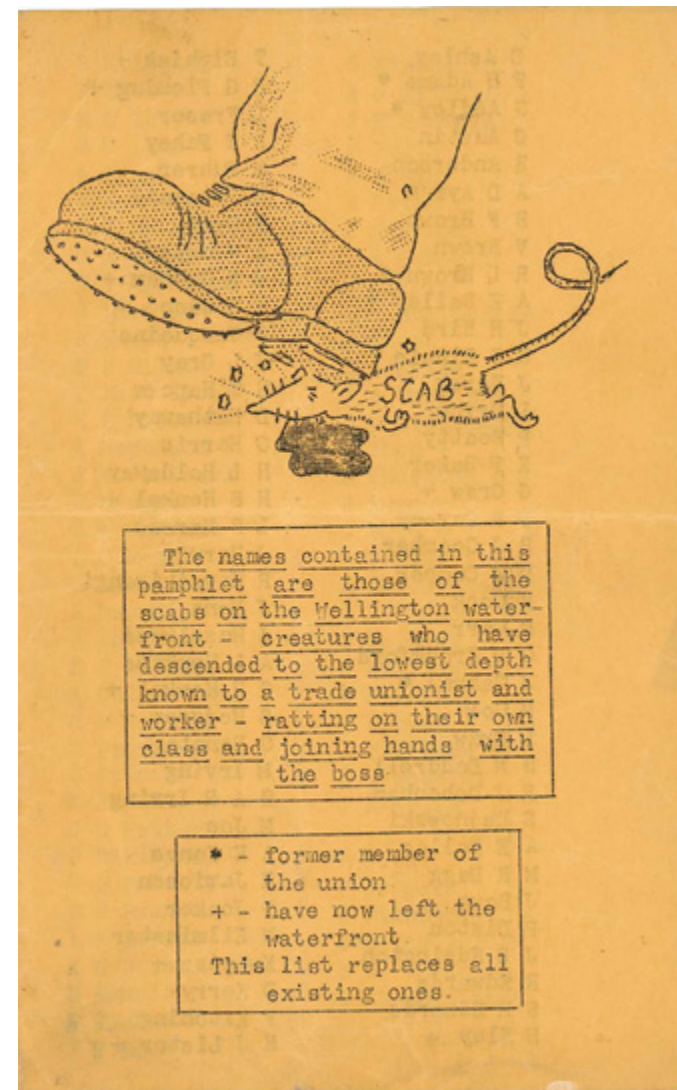


Figure 9: Max Bollinger. *Scab*; the names contained in this pamphlet are those of the scabs on the Wellington waterfront - creatures who have descended to the lowest depth known to a trade unionist and worker - ratting on their own class and joining hands with the boss. Front cover of one of the many scab lists. Eph-A-Labour-1951-04-front. ATL.

monumental pseudo-swastika, its verticals and horizontals resembling the symbol's dynamic arms. Walsh's face, a rat, and a reference to a Trojan Horse suggest a symbiotic relationship among them. In Figure 7 he is identified by his birth name of Tuohy. Another pamphlet emphasises his treachery, calling him a sooler-on (an attacker), grouping him with a snake (a metaphor for a treacherous person), a toad (understood as an Aesopean treacherous devil) and a snail.³⁶ The rat epithet was not confined to Walsh. Along with scab, it became a multi-modal way of speaking of strike-breakers.



Figure 10: Max Bollinger. Scab labour in the form of a rat and less than a man being escorted onto the wharves by Holland's 'scab-herders'. Wellington Watersiders' Official Bulletin 26, 21 May 1951. (0314 ATL).

In the eyes of the Union, a scab was a creature made from some "awful substance" left over after the making of the toad, the snake and the snail. It had a "cork-screw soul, a water-sogged brain and a combination backbone made of jelly and glue."³⁷ Physically, it is material that forms over a wound, but has come to represent a morally disfiguring disease in union rhetoric. A scab was seen as a greater enemy than employers or the governments.³⁸ At a time when physical labour could be hard and dangerous, brotherhood was crucial. 'Scab' is visited upon those who threaten the solidarity of labour by not standing shoulder to shoulder with their brothers. Some unionists were fined and even imprisoned for hurling this "ultimate in insulting language" at their adversaries.³⁹ There is little way to picture a scab and while the name remains in texts, the rat was more often how it was articulated visually. The Union produced scab lists that divulged the names and addresses of strike-breakers, one of which is illustrated with a large workman's boot crushing a rat beneath its heel – "the names listed in this pamphlet are those of the creatures at present befouling the Wellington waterfront - when we pass an open sewer we will remember them" (Figure 9).

Scabs came largely in the form of men recruited or 'herded' for waterside work, men who were enticed, against Union pleas, into forming a new union after the NZWWU was deregistered. In Figure 10, Bollinger depicts a scab/rat accompanied to work by the 'brute force' of the Government's enforcement tools. Many such men were protected by police cordons as they made their way past the unionists to the wharves. One of the most ingenious pieces of pamphleteering against scabbery was perpetrated by workers in the Government Printing Office. Using an official Department of Health illustration of a rat in a leaflet that warned against the industrial diseases brought by vermin, they over-printed across it "Don't scab" and issued it in thousands of copies.⁴⁰ While some adversaries were vilified as scabs and rats, the police were ridiculed. This is especially evident in Bollinger's cartoons.

VICTIMS OF POLICE BRUTALITY

The sheer volume, and the apparent effect, of the literature that issued from the Action Committee's Gestetners and the TUC's presses made enforcing the Regulations against it a priority. While the mainstream press reported the "reign of terror" perpetrated by the "Communist-inspired dock workers," Bollinger illustrated the other side.⁴¹ His wryly humorous cartoons spoke of the "victims of police brutality", illegal searches and the targeting of women and children.⁴² Under Section 18[b] of the Regulations, a police officer in pursuit of evidence of a suspected offence against the Regulations was allowed to enter "land, premises or place" or arrest any person.⁴³ Looking for the tools of the illegal literature, plainclothes police raided "and ransacked" homes, often without warrants and late at night.⁴⁴ Bollinger's depiction of this obviously goes beyond what the police were even likely to do, but it highlights the perceived ridiculousness of the police response (Figure 11).

"Do you hear the tramp of Holland's jackbooted Stormtroopers invading the privacy of your homes in the dead of night?" asks a pamphlet produced by the TUC.⁴⁵ Even while the Government was arguing for the lenient position taken by the police, the cartoon in Figure 12 gainsays Holland's words by suggesting the police physically attacked women. The image in Figure 13 again ridicules police actions through an exaggerated response to the participation of watersiders' families in the distribution of their literature.

Another route the Action Committee took to garner support and vilify the enemy was to link the present struggle with similar historical events. The image in Figure 14 was one among a number of discursive narratives created to remind people that this experience was one of a long line of working-class struggles including the Great Strike of 1913 and the 1932 Queen Street riots.⁴⁶

It might equally have gone further back to evoke the Maritime Strike of 1890. It too began on the wharves and spread to other unions, and it too found itself ranged against ship-owners and the government. So, while the 1951 experience was not a new one, it was a bruising one that ultimately saw the end of the NZWWU.



Figure 11



Figure 12

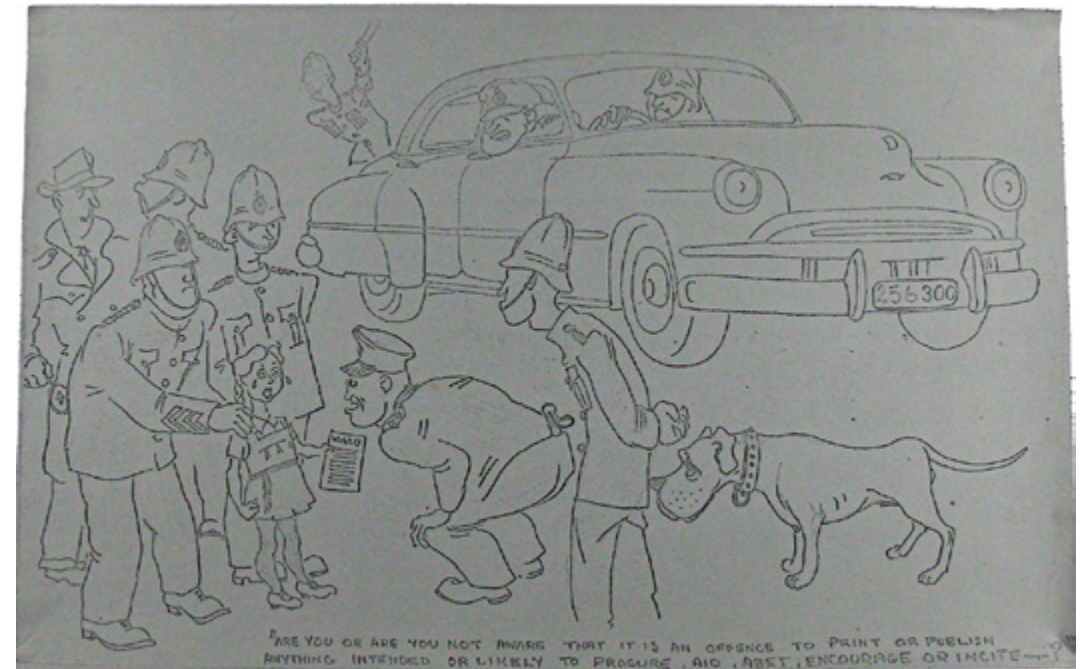


Figure 13

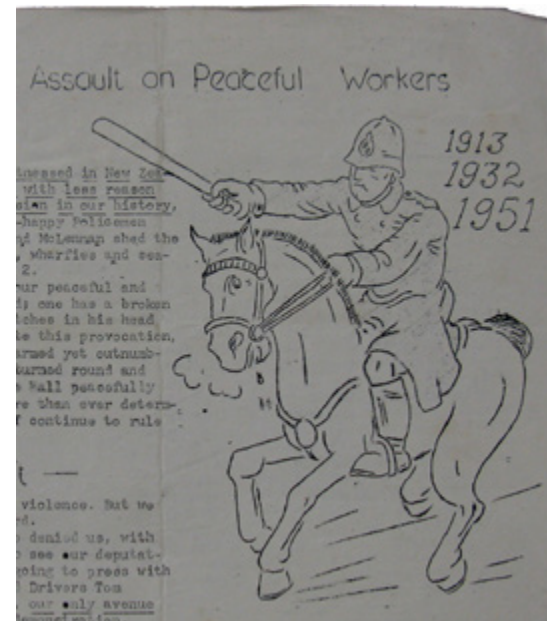


Figure 14

Figure 11. Max Bollinger. A mocking image designed to ridicule police powers and their abuses, during the dispute. Wellington Watersiders' Official Bulletin 14, 16 April 1951. (0314 ATL).

Figure 12. Max Bollinger. One of the Union's complaints was that while the Government was assuring the public that enforcement of the Regulations was moderate, women and children were often subjected to "savage and unprovoked" attacks. Wellington Watersiders' Official Bulletin 31, 6 June 1951. (0314 ATL).

Figure 13. Max Bollinger. A humorous cartoon again designed to ridicule. (0314 ATL).

Figure 14. Max Bollinger. One of the tactics used to gain support was to remind people that the present struggle against tyranny was part of a long and on-going battle for workers' rights. Wellington Watersiders' Official Bulletin 18, 2 May 1951. (0314 ATL).

CONCLUSION

By the production of Bulletin 35, the Committee was resolved to continue the struggle in spite of reducing numbers remaining loyal. For many, the situation had become untenable. Some watersiders felt financially obliged to take work in other industries; many of the support strikes went back to work. The Government was unmoveable. Having put strike-breakers and the armed services to work on the wharves, it saw no need to give in. And it didn't. On 15 July, the Union conceded defeat. A newspaper report noted that there would be no more anonymous strike pamphlets beyond the last, number 43. They were wrong.

Buoyed by their success in breaking the strike, the Government called an early election. The Action Committee then set out to think about the future of unionism on the wharves and to campaign against the National Party in the election. It continued to fight through the medium of the bulletins, but, in the end, the National Party retained its majority. The toll on Union members was heavy. The dispute cost jobs and exacted misery on thousands. Weaker unions replaced the once-strong Union, the Labour Party struggled to gain purchase within the electorate, and the cause of unionism was set back for years afterwards. The struggle was always going to be hopeless given its time in history, the resolve of a strong government and the support of the public. But what the underground literature has produced is a picture of the inside of the struggle, some the issues and concerns of those who supported it as it played out over the 151 days. And in retrospect, as the editor of the 1960s/70s underground magazine *Cock*, Chris Wheeler, points out, the material demonstrates "what could be done with a simple little printing press [sic] hidden away in someone's basement."⁴⁷

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- 14 Webber, "Trade Unions", 3; see also John A. Lee, *Socialism in New Zealand* (London: T. Wener Laurie, 1938); Peter Franks & Melanie Nolan, eds, *Unions in Common Cause: The New Zealand Federation of Labour 1937-88* (Wellington: Steel Roberts, 2011).
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- 41 Quoted in Scott, *151 Days*, 111. There is no evidence that either the president of the Union, Jock Barnes, or its secretary, Toby Hill, had any affiliation with the communist party. This is in contrast to Walsh who had been a member of the Communist Party at one time.
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Historical Emergences of Design Thinking in Theory and Practice.

Alan Young

Keywords: #Design thinking #design process #discourse #history #New Zealand #Better by Design #IDEO

Design thinking has emerged over the last twenty years as a new way of understanding the process and value of design, as it is applied in practice to assist the processes of other industries and organizations. By envisaging this through a Foucauldian lens, we are able to excavate the strategic 'gathering' of sources which act to validate and empower this set of practices as a coherent, historically situated, emergent discourse. This paper identifies the early emergences of the discursive elements of design thinking, and indicates the key validating theories and practices that support it.

INTRODUCTION

The past twenty years has seen a growing importance placed by Government and industry on design thinking. In 2004, New Zealand Trade & Enterprise initiated a 'Better by Design' team to deliver a programme to 'boost the competitive advantage of local businesses through world-class design'.¹ Better by Design promotes design thinking as a key design methodology through which this can be achieved². In 2017, DesignCo.³ published a report titled 'The value of design to New Zealand', which estimates the yearly economic contribution of design at approximately 10.1 billion dollars. This report places considerable emphasis on the importance of *design thinking*, noting that it is 'ubiquitous across all disciplines'⁴, pointing to the 'growing body of evidence that demonstrates the value of design thinking and processes as tools for driving innovation within the public sector'⁵.

*Design thinking*⁶ is, from a design perspective, something of a strange animal. It is primarily directed at non-design industries, proposing a specific set of practices that may be helpful to these industries, and based on underlying theories that suggest a unique way that designers operate. It has thus impacted design practice and education, such that we now find it in design curricula, in some regards shifting how design is seen and even what design *is*. On its emergence in social design, Tonkinwise⁷ has asked 'What is design that designers think reformed sociality is the outcome, if not also the means, of what designers do?' We might ask the same question regarding all of the industrial applications of *design thinking*. This paper explores these specific practices and theories through a Foucauldian lens in an attempt to excavate the mechanisms of their emergence and validation.

Interlocutors who feel passionately about the value of certain institutions, ways of operating, and the like, often heroize them, emphasizing their original, or 'special' nature. There is therefore the temptation to imagine their emergence as unique and historically dissociated from other occurrences. Yet, nothing emerges from a vacuum. Alternatively, we are often presented with historical depictions of key practices as a continuously unfolding evolution towards a present superior form. Foucault's notion of discourse is particularly useful in considering these kinds of emergences⁸. Discourse, in this sense, is where certain practices are brought together as a unity. Through this process, previously disparate components of the discourse are linked and officially sanctified through a professional language

with concurrent systems of accreditation which specify what may be practiced and who may practice it. Precisely what is chosen to be included and what remains excluded from the category, and thus what is and is not to be considered within the boundaries of the discourse can be seen in terms of the strategies of various social and institutional groups and stakeholders. Thus, rather than seeing *design thinking* as unique event, or natural evolution, this paper regards it more as a strategic *choosing* of useful elements by numerous stakeholders with different, but related perspectives. As such we might look at the history of the subject as a collection of noted historical emergences gathered to construct a decisive narrative; what Foucault terms 'a history of the present'⁹. We might compare the formation of *design thinking* to Foucault's explication of the formation, for example, of medical discourse; consisting of various speaking positions (doctor, nurse, patient, and the like), educational and industrial institutions (universities and hospitals), a legitimizing history, and a language specific to medical discourse. Each of these contribute to ways that power is enacted throughout the discourse, and dictate who, within the discourse, make speak to whom and about what.

A HISTORY OF THE PRESENT

We can regard design thinking within the overarching discourse of design generally, which emerged over the last two centuries, through various strategic relations to national economic interests. This can be seen as early as the 1835 Select Committee hearings, where British manufacturers and government attempted to combat the perception of French superiority in product design. The committee was set up to officially inquire into:

The best means of extending a knowledge of the Arts and the Principles of Design among the People (especially the Manufacturing Population) of the Country; also to inquire into the Constitution, Management and Effects of Institutions connected with the Arts.¹⁰

Immediately post-war, Britain staged two festivals to demonstrate the value of British design and innovation. Of the 'Britain Can Make It' festival in 1946, Atkinson¹¹ notes the intention centered around 'the value of "good" design and telling a story about how design could be ever improved'. The Festival of Britain in 1951 was wider in scope, but maintained the intention of demonstrating the value

THE TIMES FESTIVAL OF BRITAIN SUPPLEMENT



FEATURES OF THE FESTIVAL

Here is a brief list of the main events in the Festival of Britain. Cut it out and keep it by you—it will help you to make your plans this summer.

EXHIBITIONS

London
 South Bank Exhibition May 4 - September 30
 Festival Pleasure Gardens, Battersea Park . . . May - November 3
 Exhibition of Science, South Kensington May 4 - September 30
 Exhibition of Architecture, Lansbury, Poplar May 3 - September 30
 Exhibition of Books, Victoria & Albert Museum May 5 - September 30
 1851 Centenary Exhibition, Victoria & Albert Museum May 1 - October 11



Glasgow
 Exhibition of Industrial Power, Kelvin Hall . . . May 25 - August 18
 Exhibition of Modern Scottish Books . . . June 1 - July 28

Edinburgh
 'Living Traditions'—Exhibition of Scottish Architecture and Crafts . . . June 23 - September 8
 Exhibition of 19th Century Books . . . August 3 - September 13

Belfast
 Ulster Farm and Factory Exhibition . . . June 1 - August 31

TRAVELLING EXHIBITIONS

By Land
 Manchester . . . May 5 - 26
 Leeds . . . June 23 - July 14
 Birmingham . . . August 4 - 23
 Nottingham . . . September 15 - October 6

Festival Ship "Compania"
 Southampton . . . May 4 - 14
 Dundee . . . May 15 - 25
 Newcastle . . . May 30 - June 15
 Hull . . . June 20 - 30
 Plymouth . . . July 3 - 14
 Bristol . . . July 18 - 28
 Cardiff . . . July 21 - August 11
 Belfast . . . August 15 - September 1
 Birkenhead . . . September 5 - 14
 Glasgow . . . September 18 - October 6

ARTS FESTIVALS

London Season of the Arts May 3 - June 30
 Aberdeen Festival . . . July 30 - August 13
 Aldeburgh Festival of Music and the Arts . . . June 8 - 17
 Bath Assembly . . . May 20 - June 2
 Belfast Festival . . . May 3 - June 20
 Bournemouth and Wessex Festival . . . June 3 - 17
 Brighton Regency Festival . . . July 15 - August 25
 Cambridge Festival . . . July 30 - August 18
 Canterbury Festival . . . July 18 - August 10
 Cheltenham Festival of British Contemporary Music . . . July 2 - 14



Dumfries Festival . . . June 24 - 30
 Edinburgh International Festival of Music and Drama . . . August 19 - September 8
 Glyndebourne Opera, Mozart Season . . . June 20 - July 21

Inverness 1951 Highland Festival . . . June 17 - 30
 Liverpool Festival . . . July 22 - August 12
 Llangollen (International Musical Eisteddfod) . . . July 3 - 8



Llanwrst (Royal National Eisteddfod of Wales) . . . August 6 - 11
 Norwich Festival . . . June 18 - 30
 Oxford Festival . . . July 3 - 16
 Perth Arts Festival . . . May 27 - June 15
 St. David's Festival (Music and Worship) . . . July 10 - 13
 Stratford-upon-Avon (Shakespeare Festival) . . . March 24 - October 27
 Swansea Festival of Music . . . September 16 - 29
 Worcester (Three Choirs Festival) . . . September 2 - 7
 York Festival . . . June 3 - 17

OTHER EVENTS

London Festival of British Films June 4 - 17
 Edinburgh
 Gathering of the Clans . . . August 15 - 19
 International Documentary Film Festival . . . August 18 - September 8
 Cardiff
 Pageant of Wales . . . July 25 - August 6
 St. Fagan's Folk Festival . . . July 16 - 28
 Dolbreddre, Merioneth Welsh Hillside Farm Scheme . . . May - September

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Figure 1. "Features of the Festival", part of *The Times Festival of Britain Supplement*, 1 May, 1951, p.4.

of British design,¹² with the Council of Industrial Design one of the organizing bodies. It is worth noting that even at this stage there was a strong sense that 'good' design was based on wide ranging research:

The Festival's designs, organized around solving 'problems' that might be found in the home, were underpinned by technical research into building and social science, and advice given by an expert panel of economists, a housing centre worker, a social historian . . . and a Board of Trade official. To qualify for the full design fee, section designers had to demonstrate they had carried out a large amount of social science research into ideal environments in which families could function, and design research into issues such as how to heat a room cost-effectively . . . This removed the immediate focus from what was fashionable or affordable, on to supposedly universal problems such as dripping teapots and draughty windows.¹³

Throughout the latter half of last century, a number of design initiatives emerged in the UK, with the most recent, the *Restarting Britain* initiative outlined in two reports in 2012 and 2014, which promotes of the value of design to industry. As noted above, Aoteoroa has also seen a number of initiatives directed at promoting the value of design to industry, and we can observe *design thinking* as an emerging strategy in these promotions.¹⁴

From its emergence in the 1980s, *design thinking* is now known and practiced across fields from healthcare, business management, and science, to social innovation.¹⁵ Perhaps the most significant emergence of the current notion of the term came from the design company IDEO, which was founded in 1991¹⁶ with *design thinking* as its predominant approach to design innovation. After recognizing its value in their own practice, founder David Kelley initiated a new Institute of Design at Stanford to teach 'design thinking and strategy to business, engineering, and design students'.¹⁷ The practice was also popularized by a demonstration in 'Reimagining the shopping cart', an episode of ABC's *Nightline*.¹⁸ Indeed NZTE's Better by Design instituted a study tour to IDEO and Stanford d.school in 2013¹⁹, and might be seen, from a Foucauldian perspective, as one of the key authoritative voices establishing and propagating the discourse in a New Zealand context.

THE HUMAN-CENTERED APPROACH

Design thinking is defined by IDEO president and current CEO, Tim Brown, as a 'human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements of business success'²⁰. The importance of this emergence is that *design thinking* is defined predominantly not as a discursive element for design discourse, but primarily for use in other industries. For example, the UK Design Commission report *Restarting Britain*,²¹ states that "'Design thinking" was a concept pioneered by IDEO to help companies understand how to think like designers in order to embed design in business practice'. Brown & Wyatt²² describe the shift in ways of understanding design:

Designers have traditionally focused on enhancing the look and functionality of products. Recently, they have begun using design tools to tackle more complex problems, such as finding ways to provide low-cost health care throughout the world. Businesses were first to embrace this new approach—called design thinking—now non-profits are beginning to adopt it too.

The emergence of design thinking as discourse can be seen in its rapid rise in popularity across numerous industries. In 1989, we can still see the term used in its general sense in *Design Discourse: History, Theory, Criticism*,²³ which describes how the various articles underpin 'new tendencies in design thinking' and notes 'those designers who tried to align design thinking with the scientific and technological values that were developing . . .' The new use of the term has seen a surge in its popularity over the last twenty years, with a significant increase in appearance in books from the 1930s to 2007; and scores of books in the last few years with the term as part of the title.²⁴

We can note this trend in the UK Design Commission's reports *Restarting Britain*. The first report from 2012 mentions the term *design thinking* a total of 4 times, while the second report, just two years later in 2014, has sixteen mentions. It suggests an expansive set of areas where design can be applied:

- Redesigning individual services
- Redesigning policies
- Moving beyond the idea of discrete services and redesigning what organisations as a whole do, i.e. systems-level design.

It also contends that the design professional might not only be involved in the spotting, researching and developing briefs for a problem, but should also be involved in working on the solution.

As noted, the primary field for *design thinking* has been that of management, heralded by practitioners like David Dunne²⁵ who notes Herbert Simon's claim for the 'establishment of a rigorous body of knowledge about the design process as a means of approaching managerial problems'. Similarly, Boland & Collopy highlight the possibilities for the relationship between design and management, noting their exploration of 'the intellectual foundations for approaching managing as designing'. Boland & Collopy's²⁶ volume is an edited collection of selected papers from a 2002 workshop on 'Managing as Designing', to discuss how 'knowledge of design could benefit the practice of management'²⁷. Roger Martin, Dean of the Rotman School of Management at the University of Toronto, describes the influence of IDEO's designing of the 'entire consumer experience'²⁸ and the development of the perspective that companies have to reorganize to become like 'design shops in their attitude and work methods',²⁹ referencing the notion here of 'wicked problems' and 'collaborative integrative thinking'. Martin also emphasizes the rising popularity and acceptance of design within the business community, noting that '*Fast Company*'s design issue last year was the biggest selling issue in the history of that company³⁰. Breen's³¹ article for *Fast Company* interviews various 'visionary men and women who are using design to create not just new products, but new ways of working, leading and seeing', noting the 'key design principle' of collaboration; and cites Martin's statement that design 'has emerged as a new competitive weapon and key driver of innovation'.

Design thinking has become transformed from a general meaning of 'the way that designers think' to a rubric for a range of specific, institutionalized practices. In Foucauldian terms, it incorporates a language, historical trajectory, a place in key educational and industrial institutions, and a set of theorists and practitioners, all of which act to validate and propagate the discourse³².

To recognize the validation of *design thinking*, it is worth considering the validation of its key components:

Complex problems and the creative process.

The understanding that many design problems are complex and cannot be adequately approached with linear, scientific thinking. *Design thinking* emphasizes a creative process, open to possibilities of seeing each *solution* as a possible starting point for further investigation and creative possibilities; including the ability to revisit and redefine the initial problem. This may involve the creation of multiple pathways and solutions, both possible and impossible, as ways of exploring new terrains. This also involves moments of unexpected discovery.

Collaboration: Customer/user centeredness

Involving the customer in design stages; with particular emphasis on the emotional as well as intellectual impressions, needs and desires. This also involves an investigation of all aspects of design use for the consumer and other stakeholders, beyond the simple construction of a product or service.

Collaboration: Stakeholder involvement in the design process

The involvement in the design process, of different personnel who may administer or otherwise interact with, the end design solution.

COMPLEX PROBLEMS AND THE CREATIVE PROCESS

A number of key works and circumstances can be seen as forming the validating foundation of the *design thinking* approach. An early emergence of design as a 'way of thinking' is presented in Herbert Simon's volume *The Sciences of the Artificial*,³³ originally published in 1969. Simon regards design as the key discipline that allows ways of thinking that recognize the fundamental patterns within the modern complexity of subjects from the fields of economics, administration, computing and human psychology. He regards design primarily as a process, practiced generally: 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones'³⁴



Figure 2. Inside spread from: 'The Value of Design to New Zealand: A study highlighting the benefits and contribution of design to the economy of New Zealand'. A report by DesignCo released on the 26th of July, 2017 which estimated that design contributed 4.2% of GDP in the year to March 2016.

and 'we can conclude that, in large part, the proper study of mankind is the science of design . . . as a core discipline for every liberally educated man'.³⁵ This approach suggests the notion that anyone can access design thinking; an important proposition for the development of a *design thinking* notion which invites contributions not only from designers, but from all participants and stakeholders in a design proposal, from consumers, to managers, IT professionals and other staff that might be involved with the design outcomes.

This approach is supported by numerous publications on design and exemplified in Cross,³⁶ who states that 'design thinking is something inherent within human cognition; it is a key part of what makes us human'. Although Cross's work is largely concerned with traditional notions of design thinking, it also introduces the important aspect of usability, and the practice of bringing to bear in the design process, of the opinions and advice of non-designers who have experience of the product category.³⁷

To suggest that a process is a natural part of being human runs the risk of devaluing it as a valid methodological approach, and a number of sources have been activated to contend that design thinking is as valid as traditional scientific approaches. One could argue that the emergence of design courses at polytechnics and universities in the 1980s and, in particular, the emergence of postgraduate programs using practice-based design methodologies, saw an increasing demand for the design process to be recognized as valid research. One key source here is the work of Donald Schön,³⁸ which uses the notion of 'reflection-in-action', whereby the design practitioner 'may reflect on practice while they are in the midst of it'. He suggests the process emerges as a result of complexity in the problem:

Because of this complexity, the designer's moves tend, happily or unhappily, to produce consequences other than those intended. When this happens, the designer may take account of the unintended changes he has made in the situation by forming new appreciations and understandings and by making new moves. He shapes the situation, in accordance with his initial appreciation of it, the situation 'talks back,' and he responds to the situation's back-talk.

We can note here a foregrounding of one of the key elements of *design thinking*—that notion that designers deal with complex problems which must be approached through non-linear, reflective, back-and-forth thinking. Schön also notes that, in opposition to logical, linear thinking, the element of surprise becomes significant in reflective thinking:

Much reflection-in-action hinges on the experience of surprise . . . when intuitive performance leads to surprises, pleasing and promising or unwanted, we may respond by reflection-in-action.

Schön makes a powerful argument for the validity of these designerly ways of thinking, basing his enquiry in the context of a crisis in thinking, whereby traditionally validated methods have proven incapable of dealing with the complexity of current problems. He calls for 'not only analytic techniques . . . but the active, synthetic skill of "designing a desirable future and inventing ways of bringing it about"'. Schön's work gained considerable attention from design theorists, becoming required reading for many postgraduate design students attempting to justify their methodology in practice-based enquiries.

We see complexity of the process reiterated in Lawson,³⁹ who notes the indeterminacy of design solutions: 'In some kinds of design one knows exactly where one will end up, in others one has very little idea'.⁴⁰ Design thinking, in its general use, however, was brought to public attention in 1987 through the book of the same title, by Peter Rowe⁴¹. Rowe noted at that time that 'there is no such thing as *the* design process in the restricted sense of an ideal step-by-step technique. Rather . . . designers move back and forth between the problem as given and the tentative proposals they have in mind'.⁴²

COLLABORATION: USER FOCUS

In 1992, Richard Buchanan published one of the key articles to discuss design thinking, 'Wicked Problems in Design Thinking',⁴³ based on a paper delivered at the *Colloque Recherches sur le Design* in 1990. In this, he traces the emergence of design thinking to the 'cultural upheaval that occurred in the early part of the twentieth century'⁴⁴ and notes John Dewey's notion of a 'new relationship between science, art and practice'⁴⁵ and his particular conception of *technology* as 'an art of experimental thinking'.⁴⁶ Buchanan develops in this article an argument for a number of the discursive elements of the current notion of *design thinking*. Firstly, he suggests both the key role of the designer, but concurrently the broad inclusiveness of design thinking, noting its foundation in the liberal arts, which he suggests is:

a discipline of thinking that may be shared to some degree by all men and women in their daily lives and is, in turn, mastered by a few people who practice the discipline with distinctive insight and sometimes advance it to new areas of innovative application.⁴⁷

He also rejects the limiting of design thinking to specific design professions, suggesting instead that these areas are 'places of invention shared by all designers'.⁴⁸ Furthermore, he incorporates the notion of experience design, whereby 'the problem should be studied from the perspective of the flow of customer experience'.⁴⁹ Buchanan defines design thinking as different from linear scientific thinking because of its focus on *wicked problems*, a concept borrowed from Karl Popper and developed by Horst Rittel in the 1960s. Rittel suggests that wicked problems have no true or false solutions, only good or bad ones, always have more than one possible explanation, and are always symptoms of another 'higher level' problem.⁵⁰

We have here a corpus of works that act as a validating foundation for design thinking generally, and in turn, *design thinking* in its current form, as a systematic and multifaceted approach to problem-solving, whereby design problems are recognized as often complex and unsolvable using traditional logical methods. These emphasize the importance of creative approaches that allow for re-defining the initial problem, and approaching it in multiple stages, and from new or previously unconsidered perspectives.

COLLABORATION: STAKEHOLDER INVOLVEMENT

A second key component of *design thinking* is an emphasis on collaboration with clients, other stakeholders, and perhaps most importantly, consumers. This may be through involving them in early assessments of the design problem, or observational research in the development phases.

Design thinking is about using intensive observation – of customers and potential customers, work and social patterns, and global trends – to uncover latent needs, and applying teamwork, experimentation and expertise to figure out ways to meet them. It goes against the popular idea that clever innovation is usually the product of backroom inventors or singular genius, but is instead a creative approach to problem-solving that businesses can learn to master as a source of commercial advantage.⁵¹

Østergaard⁵² notes that a key part of IDEO's approach is a shift from designing customer products to designing customer experience. Yet, although this is a key component of *design thinking*, it is important to recognize that it has long been a practice in a number of design organisations, and perhaps the significance of the current design thinking approach is more in the priority this is given within the process. Marketing, for example, has for many years focused on the customer experience. Their toolbox has included consumer experience reviews, focus groups prior to product release and powerful techniques of market segmentation and analysis, such as the VALS system. This system, initiated by Strategic Business Insights (SRI) is directed at market analysis through consumer behaviours, demographics and psychographics:

The original VALS, launched by SRI in 1978, was a response to SRI studies of the fragmentation of U.S. society in the 1960s and the implications of those changes. The 1960s was also when the advertising industry was transforming to integrated marketing. Advertising visionaries encouraged SRI to extend its work into a marketing tool. SRI's pioneering method of applying psychographics to business management and marketing research enabled marketers to use VALS as a way—beyond demographics—to think of consumers.⁵³

We can also see that, as early as the 1980s, both involving the client in early stages of the design processes, and designing for the total customer experience were already recognized as key components of successful design strategy. One of the most innovative advertising

and design companies of this period, Bright and Associates, had an approach which incorporated both of these perspectives. In Konishi's interview with Keith Bright, Bright describes the company's emphasis on the total consumer experience:

Around 1982 Jay [Chiat] phoned Keith with an odd request "Can you design dinner ware?" He was going to meet the owners of Holland America Cruises and he wanted to take on the account, including looking at the identity in all applications'. What transpired was a two-year, \$5 million program that took Bright onto a different level of branding company . . . Keith considered the whole cruise experience from the first interaction at the travel agent's office all the way through the cruise to its memorabilia. In executive and consumer interviews, Bright identified various points of passenger confusion or disappointment. They also took an inventory of all printed materials, photographed signage at the airports, docks and on board, and they looked at every point of interaction between the cruise brand and the passengers.

'We looked at the arc of a cruise and extended the experience to include selecting the cruise and receiving tickets in a special wallet. We wanted to get the passengers committed to the trip and ensure the planning and buildup was part of the trip's excitement. The cruise itself should then consistently deliver on the experience.'

The program was thorough. It included all utilitarian and directional signage, tickets, brochures, boarding material, even door hangers and ensuite informational items; themed restaurants—signage, menus, wall artwork; all uniforms, travel bags and trip merchandise.⁵⁴

In terms of collaborating with clients and other stakeholders, this too has emerged from historically successful practices in the design industry. New Zealand graphic designer and art director, Warren Smith, was interviewed as part of the Tūhono Toi Hoahoā: Advertising and Design History Research Archive, due for launch in 2018. In this, Warren describes the process being used by Bright and Associates in 1988, which incorporated client feedback from the early stages of the process.



Figure 3. Keith Bright (R) works with a wall of multiple iterations in Bright and Associates' early branding success. Reprinted with the kind permission of Tania Konishi.

I worked for Bob Harvey and McHarman Ayer and I was creative director for a little while. I was mainly art director. Bob Harvey had an opportunity . . . they had the New Zealand Steel account, and Bob came back one day from a briefing by New Zealand Steel. They wanted us to do a totally new campaign for New Zealand Steel. When we sat down in the agency to talk about it, Bob Harvey said, 'There's a bigger problem here and that is that New Zealand Steel looks and sounds like a scruffy little organisation. They don't project themselves as being big and powerful and strong. If we're going to do advertising . . . we need to fix that as well. I've just come back from a trip to America and I've hired a design company called Bright and Associates to do a new corporate design. We have to travel to America for the first presentation'. I got to go to Bright and Associates. It was just a revelation.

Anyway, we go there and it was the first time I'd ever seen a way of doing things that was beyond the kind of, 'I'm the designer. This is what you shall do.' The philosophy was

really good, and I've used it ever since, and it works. They said, 'Okay, guys. You're here because you've given us a brief. We've done lots and lots of work, and your job today is to eliminate the stuff that you don't like of what we've done'. We went into a room about as big as this. There was a coffee table, couple of perks and sandwiches, and they said, 'You're not allowed to come out until you've picked out six designs'. Now, on the wall on A4 sheets, or their equivalent, were black and white designs of every geometric symbol you could possibly imagine. There were hundreds of them. Literally hundreds. The whole room was lined with all of these things, and then at one end, there was a whole lot of logos and different typefaces. They said, 'Your job is to pick out six that you like, and we reserve the right to put into that a seventh, if you don't pick the one that we think has got the legs to go all the way'.

It took us an age. We were shifting things around. We ended up with six and it was good. They said, 'Right, okay. We're going to take those and we're now going to incorporate those. We'll do colours and we'll apply them to stationary and one or two objects, like a mug and a souvenir ruler or something'. They came to New Zealand to do the second and we took them on the big tour. It was great.

I said to them at the end of it all . . . 'I'm very interested in the way you operate'. They said, 'Look. It's a very, very simple principle. If you could get the client to contribute to the decision-making process, you won't have as many arguments. You won't waste money as much'. He said, 'Until you really get to the very end of it, they're involved up to their necks in the whole lot just as much as you are'. He says, 'You have any arguments, have them at the beginning. That's the best time to do it, because it clears the air'.

We can see here, a clear sense of the recognized value of incorporating clients in the actual process of development of the design, from the earliest stages of development, as well as in follow up sessions along the design trajectory. This is one of the key components of *design thinking*, and, along with an approach of designing the total user experience noted above, could be considered a significant early emergence of what today comes under the *design thinking* rubric.

It should be noted that current notions of design thinking are not without detractors and a number of commentators—in some

cases, previous design thinking advocates—have begun to question its current definition or its validity⁵⁵. It seems, however, in spite of these reservations, that the discourse continues to expand, with each year seeing increasingly more design thinking courses and related industry positions developing.

CONCLUSION

One could argue that a primary focus of *design thinking* is the education of industry to the valuable role of a designer or design team in assisting with the instigation and management of design processes to assist in finding solutions for a wide range of issues that industry currently finds problematic. In New Zealand, the discourse has made significant inroads, with numerous companies now offering design thinking courses and services⁵⁶, and a current Seek⁵⁷ search delivering 55 results for design thinking jobs, and Linked-In⁵⁸ a total of 99. As such, it is also reshaping the discourse of design itself, in New Zealand and elsewhere. We should observe, however, that the key components of *design thinking* are neither unique to *design thinking* arena, nor new, and have traceable historical emergences prior to the unification of them under the rubric *design thinking*. Using a Foucauldian lens and explicating current notions of *design thinking* as emergent discourse, we can note a number of its central practices as based on the innovative approaches used in the design industry, and validated through a number of key theoretical texts. This allows us another avenue from which to observe the strategic argument for its place and significance in the future of New Zealand's industrial and social development, both of which have ramifications in terms of Government funding, pedagogy, and New Zealand's global economic position.

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Resurrecting the Archive: 3D printing and interactive technologies in Libraries

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#Information Management #Cyber-Physical Systems #Libraries
#Cognitive Load Theory #CIDOC CRM

Emerging technologies influence the shape of society, how we interact with the world, how we learn, how our activities create new knowledge and how we can recontextualise old knowledge in new ways. This paper is a collaboration between Victoria University of Wellington School of Design and the National Library of New Zealand and documents a series of projects undertaken by the university that are of interest in advancing the future potential of emerging 3D technologies within libraries. Projects include the use of virtual reality and augmented reality to reinvigorate historical collection materials to provide richer context and connections to other physical and digital items; 3D data management and retrieval through the use of game engine software; 3D printing and associated technologies as a means of materialising knowledge for hands on learning. These projects are explored in reference to the following major library functions: supporting learning, collecting, making collected items findable, and drawing dormant information from heritage items by extending them into three and four dimensional interactive spaces (that is, 3D spaces recreated with the additional inclusion of

temporality that demonstrates spatial change over time). Findings demonstrate that the mere inclusion of emerging technologies within libraries are not sufficient on their own but are necessary in order to share new forms of volumetric information (information concerning objects often rendered two dimensional by traditional archival practices dependent upon paper storage technology), to hold existing collection material up to the increasing demand of informational fidelity, and to make accessible new knowledge held in large datasets otherwise unavailable to general users.

INTRODUCTION

The role of a library is to enable its users to access the wealth of its collected knowledge openly and independently. This is achieved through access to both resources and services. In a time where digital access to information has become the dominant means of access, the institutional differences between libraries, archives and museums are also called into question.

3D Printing and Makerspaces (collaborative work spaces) that concentrate additional new technologies (CNC routing, laser cutting, computational weaving and knitting etc.) for the fabrication of objects are being adopted into the service offering of libraries worldwide. This is often seen as a desperate attempt for physical libraries to maintain relevance through a digital diaspora, as access to material over the internet can be found faster, cross-referenced instantly, and accessed anywhere. With this in mind, The National Library of New Zealand and the School of Design at Victoria University in Wellington embarked upon a collaboration to explore the potential to open up archives in a meaningful and useful way to the public. The focus of our initial research was to move beyond the Makerspace as a default setting, and explore how to better integrate 3D printing technologies into the operations of libraries as a means of making their archives and collections more accessible and engaging, and thereby give the Makerspace a more compelling reason for being. Compelling content and use of contemporary fabrication tools would, we believed, not only open up the library archives, it could also provide direct and tangible access to a whole plethora of historical material so often “lost” in archives through the lack of a medium with which to engage with, and understand, its content.¹

In his blog “Mission creep: A 3D printer will not save your library” Hugh Rundle gives an astute account of how contemporary maker technology could be considered misplaced in a library environment by drawing on examples from blog posts which fail to link the service of these machines to past or future applications of library collections. However, 3D printers are fundamentally output devices, just like standard paper printers and the applications of this technology rely more broadly on the digital representations which are being made physical. For that reason the complete array of emerging 3D technologies must first be explored.

If 3D printing was truly a useful technology for libraries, there would be serious articles about the potential for information storage,

discovery and dissemination. What the blogs, tweets and presentations of 3D printing enthusiasts are filled with is mostly stories about 3D printers that print in chocolate.²

Rundle is right to question the seriousness of 3D printing technologies deployed for their spectacular value rather than as a genuine tool that supplements the mission of the library. To this we would add the need for a genuine appraisal of the usefulness of other tools too. This includes not only the 3D printer itself but equally important, the associated scanning technologies, 3D modelling software, including the trend to more intuitive open source software, online platforms and systems, as well as Augmented Reality (AR), and Virtual Reality (VR).

In her article *Multimedia for the People* (1999) Pat Ensor noted that “Libraries grew up as repositories of printed material because that was how material could be recorded and passed on”.³ At the time of publication she asserted libraries relied on a “limited palette to convey information” as libraries’ made audio or video content scarcely available online with part of this problem due to web browsers not offering the same level of support they do today. 3D technology could be considered a form of new media with the platforms that deliver it still in late development.

The ways in which information is recorded and disseminated changes with the society in which it was created. We have already witnessed a shift to a digitally dominant mode of information exchange.⁴ Articles are published on blogs and websites, we see an increase of self-published material through the cost-effective format of e-book distribution; multimedia content creation has proliferated with services such as YouTube and the affordability of digital cameras and open access to editing software. The change in society we are witnessing is a shift from one that is consumer based to one that is “prosumer” centred - a term coined by Alvin Toffler in 1980 to refer to people who are both producers and consumers⁵.

This shift in society is consistent with the findings of previous research conducted by Victoria University of Wellington School of Design investigating the new material culture arising from digital design and fabrication technologies including new modes of production and communities of co-creation. 3D printing as a means of production is additive (material is fused together to form an object), rather than the traditional subtractive means of production found in mass-manufacturing processes which produce volumes of waste material. Digital design software makes the creation of everyday objects a

prosumer activity by reclaiming traditional crafting techniques and presenting them in a digital space where anything can be created without the need to retool based on the object’s function or the type of materials being used. This allows for the recovering of mass production’s social costs in which, until recently, we have seen people disconnected from the fundamental activity of making that first delivered humanity into civilization. Guild-like culture is on the rise between prosumers.⁶

The sale and digital distribution of media has already shifted. Additive manufacturing ensures that physical products will follow this trend. Khan and Mohr⁷ identify seven key areas impacted by the shift from mass production to production by the masses:

1. Mass customization,
2. Resource efficiency,
3. Decentralization of manufacturing,
4. Complexity reduction,
5. Rationalization of inventory and logistics,
6. Product design and prototyping,
7. Legal and security concerns.

The economic benefits provided across these key areas indicate that a production-by-the masses mode of manufacturing is likely to become dominant sooner rather than later. That being the case providing access to this technology as a library service enables users to gain hardware and software knowledge needed in a hands-on environment.

As 3D and 4D (the addition of temporal information to 3D data) formats become ubiquitous and as libraries continue to collect information in new forms, for instance the harvesting and archiving of websites or the inclusion of born digital content, then it stands to reason that 3D files will have a place within libraries in the form of 3D digital surrogates of collection items; AR or VR multimedia publications; animation assets, finding aids, or interpretive materials that take existing library collection material and extract additional information using the new technology. However our fascination is not so much the form that these new digital collections will take, but rather more the opportunity these new technologies offer in revisiting historical analogue collections and archival material; to reinvigorate them and reveal their richness in more engaging ways.

SUPPORTING LEARNING

One of the major functions of libraries is to support learning. But we support it predominantly for those who learn best through reading. In 1983, Howard Gardner formulated the concept of multiple intelligences. Out of seven intelligences that he postulated, libraries appeal to only one: verbal-linguistic. We can't necessarily handle all of them, but by promoting sound and image, we could support musical intelligence and visual-spatial intelligence better than we currently do.⁸

Talking-books exist within libraries to enable disability access: a precedent for how information can be delivered through other sensory channels. As noted by Ensor, not all people learn best through a verbal-linguistic mode of processing information and although multimedia can aid disability it can also expand the opportunities for learning to those who have dispositions suited more to visual, logical, kinesthetic or other modes of learning. 3D technologies democratise knowledge even further by offering tactile properties and interaction across the senses and incorporating the given environment into the knowledge acquisition process.

Quiver is an Augmented Reality colouring book developed by HitLab NZ using MagicBook technology.⁹ The user, by means of a smart-device (smartphone or tablet) scans a 2D drawing which triggers an animated AR model from *Quiver's* database. The model can be altered by physically colouring the 2D drawing on paper. The colour from the image is picked up by the camera on the smartphone and mapped onto the AR model. An educational version of the *Quiver* app is also available to aid learning within classrooms.

We believe that this technology would be a valuable tool for artists who wish to create 3D content but lack the necessary computer aided design skills. When combined with an automatic model generation technique, there are a number of possible fields which could benefit from this technology for example in architectural design, and rapid prototyping of 3D designs.¹⁰

The app goes further and takes this virtual content and explores the possibilities of 3D printed outputs.¹¹ Dylan Hughes-Ward's design thesis, *Making Connections: 3D printing, libraries and augmenting their reality* builds on top of *Quiver* and the work done by HitLab NZ and the MagicBook technology by integrating Augmented Reality with existing library holdings. In a scenario aimed toward primary school users, Hughes-Ward takes a children's book from the National Library collection and seeds it with an AR model; *Big Sloppy*

Dinosaur Socks written by Jan Farr and illustrated by Pamela Allen. Image recognition brings the book to life with an interactive animation anchored to the book that can be viewed in 3D by moving the smart-device around the book. The interaction allows for expansion upon the narrative. The potential app would provide a paper print out which can be coloured in and augmented again, similar to *Quiver*, to change the colour texture of the animation character or alterations can be made in-app with a range of sliders. At any point the animation can be paused and the model 3D printed in its given pose. The model itself can then be used as a smart object engagement point outside the library to link to related books and resources, or simply provide expanded engagement for the blind and kinaesthetically inclined learners.

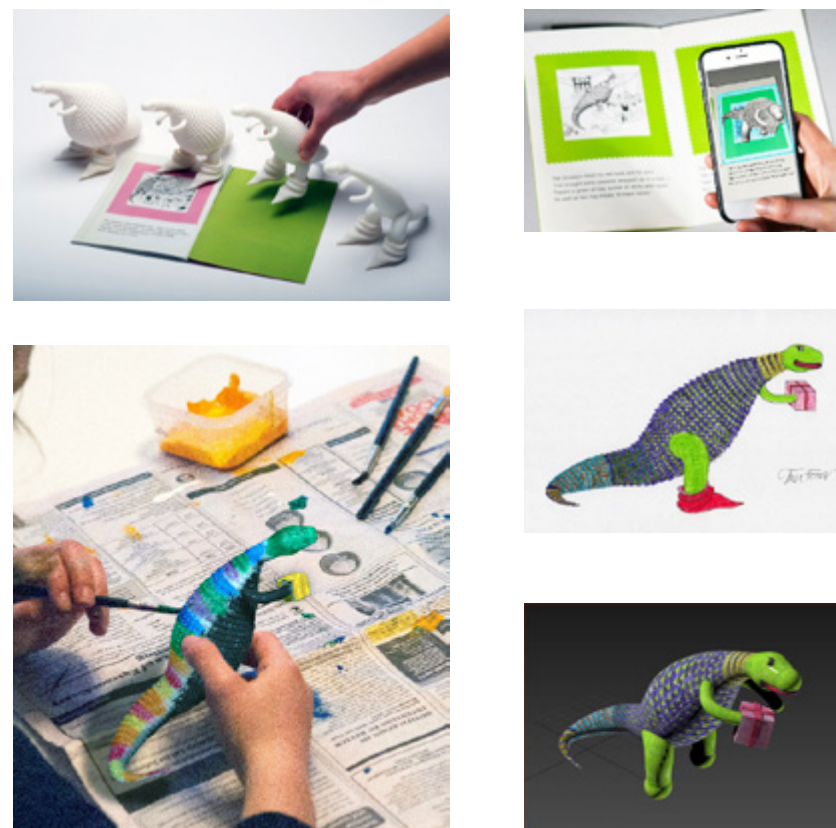


Figure 1-5: Dylan Hughes-Ward's thesis, *Making Connections* demonstrates how the combination of AR and 3D printing invites co-creation and participatory design with the coloured in drawing from Jan Farr. All images courtesy of the authors.

In a secondary school scenario a book seeded with AR overlays provides questions that test students' knowledge and unlocks printable smart objects. The overlays may contain a gloss for terminology, extended descriptive information or external links to other information sources.

A further exploration looks at the possibility of a dedicated library space for searching AR content in which seeded collection items or 3D printed smart-objects can be interacted with and overlays of digital content can be projected onto a desk surface.

AR seeded content offers new opportunities in the marketplace of instructional design and is an example of new multimedia worth collecting by libraries. Under Cognitive Load Theory learners process information through two channels; a verbal/auditory channel, and a visual/pictorial channel with a limit to how much information each channel can process at once¹² *Making Connections* as a method to support learning greatly reduces cognitive load as the interactivity provides the multimedia benefits of offloading textual information from the visual to auditory channel, it allows pre-training of important concepts through added descriptions or glossing of unfamiliar terms through AR overlays, and allows learners to move at their own pace in response to user action unlike traditional video/animation.



Figures 6-8: Demonstrating how 3D printing can invite and encourage different ways of extending narratives.

AR applications such as this are an example of the move from a digital society toward one that is cyber-physical. A key notion of cyber-physical systems is that knowledge exists not only in a mental space, but in cyber space, physical space, and socio spaces. Cyber-physical systems take advantage of intelligent environments by merging digital resources with physical resources. Artificial spaces contain both physical and social characteristics and the use of these spaces in facilitating information exchange is key to the development of new epistemologies made possible through human-machine, and machine-to-machine interactions, and with communication between smart objects across the Internet of Things.¹³ *Making Connections* takes the work of HitLab NZ in a new direction by providing interactions with existing information sources. It then layers this with expanded information. The knowledge gained by the user, however; will change with the context of artificial spaces; at home, at school, at a library or in a museum.

COLLECTING AND FINDABILITY

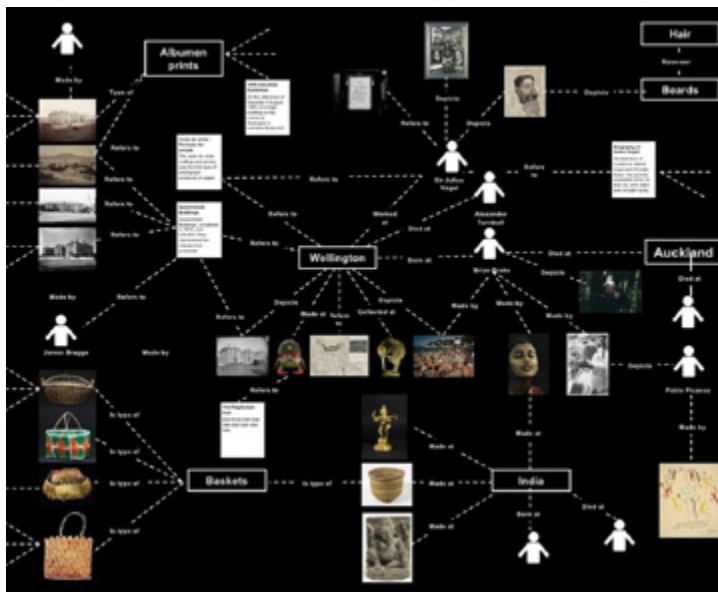
Ryan Achten's thesis *Virtual Recollection: Artefact Engagement in Three-Dimensional Environments* identifies an opportunity within cultural institutions to extend the practice of digital archiving to represent artefacts in three dimensions. Standard practice for digitisation is to scan or photograph items as two-dimensional digital representations. This is adequate for capturing textual information but has become common for physical artefacts within library and museum collections. In these instances only a facet of an object can be represented and the utility of their form is lost altogether.

Achten has prototyped a software interface called *Vertice* using the game engine Unity 3D. The software allows users to upload either born digital objects or surrogates of 3D objects produced through precision scanning and photogrammetry to be staged for ingest into a digital archive. The user inputs metadata through a descriptive form to contextualise the object. *Vertice* adheres to Dublin Core metadata standards and the current prototype uses a schema based on the International Committee for Museum Documentation's (CIDOC) Conceptual Reference Model (CRM).

CIDOC CRM is an ontology designed to enable integration of cultural heritage data across library, museum and archives. A CRM

uses semantic mapping to link items as complex intellectual objects, or entities, as opposed to simple strings of text. The NZ Electronic Text Centre (NZETC) at Victoria University of Wellington uses CIDOC CRM to link digital resources between collections and across institutions. As the digital resources held with NZETC are text heavy, linking is achieved by a framework of topic maps interlinked by event-based references.¹⁴

As the CRM forms entities from information and interlinks these entities in reference to events in which they were involved, *Vertice* creates an opportunity to cut out redundancies. The 3D object itself can be semantically mapped to topic maps such as those in the NZETC, or to other forms of media with semantic associations. The schema creates links via relationships such as “made by,” “refers to,” “is a type of,” “created in,” as seen in Achten’s CRM diagram (Figure 11).



Figures 9-10: The *Vertice* graphical user interface “import” and “artefact information” for collection items from the Auckland Museum

Figure 11: *Vertice* research: example of a semantically linked CRM ontology

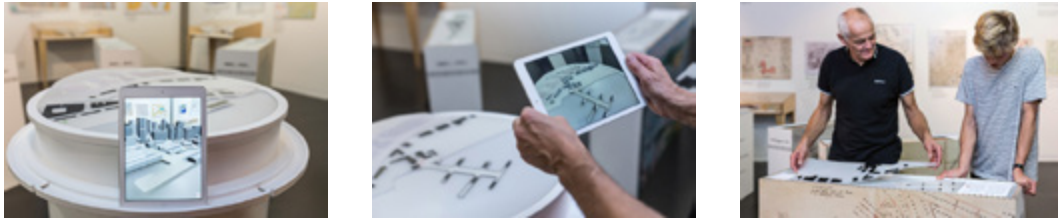


Figure 12: An example of both parametric and photogrammetric models in *Vertice* showing relational information, contextual overlays, and diegetic interactions

Semantic linking such as this is useful for *Vertice* as it explores further means of engaging with 3D content via narrative virtual space (Figure 12) which allows objects to relate with similar objects in their natural environments and to retell history through new forms of representation that can be generated through linking.

In a cyber-physical context these semantic links can go beyond linking solely with other digital resources to forming links with what Zhuge refers to as other “semantic nodes” ; a term which can refer to anything from text, images, human beings, concepts, events, machines, or networks with the role of these nodes reflecting back attributes of given spaces.¹⁵ This means cultural institutions can help resource each other through open digital access but the institutions as socio spaces will reflect back different forms of knowledge given their function within society. When utilized within a library environment *Vertice* becomes both a powerful finding aid and interpretive medium with the opportunity to output 3D printed smart objects. In a museum environment *Vertice* may serve a stronger curatorial function by aiding curators in more easily making links across associated objects in its database and allowing these objects to be quickly and easily test printed for mock up display.

A precursor to both Hughes-Ward’s *Making Connections* and Achten’s *Virtual Recollection* was their 2014-2015 Summer Scholarship project: *Digital Archives of the Future* with fellow scholar Ruth Barnard. This took place over a ten week period and covered four scenarios that interpret library collections. *My National Library* is one scenario that promotes a sense of public ownership and sharing of individual content and proposes to interlink with the National Library’s existing website as a space to collect sets of digital items such as photos, text,



Figures 13-16: Augmented Reality exhibition piece showing waterfront reclamation at Queens Wharf and the growth of Wellington in this area



paintings, audio recordings and 3D model content. Research can be tracked and digital resources can be managed via smart-devices and image recognition with interactions being stored on the user's My National Library webpage. Extending upon *My National Library* with progress made by the *Making Connections* project, and the semantic link network provided by *Vertice* there is a powerful opportunity to search across collections and institutions, saving and tracking research, overlaying descriptive or further link information onto physical space, original items, and both 2D and 3D printed replicas alike. In doing so it addresses the issue of Makerspaces in libraries as a default setting, by transforming them into Makerspaces with a sense of purpose that is inseparable from a library's traditional historical collections.

FORMATION FROM INFORMATION

Although Google Earth is available to anyone with an internet connection there are many places on earth where detailed satellite data is unavailable. In the example of Afghanistan much of this data is classified and shaded relief maps are generated not from satellite data but from paper topographical maps.¹⁶ Topographic maps make

up a valuable resource offered by libraries and due to traditional cartographic methods any understanding of elevation information is only available through the ability to read contour lines. 3D printing provides an immediate means to output digital elevation models (DEM) extracted from paper maps which reveals, very reliably, otherwise invisible information. This also exemplifies what can be done with digitised heritage items to meet growing demands for new types of data not otherwise present in traditional forms and how curatorial services within libraries can offer richer interpretation of their collections.

Over the summer of 2015-2016, Victoria University of Wellington's Summer Scholars undertook a ten week project titled *Visualising Wellington* to investigate how AR, VR, and 3D printing technology can be used to interpret collection material in new and engaging ways. Three examples were produced as exhibition items for display within the National Library. All exhibition pieces relate to Queens Wharf on the Wellington waterfront.

The first example looks at the reclamation of the Wellington waterfront. A physical representation was created through CNC milling 3D topographical information and vacuum-forming acrylic to form Wellington's terrain. Laser cutting on acrylic was used to form puzzle-pieces approximated from library collection content that represent the Wellington waterfront over periods 1857-1867, 1889-1903 and 1967-1970. Images from these periods were also used alongside an algorithm to generate the buildings occupying Wellington's terrain which are made visible through AR and recognises which puzzle pieces are present.



Figures 17-18: Queens Wharf AR interactive installed in *Unfolding the Map* exhibition at the National Library of New Zealand

As puzzle pieces are added to the terrain to expand the waterfront; new buildings spring up as AR overlays to match the profile of the city during the given period. For pre-existing land the AR updates with the time period to represent the expansion into the city in addition to the expansion across reclaimed land.

The second example introduces Virtual Reality applications in the form of public viewing binoculars that recreate a first person view of a historic Queen’s Wharf through interpretation of static library images. The binoculars house an Oculus Rift VR headset that orbits around a point on a stationary stand. If installed in a location on present day Queen’s Wharf the physical binoculars would allow for an interesting merge of physical and digital spaces bringing together different socio spaces from the physical present and digital past.

The final example provides a glimpse at an alternative Queens Wharf through the modelling of the proposed Lambton Tower precinct; a tower that was never physically built. A document held by the library covering floor plan and elevations, artist’s impressions and images of hand-crafted models was scanned and imported into computer modelling software. This allowed the floor plans to be extruded and output for 3D printing in three segments of white ABS plastic at a scale of 1:500 to the original tower design. While this may have been time consuming to model it also revealed the ways in which an algorithm could be created to speed the modelling processes up and make interpretation of similar planning documents more accessible to library staff and its users.



Figures 19-20: Scale model of Lambton Tower interpreted from National Library collection material and 3D printed in white ABS

Digital Spectrum



Figure 21: Research matrix

Through the formation of these exhibits the research team developed a research matrix that quantitatively plotted precedents of contemporary exhibition methods along a physical axis and a digital axis with each axis stretching a scale of less to more complex in terms of its carrying capacity for human interpretable information with more innovative research precedents occupying greater areas of the matrix.

Interpretive material such as the work done by the *Visualising Wellington* can be archived and made findable using systems such as *Vertice*. My National Library as another example would provide another means of saving and interacting with the research and the further developments made in the *Making Connections* project extend upon those developed in the Summer Scholarship project of 2014-2015 titled *Digital Archives of the Future* of which My National Library was one of four examples. The other three provide further examples of ways libraries can reconfigure their holdings. The following outputs were also presented as an exhibition at the National Library of New Zealand:

The first example interpreted material connected with *A Contemporary Conversation*; a National Library exhibition commemorating the centenary of the First World War, its impact, and connections with ongoing conflict in the world today. Three items were given treatment:

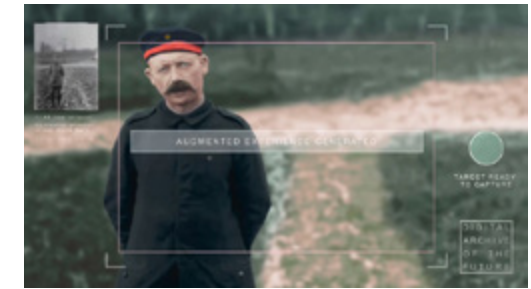
1. A photograph “Warship escorts for the New Zealand Expeditionary Force” was coloured and further enhanced with descriptive overlays about the ships in the image and a QR code that enabled downloading of a 3D printable model of the ship.

2. An ANZAC trench diagram was represented as 3D printed terrain where the viewer can move a 3D printed figure across locations and view on a screen the relevant location transformed via Google Maps with an overlay of the Gallipoli map. Options to 3D print the soldier figurine, or a section of the terrain, are also presented.

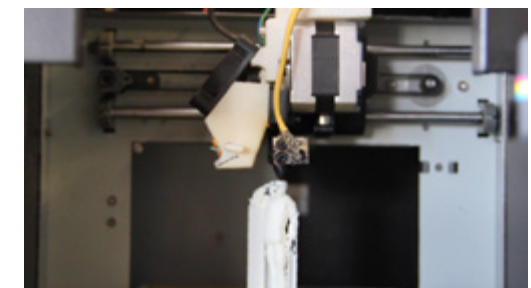
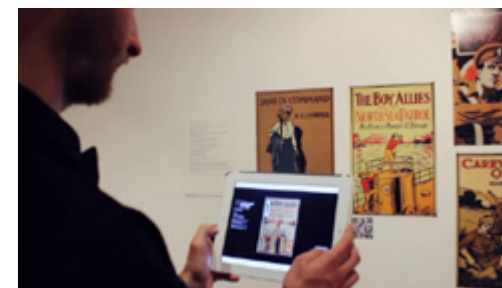
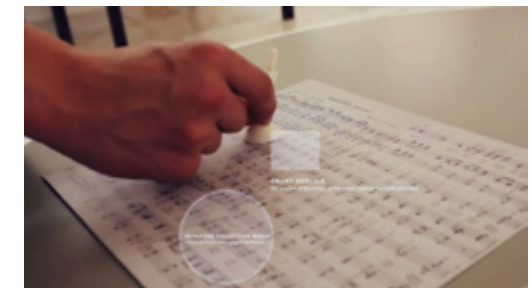
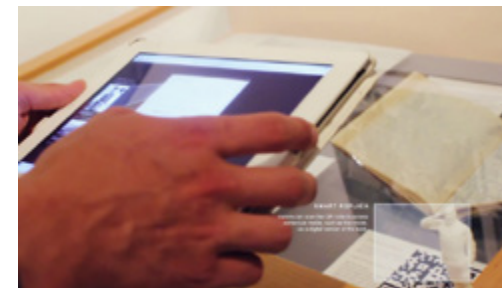
3. A photograph of Alsatian prisoner of war, Jules Gominet is brought to life through animation in which he tells his story to connect further than the photograph alone and link back to the library collections, notably the work of the photographer Henry Armitage Sanders, and the location of Colincamps in France.

The second example interprets content from another related exhibition *A Child's War* using 3D models as signposts for exhibits that can be interacted with using AR via an iPad or smartphone. The AR application in this exhibit extends to interacting with the books or diaries on display. Keywords can be touched to provide related information beside an image of a corresponding model. A book of music encourages interaction by playing back the sounds that are presented on the paper.

The final example looks at the collection of Paul Jenden; a writer, director, choreographer, set and costume designer and looks to encourage physical interaction. 3D interactive models have been produced from Paul Jenden’s *Punch and Judy* sketches and gesture interaction has been incorporated to allow the user to select either the Punch or Judy puppet and manipulate the model through the user’s movements. A countdown begins at the beginning of the interaction and once it ends a snapshot is taken giving the viewer the option to 3D print these puppets in their final pose.



Figures 22-25: World War One: A Contemporary Conversation



Figures 26-29: A Child's War



Figures 30-32: Paul Jenden exhibition material

CONCLUSION

As smart-devices, smart objects, and other semantic nodes proliferate we see that digital resources are already so accessible that the way we best utilise our physical resources and the spaces they occupy now requires readdressing. With emerging 3D technologies offering full 360 degree perspectives of both narratives and histories in a more immersive and engaging manner - we are freed from the limitations of text and two dimensional image capture. In the instance of text based resources conceptual reference models now allow pictorial, auditory, and object information to be returned and explored through their relationships with each other overcoming the limitations of text only searching. Augmented reality allows this information to be overlaid onto physical space, 3D printing allows information to be output into physical space, and Virtual Reality allows physical space to be simulated. The potential of these advancements to enhance education, entertainment and supply chains will impact the way information is recorded and in the case of libraries how and what is collected. As these shifts occur existing collections may benefit from reinterpretation so

that the information they hold can be presented in ways that make them compatible with new means of transmitting and receiving knowledge. Whether 3D Printing, Augmented Reality, Virtual Reality, or any future technologies are useful or not for libraries depends not on the mere inclusion of technologies themselves but the active imagination of wider society capturing, re-interpreting, and co-creating new knowledge with the technology made openly available to enable this.

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ENDNOTES

1 In this instance we use the term "lost" in a figurative rather than a literal sense that archival material that remains buried is, to all intents and purposes, "lost" to the public. It should be noted that such a contention could split archivists depending on the assumption that archival material exists for contemporary display or for future preservation but an advantage of these technologies is that data, once extracted can be manipulated and reinterpreted while the original archive can remain a place of preservation. Indeed, access to and reconfiguration of previously

unattended archival material can serve the longer term purpose of preserving archives that are suddenly understood publicly for the value they contain.

- 2 Rundle, Hugh. "Mission creep: A 3D printer will not save your library." *It's Not About the Books blog* (2013)
- 3 Ensor, Pat. "Multimedia to the People: plenty of room for multimedia enticements alongside traditional library offerings." *Library Journal New York* No.124, p.15.
- 4 Recognising this shift and its potential to open up access, libraries and archives have,

over the last three decades embarked upon a digitisation process that is ongoing to this day. The quality, file formats and best practice for digitising and making available archival material is a vibrant and ongoing discussion (for contemporary theoretical and practical historical examples of archival digitisation see Garde-Hansen 2011 and Denvir 1998).

- 5 See Pal Ahluwalia and Toby Miller. "The prosumer."
- 6 Maxe Fisher, Simon Fraser, Tim Miller, Ross Stevens, Jerad Tinnin, and Annelies Zwaan. "Digital craft in digital space: A paradigm shift in the making." *Design and semantics of form and movement*, p.223.
- 7 Sebastian Mohr and Omera Khan. "3D printing and its disruptive impacts on supply chains of the future." *Technology Innovation Management Review* 5, no. 11 (2015): p.20.
- 8 Pat Ensor, "Multimedia to the People: plenty of room for multimedia enticements alongside traditional library offerings." *Library Journal New York* No.124 (1999): p.15.
- 9 See Mark Billingham, Hirokazu Kato, and Ivan Poupyrev. "The magicbook-moving seamlessly

between reality and virtuality." *IEEE Computer Graphics and applications* 21, no. 3.

- 10 See Adrian Clark and Andreas Dünser. "An interactive augmented reality coloring book." In *3D User Interfaces (3DUI), 2012 IEEE Symposium*.
- 11 Quiver Augmented Reality. "(2013) Quiver – 3D printing test."
- 12 See Richard E. Mayer and Roxana Moreno. "Nine ways to reduce cognitive load in multimedia learning." *Educational psychologist* 38, no. 1.
- 13 Zhuge, H. "The knowledge grid: toward cyber-society." *Singapore: World Sci. Pub* 10 (2012): 7567.
- 14 See Alison Stevenson, Conal Tuohy, and Jamie Norrish. "Ambient Findability and Structured Serendipity: Enhanced Resource Discovery for Full Text Collections."
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The 'New Way' of Shopping: Farmers Trading Company Catalogues 1909 - 1938.

An Illustrated Commentary by
Rosemary Brewer and Alan Cocker

In August this year Australasian retailers were informed of an approaching "Death Star"¹. The American online retail giant Amazon announced plans to open its first major Australian warehouse, what it called a 'fulfillment centre', in suburban Melbourne. In New Zealand retailers were reported as being "spooked by the 'Amazon Effect'" according to researchers at Massey University² who found that business confidence had fallen since 2016 and the global online retailer was being cited as the main reason for uncertainty. With the opening of the Australian warehouse it was estimated that Amazon could build a business with annual sales of \$915 million in this country in just five years.³ Over a century ago the New Zealand retail industry was shaken by another 'retail revolution', the mail order catalogue.

The development by Amazon of an Australian warehousing presence has a strong resonance more than a hundred years ago. In October 1909 a twenty-four year old hardware salesman, Robert Laidlaw, opened New Zealand's first mail order business. In his inaugural mail order catalogue he described his approach as the 'New Way'. His way was to sell only from a catalogue, "thus saving all travellers' and salesmen's wages and expenses"⁴. He also would accept cash only and would only serve out-of-town customers and thus not threaten urban retailers⁵.

The time was opportune for this initiative. Social and technological change had created conditions where Laidlaw's venture could succeed. There was growing prosperity with a consequent growth in consumerism and an increasingly literate community with the introduction of universal primary education from 1877. Postal services had much improved with rural delivery starting in 1905 and by 1909 motor lorries began to be used for the delivery of letters and parcels. Vitally, for the distribution of goods from Auckland, the North Island Main Trunk Railway was completed in 1908. These changes brought about a literate, accessible market.

Laidlaw's inspiration for a mail order business was the American entrepreneur Aaron Montgomery Ward who founded a company in his name in the transportation hub city of Chicago in 1872. Ward's basic business policies were adopted by Laidlaw. They can be summarized as: Buying and selling for cash, which eliminated interest charges in the purchase of goods and in financing credit to customers, thereby lowering prices. The unconditional guarantee of all merchandise sold and the use of advertising techniques that radiated friendliness and care beyond the consummation of the sale and offering through the catalogue a huge assortment of goods.

As with Ward, and later Sears Roebuck in the United States, Laidlaw's business grew rapidly. In its first year of operation turnover doubled each month. The business moved from its initial small two-story office in Fort Street, Auckland after only four months of trading. Five months later the company moved into larger premises yet again. Laidlaw's business was absorbed into the Farmers' Union Trading Company in 1918 but he emerged as the General Manager and the largest shareholder and consolidated the business as the Farmers' Trading Company in the early 1920s. The extensive yearly mail order catalogue was produced until 1938 when the costs of producing it and retail changes saw its demise.

This account looks at the mail order catalogues as media that tell us something of the age that produced them. The original wood



Figure 1. Cover of first Laidlaw Leeds Catalogue, issued 1909. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

OUR GUARANTEE MEANS WHAT IT SAYS. PAGE 7. 113



No. P4763—SAWS, KITCHEN (as illustrated).—For cutting bones in meat, etc.; a very handy article in any house.
Our Price 1/-

SCALES—(See also under **BALANCES**.)



No. P4764—SCALES, HOUSEHOLD.—For ordinary use; tin scoop; all complete, with a full set of weights.
Our Price, Complete . . . 4/6

No. P4767—SCALES, HOUSEHOLD (as illustrated).—These are very strongly made, swinging on knife pivots; well balanced; large tin scoop; a very useful scale for all household purposes; no weights go with this scale; weights from lbs. down to 1oz., 2/- per set extra.
Sizes 7lb. 14lb.
Prices 5/11 6/9

SCISSORS—(See **CUTLERY DEPARTMENT**)

No. P4768—SCREW HOOKS.—Japanned; very strongly made.
Sizes 10 12 14 16
Our Price, Per Doz. . . 5d. 8d. 11d. 1/3

No. P4770—SCREWS, IRON.—These are the ordinary screw, so commonly used; in packets of 1 gross. We quote the ordinary sizes, but will supply any other if desired.
Length. Fine. Medium. Stout.

	Per Packet.		Per Doz.	
1 in.	5d.	6d.	7d.	1d.
1 1/4 in.	7d.	8d.	9d.	1d.
1 1/2 in.	8d.	9d.	10d.	1d.
1 3/4 in.	9d.	10d.	11d.	1d.
2 in.	1/-	1/1	1/3	1d.
2 1/4 in.	1/2	1/5	1/8	2d.
2 1/2 in.	1/5	1/8	2/4	3d.
2 3/4 in.	1/9	2/3	2/11	3d.
3 in.	2/9	3/4	3/11	3/4d.

No. P4773—SKEWERS.—Strong, steel tin-rod, assorted, 5 to 16 inches.
Price 5d. Per Set

No. S4776—SLOP PAILS.—Strong galvanised, with good covers.
Small. Medium. Large.
Our Prices 3/3 3/9 4/5 each

No. P4779—SPIRIT STOVES.—The usual French, with wick and regulator; used everywhere. Extra wicks, 1d. each.
Price 1/3 each

No. P4782—SPIRIT STOVES.—Ideal; blue flame; wickless.
Price 10d. each

No. P4785—SPIRIT STOVE.—With cover; strong and durable.
Price 7d. each

No. T4788—SPOONS, BASTING.—For kitchen use; strongly made and well tin-rod. (See also **ENAMELWARE DEPARTMENT**.)
Sizes 10 12 14 16 inch
Prices 4d. 5d. 6d. 8d. each

No. S4791—SPOONS OR FORKS, TINNED.—For ordinary use; but we strongly recommend using our Dixon's nickel-silver. (See the **CUTLERY DEPARTMENT**.)
Size Tea. Dessert. Table
Prices 1d. 1 1/2d. 2d. each
10d. 1/3 1/6 Doz.

No. P4800—STAPLES, WIRE.—Slice cut, for fencing, netting, etc. These are all well galvanised, and guaranteed best quality procurable.
Size and Gauge—
1 x 1 1/4 in. 1 x 1 1/2 in. 1 1/2 x 1 1/4 in. 1 1/2 x 3/8 in. 1 1/2 x 3/16 in.
Price Per lb.—
4d. 3d. 2d. 2 1/2d. 2 1/2d.
Price Per Doz. lbs.—
3/6 2/8 2/4 2/2 2/2
Price Per Cwt. Keg—
25/- 18/6 16/6 15/6 15/6

No. P4803—STOVES, HEATING, or KEROSENE HEATERS (as illustrated).—These are wonderfully useful in any home, as they may be lit on a cold morning or evening for an hour and then put out when the room is warm enough. They may be carried from room to room; no dirt or dust; no wood or chop; no fireplace to clean in the morning. Black Japanned frame, with leaded tin foot and No. 2 full size burner, using ordinary kerosene. We do not supply the small size, as we can afford to sell our large one at the same price. 25 inches high.
Our Price, Full Size Burner, 18/6



No. P4804—DOVER STOVES (as illustrated).—Made in the famous Bonnybridge Works, in Scotland; recognised everywhere as one of the finest stoves procurable; it has a good oven and plenty of room on top to accommodate a number of pots; it is portable, and needs no building in what-over. Size 6 or 7 is usual, but we supply it as large as Number 8 for those who want a big stove.
Sizes 6 7 8
Prices 51/6 64/6 78/6

No. P4806—STOVE, BEATRICE.—With thick wick, tinned, and all complete; burns ordinary kerosene. This will boil a kettle in a very short time.
Our Price 4/5 each

No. P4809—STOVES, OPTIMUS AND PRIMUS.—Brass; strongly made; pumps up with air pump; starts by methylated spirits. These are absolutely wickless, and burn with a strong blue, hot flame.
Price—Optimus 12/6 each
Primus 13/9 each

No. P4813—STOVES, WICKLESS, BLUE FLAME COOKER.—With steel frame. Japanned black, burns kerosene; a very handy stove.
Price 18/6

No. P4815—STRAINERS, TEA.—To fit spoon or cup; at the same price as shown.
Price 1d. each

No. P4821—SYRINGE, GARDEN.—Strongly made, in zinc, with good plunger; 18 x 1 1/2 inch.
Price 1/9 each

No. P4824—SYRINGE, GARDEN.—All brass; very strongly made, sure to give you every satisfaction. Remember, any goods purchased from us may be returned if you are not more than satisfied.
Sizes 15 x 1 1/2 in. 15 x 1 1/4 in.
Prices 3/3 4/3 each
Prices, Heavy 6/11 each

No. P4827—SYRINGE.—Double action, patent, for syringing or spraying trees, etc. Strongly made in brass.
Price 17/6 each

No. P4828—TACKS.—Ordinary blue or tin-rod.
Price 1d. Per Box; 9d. Per Doz.

No. P4830—TACKS.—In paper packets, 1,000 in each. This is by far the best and cheapest way to buy tacks. Tinned or blue, as preferred.
Sizes 1 1/2 inch 2 inch
Prices 2d. 2 1/2d. 2 1/2d. 2 1/2d. 2 1/2d. Pkt.

No. P4833—TACKS, CARPET.—In packets.
Price 2d. Per Packet

P4836
No. P4836—TAPS, WOOD.—With metal plug, for beer, etc.; as illustrated.
Size 6 7 inch
Price 6d. 7d. each

No. P4839—TAPS, ALL WOOD.—With wood plug, for vinegar, etc.
Size 7 8 inch
Price 8d. 9d. each

No. P4842—TIN OPENERS.—With cork-screw combined (as illustrated); a very special line.
Price 5d. each

No. S4845—T R A Y S, STEEL, OVAL.—Japanned black; for ordinary use.
Sizes 20 22 inch
Prices 1/4 1/3 each
24 26 inch
Prices 2/2 2/3 each

TENTS AND FLYS.—Look up General Index.

TINWARE.—(See **TINWARE DEPARTMENT**.)

TOOLS.—(See **Separate, TOOL DEPARTMENT**.)




THE DAY OF BIG PROFITS IS PAST.

Figure 2. Sample page from the Laidlaw Leeds Catalogue of 1909. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

Figure 3. Cover of Farmers' Trading Company Catalogue No.10, 1929. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

cut black and white illustrations (see Figure 2 for example) which later gave way to half tone and then colour printing (see Figure 7) were supplemented with homilies and text⁶ which sought to reinforce the integrity of the owner and convey a kind of friendliness and care for the relationship with the customer that go beyond the mere requirements of a sale. It was important that if the consumer was to pay cash in advance for goods out of a catalogue that there was considerable trust in the company providing the service.

Robert Laidlaw brought to his business his Presbyterian morality and he was also strongly influenced by the cooperative movement. He prided himself on the relationship of trust he built with customers and they in turn dressed and furnished their homes with the retailer's goods. There are a number of cultural stories that could be told from the catalogues but this account focuses on how they reflected changing norms when addressing the female audience.

The 29 years from 1909 to 1938 saw an expansion of socially acceptable roles that women could play in New Zealand society – at least that part of it which had the disposable income to purchase products available by mail order – alongside an increased permissiveness in its depiction of women's bodies, and expectations that married women at least would remain responsible for the running of households and the clothing and nurture of their families⁷.

The initial audience for these mail-order catalogues was the rural family, isolated from opportunities in urban areas to 'shop around', and eager to get a reliable and convenient alternative to the local store - but with cheaper goods. In the 1913 catalogue, Robert Laidlaw acknowledges that "our great progress and our present prosperity are tributes to the intelligence of New Zealand farmers and their wives"⁸ Prior to the merger with the Farmers Union Trading Company in 1917, the latter's catalogue also makes it clear that male farmers are the primary audience, but exhorts them to "Study the interests of your wives and children"⁹. The extent to which women themselves were characterised as purchasers by the company is not made explicit, and they may have been making room for the possibility of differences between families depending on the customs of the household, and perhaps the power dynamics between the couple.

Alongside the continuing advertisements for farm and workshop equipment, are domestic products such as furniture, appliances, carpeting, sewing machines, fabric and haberdashery as well as clothing for all the family. Until 1921 there are few women featured in the images accompanying these, but they begin to appear in that issue. A couple are depicted shopping for woven grass flooring¹⁰, and a young woman is posed using a vacuum cleaner¹¹, suggesting perhaps that they may be involved in these sorts of purchases, but also that the domestic is primarily a woman's domain. There is also a large image of a woman and child using a hand-operated milk separator¹², reflecting the labour women but also children put into the work of the farm.

Nevertheless, the word 'women' is rarely used; ubiquitous instead is the then more polite term 'ladies', and the main arenas where 'ladies' are depicted and addressed throughout the period are in personal products, particularly women's clothing.¹³ Again, vocabulary gives a clue to contemporary characterisations of the women being addressed by the catalogues. In 1909 fabrics are "well and stoutly woven"; "will give even longer wear and better service"; "will make up nicely and wear well" and are "all of British make", or "of best Home make". Even 'tussore silk', a luxury fabric, is "of known quality, and very dependable wear".¹⁴ Clothes may be "stylish"¹⁵ or "very pretty"¹⁶ but references to quality, durability and value for money dominate, and there are few references to fashion at all. Of course, fabrics made in Britain still denote quality - and 'Home' is still the United Kingdom. The vocabulary suggests that in 1909, women customers are responsible for sewing, knitting and selecting hard-wearing clothing, while being frugal, prudent - and patriotic.



Figure 4. Advertisement for a milk separator, p.164 of the 1921 Catalogue. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.



Figure 5. Advertisement for corset, p.50. of the 1909 Catalogue. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

Of particular interest for what they depict of changing attitudes to the female body are the corset advertisements throughout all the catalogues. Corsets themselves, of course, are designed to 'control' the body and literally to make it 'conform'. Scholars have discussed the significance of this actual, as well as symbolic, manifestation of the constraints imposed by the narrow range of acceptable body-shapes and also roles for women.¹⁷ Nevertheless, opinion about the tight-lacing of corsets was divided, even at the time. Doctors in the 19th century considered it caused a range of physical problems – most of which have been debunked today – and were aware of its effects on the spine¹⁸. The 1909 catalogue advertises corsets designed for tight-lacing (see Figure 5). They are described as “unbreakably strengthened”, for example, but customers are reassured that they have been also “recommended by the Medical Faculty”.¹⁹

The images tell another story – of the 'S' figure they were designed to produce, with its tiny waist and emphasised hips and bosom. That shape now appears an exaggeration of the sexualised female figure – but in the catalogues such a thing cannot be spoken of; the text alongside the images reaffirm women customers as practical and prudent, even while they are wearing a clearly impractical and probably uncomfortable garment. It is not surprising that feminists of the era had a great interest in 'rational dress', which resisted the

meanings inherent in this distortion of the female form. In 1893, Alice Burns had written in *The New Zealand Graphic* that such clothes for women were “the swaddling clothes of a sex that has not yet asserted its right to perfect freedom.”²⁰ Nevertheless, the audience of the catalogues is not at the forefront of social change, and dressing up still means a tight corset, even if photographs of contemporary women engaged in all manner of sports and work suggest they were not always worn²¹.

By the last catalogue, in 1938, the types of corsets had changed, and also perhaps their functions. The drawings are of fuller figure models, and texts such as that for the “G6543 'Corselette'” in “tea rose batiste”, may feature “a strong underbelt” designed for the “abdominal figure”²² (see Figure 6). The adult female body still required to be moulded into a shape approaching the ideal for the day, and also, perhaps, to control any public display of fleshy curves underneath. There is less emphasis on the 'bust' and hips, again exemplifying a change in what the fashionable figure was like. By the 30s 'talkies' had arrived, Hollywood films were widely viewed, and popular actresses like Katharine Hepburn and Joan Crawford were slim and willowy, embodying that change.



Figure 6. 1938 Catalogue advertisement for corsets. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

In the catalogues for the 20s and 30s there are few references to the activities of labouring women, although we know there was increasing female employment in a range of occupations, and “farm work of various kinds, such as milking cows, tending crops, and assisting with shearing, occupied many women”²³. Much greater prominence is given to clothing, which no longer has to be durable and sensible. Fashion takes precedence, and the tone has changed from a sober appeal to practicality, to the enthusiastic familiarity we are more familiar with today. The 1938 edition includes an advertisement for “stockings for the business girl ... (in) ... pure silk hose”²⁴ and full colour pages of fashionable garments entitled “Lovely Summer Fashions” in which “you’ll look slim and, Oh! so smart!”.

Although tight-lacing was gone, “and modesty was still regarded as a female virtue, young women were now encouraged to put their bodies forward for assessment. Some young and single women paraded in bathing costumes in beach beauty contests, while others sought their moment of fame in film clips shown to cinema audiences who voted for the woman whose appearance pleased them the most”²⁵. It is therefore unsurprising that “alluring” bathing suits “for your share of fun and sun”²⁶ are included – relatively brief affairs after the greater modesty earlier in the century (see Figure 7). In addition, while prior to the thirties, there was no makeup advertised at all in the catalogues, by 1932 there were perfumes, rouge, face powders, “eyebrow shades” – and lipstick under the brand name ‘Kissproof’²⁷. So while many women worked for a wage, particularly prior to marriage²⁸, direct references to women at work, particularly farm work, are rare. However, there are products for women with disposable income (including from employment outside the home) and a desire to follow the latest trends in adornment. By the thirties, use of makeup has become normalised.

Another aspect of the changing expectations of women over the period of the catalogues is the increasing ‘professionalisation’ of housework. The role of ‘household germs’ in common illnesses, particularly threatening the health of children, was widely known by 1920²⁹ and in 1932 New Zealand acquired an affordable women’s magazine, *The New Zealand Woman’s Weekly*³⁰, which focused on domestic matters such as hygiene, and included advertising which encouraged spending on cleaning products and household goods. For the middle class home, which had previously been used to at least one servant to do the ‘heavy work’ like laundry, servants had become rare, so it was now the role of the women of even middle class households to perform housework of all kinds. Classes for girls

SPORTS TOGS for Carefree Days

G4020—Tennis Suit—All-white Suit in cool Cotton Pique with floral Bolero Jacket to slip on after the game. White only. P.S.S.W., S.S.W., S.W. Price—**29 6**

G4027—South Sea Beach Suit—In all the colours of Summer. Tailored shorts, snappy sun top and swing-time Beach Coat. Buy them separately and wear them together. Ground shades: Blue, Red, Navy, Green. S.S.W., S.W. and W.
Shorts ... **4 6** Sun Top ... **2 11** Coat ... **7 11**

G4028—Palm Beach Sports Suit—In crease-resisting Lines. Featuring action sports shirt, pleated shorts and swing skirt. White and Green. S.S.W., S.W. and W.
Shirt ... **5 6** Shorts ... **7 11** Skirt ... **6 11**

G4025—Play Shorts—Styled right in fast-colour Cottons. White, Navy, Green, Lido, Brown. S.S.W., S.W., W. **4 11**

“Cooltex” Beach Shirts—In White, Green, Yellow, Red and Blue. S.W. and W. Price—**2 11**

G4019—Feel grand—and look it—in this Playtime Suit in gayest of Summer Cottons. Sand, Red, Blues, Navy. S.S.W., S.W. and W. **8 11**

G4024—Gayest Blouses of American Cotton Prints. Fast colours. Red, Blues, Greens. S.S.W., S.W. and W. Price—**7 11**

G4021—Tailored Slacks in Chalk Stripe Flannel. Grey only. S.S.W., S.W. and W. Price—**17 11**

G4022—Similar style in fine Flannel—Grey, Navy. S.S.W., S.W., W. and O.S. Price—**21 6**

G4023—Wide leg, sailor bottoms, in “Windsor” Cloth. Navy, Lido, Brown, Bottle, Black. S.S.W., S.W., W. and O.S. **8 11**

G4018—Swiss Peasant “Dinaal” with matching “Babuska,” in American Cotton Prints. Wear it over your swim suit—for lounging—or to tend to your garden. Cherry, Tan, Blue, Green. S.S.W. and S.W. Price—**21 6**

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Figure 7. Advertisements for sportswear from the 1938 Catalogue, p.218. Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

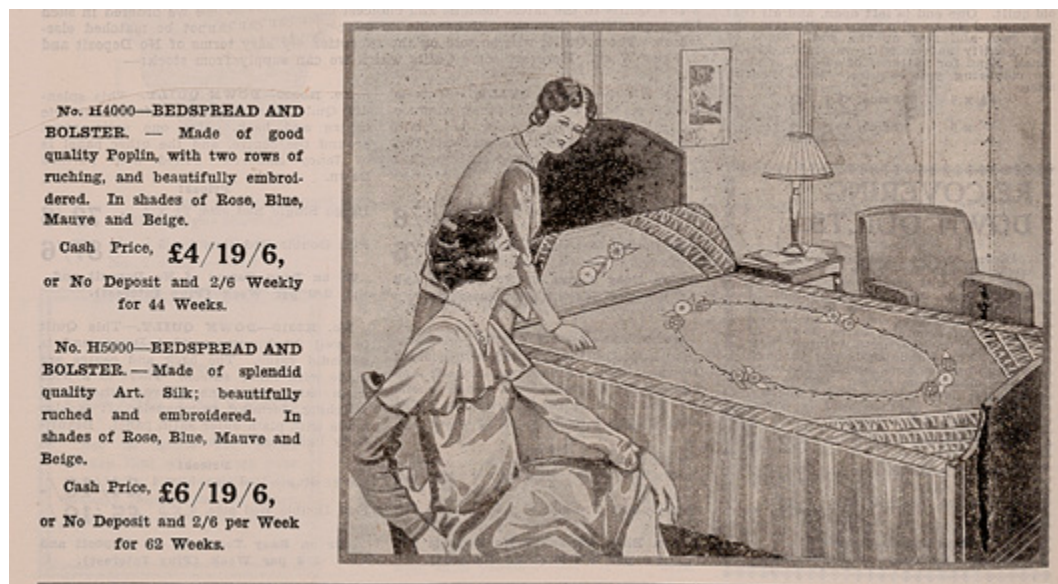


Figure 8. Advertisement for bedspreads from the 1932 Catalogue, p.486.
 Courtesy of Farmers' Trading Company and the Auckland War Memorial Museum.

in cooking and sewing were included in the school curriculum by 1929 under the titles 'home craft', and later 'home economics'³¹ reflecting the 'scientific' approach which raised its status. In New Zealand, as in the United States, being an excellent wife and mother now included being skilled in 'household management'³².

The catalogue images of women involved in domestic work and purchases for the home suggest the increasing status of such matters as they devolved to middle class wives and mothers. They also demonstrate how household goods were a way of embodying family aspirations to social cachet – even during the Great Economic Depression which held poorer New Zealanders in its grip for much of the early 1930s (the catalogues themselves were not published at all for the years 1933 to 1935). Figure 8 is from the 1932 catalogue, and is an advertisement for bedspreads, with the caption "today, in the smartest sleeping rooms, one sees beautiful Bedspreads ... the very latest idea ... besides being stylish, (they make) it so easy to effect delightful colour harmonies ... (and give) ... a touch of distinctiveness"³³. The elevated tone of the language, especially the use of 'delightful' and 'distinctiveness' echoes the situation in the image, where one woman is showing off her classy bedspread to the other.

The years 1909 to 1938 saw significant changes in the ways New Zealand women were characterised in texts such as the catalogues, reflecting increasing liberty of movement not only in their dress, but also in the range of roles they could engage in, especially the normalising of employment prior to marriage. However, many obstacles to full participation in the economic life of the country remained, and arguably there was an increase in the amount of labour married women were expected to carry out in the home, despite the increasing availability of labour-saving devices such as the sewing machine. The relative dourness of the woman suggested in the 1909 catalogue has been replaced by a woman with just as many domestic responsibilities, but with the additional onus on her to be not just 'stylish', but 'alluring'.

The mail order catalogue business which Robert Laidlaw introduced to New Zealand in the early 20th century, brought more choice and cheaper goods for the rural, and later urban, consumer. However, there were social deficits such as the potential loss of interaction that took place at the local store which was often the hub of a rural community. Retailers then, and with online shopping today, would argue the advantages of seeing the article in the store and having the advice of the experienced store owner. Yet, also analogous with contemporary events, infrastructural and technological changes would have in any event had a profound effect on the *modus operandi* of the retail sector. At the beginning of the 20th century in New Zealand with motorized road transport and improved road, rail and postal communications; at the beginning of the 21st century with the Internet. The mail order catalogues of the past and the online sites of today hold a mirror up to the culture of the time and provide valuable insights into the look and feel of the world of consumers and their communities.

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- The major mail order businesses in the United States, Montgomery Ward and Sears Roebuck, on which Laidlaw had modelled his company, were the subject of "persistent and virulent" opposition from local retail merchants. See the introduction to the

- Montgomery, Ward & Co. *1895 Catalogue and Buyers Guide*. Unabridged Facsimile Edition. (New York: Dover Publications, 1969), p.vii.
- At the foot of the page in Figure 2 there is the phrase "The day of big profits is past". An institutional advertisement or homily was placed on almost every page to create a verbal camaraderie with the reader and also to attempt to reassure them that although they were a new enterprise they had old traditions and were a reliable company. See also Laidlaw's use of a classical facade on the cover of his first catalogue (Figure 1).
 - See Barbara Brooke, (2016). *A History of New Zealand Women*, p.242.
 - Laidlaw, Robert. 'To Our 20,000 Customers', *Laidlaw Leeds Catalogue*, 1913, inside front cover.
 - Farmers Union Trading Company Catalogue*, (1917) p.113. A single example of how the language has changed with changed ideas about appropriate roles for women. The term 'farmer' is now used, as least formally, as denoting either female or male.

10 Ibid, 1921, p.464.

11 Ibid, p.465.

12 Ibid, p.164.

13 There are many pages devoted to men's clothing too - of note, a large range of styles of hat.

14 *Laidlaw Leeds Catalogue*, 1909, p.39.

15 Ibid, p.41.

16 Ibid,, p.45.

17 For example, Fields, Jill. "'Fighting the Corsetless Evil': Shaping Corsets and Culture, 1900-1930"

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19 *Laidlaw Leeds Catalogue*, 1909, p.50.

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22 *Farmers Trading Company Catalogue*, 1938, p.19.

23 Brookes, Barbara, (2016) *A History of New Zealand Women*, p.224.

24 *Farmers Trading Company Catalogue*, 1938, p.220.

25 Brookes, Barbara (2016) *A History of New Zealand Women*, p. 230.

26 Ibid p.9 - 27.

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Navigating Design History with a More Culturally Calibrated Compass

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Keywords: #Indigenous knowledge #Design pedagogy #Froebel
#Bauhaus #Transition design

It seems remiss that while New Zealand's design prowess continues to impress globally, the indigenous and cultural knowledge that has for centuries inspired and informed aesthetic languages worldwide has not been recognised for its contribution. Forgotten, or perhaps conveniently ignored, is the praise of both the New Zealand Māori and Pacific people's use of nature's harmonies to achieve beauty in aesthetics made in 1852 by education and aesthetic reformist, Owen Jones (1809 -1874) in his seminal and determinative work, *The Grammar of Ornament*. In order to reinstate Jones' claim, this paper asserts it is critical that we revisit design's history from a less Eurocentric perspective. This offers an opportunity to debunk the counter-claim that indigeneity was counter-productive to the development of modernity. By recalibrating design's history with a more accurate and culturally orientated compass, the contributions made by indigenous knowledge to the endeavours of some of design history's most iconic contributors becomes tangible. Having made these connections, this study will introduce Māori and Pasifika ideologies of time, space and connectivity to demonstrate a pathway forward in which this knowledge can be understood, acknowledged, respected and most importantly appropriately included within design's histories, current practices and future endeavours.

CONNECTING THE EAST WITH THE WEST

Although diversities are acknowledged as being highly valuable to design, when explored as non- western cultural and creative practices, quixotically they are found to be still side-lined within design curriculums that are dominated by Eurocentric, hegemonic and linear ideals. This paper asserts that to navigate thinking and praxis through this partisanship, a more culturally calibrated compass would serve design well. Required to enable this is an appreciation that indigenous knowledge is not old knowledge or knowledge only relevant to distant, now outmoded times. Although an ever increasing number of tertiary graduate attributes note the merits of cultural diversity and acknowledge the value of non- western social, cultural, and creative practice, curriculums continue to be dominated by Eurocentric paradigms.¹ Proclaiming an inclusive approach to be beneficial to both the institute and the profession, words like synergy, relationships and connectivity are used as the newly defined tenets of an improved or perhaps refocused tertiary design education. These proclamations sound convincing, yet there is still much to be done to position indigenous knowledge within design education, thinking and praxis.

This paper suggests one of the first steps forward is to recognise the contributions traditional knowledge has made as part of the discipline's history and disseminate it more accurately within the curriculum. Eurocentric ideals dominated design education in New Zealand from its establishment as a discipline in the mid twentieth century. This is well after the colonial period and positions design education as quite distinct from traditional art and craft. As a result design education has regarded indigenous knowledge as having little to offer the discipline and continues to be dominated by a working model that privileges western influences. In recent years an increased demand for diversity within design education and practice has gone some way towards re-evaluating the Eurocentric occupation of this discipline. Design theorist Alain Findeli argues that twenty first century design needs to further "open up the scope of inquiry" and calls for more collective and culturally inclusive design practice to achieve it.² Fern Lerner further defends this shift and suggests a more inclusive approach would ensure the aesthetic language of the future does not become constricted or impeded.³ Solidifying this motivation, are Terry Irwin and her fellow provocateurs within the Transition Design movement. Transition Design recognises indigenous wisdom as knowledge that has enabled people to live sustainably in

place for generations, informed by the 'slow knowledge' embedded within their cultures. Design, this group affirms, has a lot to learn from the symbiotic relationships embedded in indigenous ideologies. Building on Irwin's words that, "Transition Design draws on knowledge and wisdom from the past to conceive solutions in the present with future generations in mind,"⁴ this paper argues New Zealand design education could lead such a shift. To do so, our design curriculums need to become more culturally accurate and inclusive of indigenous wisdom and to include that knowledge in its pedagogy and histories. By example, this inclusion would ratify the use of indigenous knowledge globally and ignite the inclusion of this much needed wisdom into design education and praxis.

Recently I attended a lecture that Paola Antonelli, Senior Curator, Director of Research and Development at MoMA and renowned author, gave to a group of postgraduate students in New York City. Antonelli, clarified that her presentation was a brief and succinct trajectory through design's definitive moments, and in line with that, the well told historic moments flashed up on the screen; the Industrial Revolution, the Vienna Secession, Russian Constructivism, the Bauhaus, the International Style and of course the grand finale, American Modernism. The personal insights offered numerous segues and insightful diversions leading to America's current contributions to design. Although not asked of Antonelli, when the question of cultural influences on design's history is posed, the answers for the most part, are limited to references of either its removal or if pushed, historians will discuss Japonisme. This phrase was coined by French critic Philippe Burty (1830 – 1890) a quarter of a century after Jones' reference to the importance of the stylised aesthetics of both the Māori and Pacific cultures. Similarly Burty referenced the effect of flatness, colour and stylisation to champion pure beauty as quintessential components of the newly forming design principles. The universal model of design's history offered predominantly by Sigfried Giedion, Nikolaus Pevsner, Rayner Banham and David Raizman not only perpetuates the current working model noted earlier, but also guides the majority of design's history taught worldwide, purposefully or just ignorantly, towards the notions of indigeneity as counter-intuitive.

In the early twentieth century, Austrian architect and follower of Vienna Secession, Adolf Loos (1870-1933) scorned ornament, labelling it degenerate, and no less than a crime.⁵ It was as part of this admonishment that Loos specifically denied the relevance of indigenous aesthetics to the evolution of modernity. This defamation

was one of the earlier and most fanatical outbursts. It initiated the turning point in which the study and the expression of ornament as a reflection of culture, religion or narrative were eliminated from the curricula of art and architecture.⁶ Contrary to the histories disseminated, this study argues that references to culture, understood in the nineteenth century as excessive, and meaningful to only those of little sophistication, were not unequivocally removed from aesthetic education. If not yet celebrated within the design's history as having contributed to the pursuit of beauty or the roots of modernist design, indigenous knowledge certainly demonstrated and continues to demonstrate numerous visual strategies and ideologies that suggest their pre-existence and their influence on both the reductive codes of the aesthetic language instigated by the reformists and used in the development of the universal visual language by design modernists. In addition, Māori and Pasifika understandings of time and space are also articulated, although not acknowledged in the manifestos and practices of a number of modernists. It is these strategies and ideologies that this research seeks to clarify within design histories taught. To address this claim, an abridged version of this history is offered as context.

AN ABRIDGED HISTORY

As an article of culture, ornament is as important as it is misunderstood. Whether regarded as essential, expressive, wasteful, appropriated or applied, ornament has always been considered as an expression of meaning or function. It speaks to us, and also about us through figurative and rhythmic languages.⁷ Aesthetic education has celebrated formal embellishments from Vitruvius (c. 90–c. 20 BCE) in the first century AD, through Leon Battista Alberti (1404–1472) in the fifteenth century and on into the mid-nineteenth century where it flourished to excess. In this period, ornament, or more accurately, excessive embellishment was considered to be contributing to both wasteful production and ill-conceived design works. As a result the reputation of ornament suffered substantial criticism during the social reformations led by John Ruskin (1819–1900), Owen Jones (1809–1874) and their associates. While Jones and Ruskin sought to enable a broader and more inclusive appreciation, use and understanding of ornament and sustainable material production through the establishment of

design principles, public education and free museums exhibitions, many less enlightened early twentieth century architects and designers began to question the use of ornament altogether. Loos, was the most vehement in leading the charge by defaming cultural expressiveness.

During his work on the Great Exhibition of 1856 Jones developed a close working relationship with the like-minded Henry Cole (1808–1882). Cole would, as an extension of his collaborations with Jones go on to become the first director of the South Kensington Museum, now the renowned V&A. This relationship enabled Jones to present his theories on ornament to fledgling designers. Through his own work and lectures, Jones had been formulating what he considered to be the key principles for decorative arts. These principles provided the new reforms that framed the beginnings of design education. As a result, in 1856 Jones published his seminal work, *The Grammar of Ornament*. It is in this work that Jones gathered together what he considered to be the best examples of ornament both historically and geographically in an attempt to encourage designers to interpret and include the underlying principles contained within this exemplary work and attempt to learn from it. At the outset of this work, Jones acknowledged the importance of ornament to all cultures, stating, "There is scarcely a people, in however early a stage of civilisation with who the desire for ornament is not a strong instinct."⁸ Jones immediately turns his attentions to the works of the Pacific, where he gushes, "nothing, therefore, can be more primitive and yet the arrangement shows the most definition and skill."⁹ Jones goes on to celebrate the instinctive eye, the skill, the beauty and the fitness for purpose expressed in both form and the graphic markings that were carved into, woven around or applied to both Māori and Pasifika forms. "The beautiful New Zealand paddle would rival works of any civilisation. The swelling form of the handle where additional weight is required is most beautifully contrived. True art consists of idealising, and not copying the forms of nature,"¹⁰ announces the skills, being, wisdom and aesthetic expression of Māori and Pasifika which set these peoples apart from all others. Jones' contribution was hugely influential to the establishment of the reductive graphic code that sits at the heart of modernism.¹¹ The difference between Jones' approach and Loos' was the former's willingness to acknowledge the value, skill and sophistication of indigenous knowledge and the impact it offered modern aesthetic education. Jones, as a forefather to modernism, was one of the first to ratify culture within design when he stated, Māori and Pacific peoples were, "accustomed only to look upon Nature's harmonies, would readily

enter into the perception of the true balance both of form and colour; in point of fact we find that it so, that in the savage ornament, the true balance of both is always maintained.”¹²

Jones’ enamour with the development of a reductive graphic code did not stop with him. Following on from Jones, French reformist Eugene Grasset (1845–1917) also asserted similar beliefs. Grasset stated, “The return to the primitive sources of simple geometry is a certain guarantee of the soundness of our method.”¹³ But there had been significant inroads to this before either man’s efforts. Their aesthetic and holistic endeavours were preceded by the efforts of European educationalist Friedrich Froebel (1782–1852). Froebel discussed the practice of learning by doing through holistic, practical and creative education, known and still practiced as kindergarten. It is well established that Froebel’s precedents enabled and equipped the preliminary development of modernity.¹⁴ Preceding Froebel were indigenous ideologies and visual spatial strategies and as a keen observer of nature and humanity, Froebel’s beliefs were akin to many of these indigenous practices. Both approached the transfer of knowledge from a biological and a spiritual perspective. Froebel’s philosophy, like that of the Māori and Pacific cultures, embraced all things in nature as connected.¹⁵ Froebel’s work expressed interrelationships between the living and the innate, again replicating Māori and Pasifika ideologies. I suggest that the affinity Froebel’s tenets demonstrate to indigenous knowledge is palpable. The development of a reductive graphic that mimicked indigenous markings and the belief in holism shared between Māori and Pacific ideologies and Froebel’s pedagogy advance this assertion.

THE VISUAL CORRELATIONS

As promised this study will reveal a concealed connection yet to be told as a part of design history; between Froebel’s theory, Ruskin and Jones’ manifestos, the Bauhaus, and rather unexpectedly, Pasifika visual-spatial languages. Importantly Froebel’s work, like indigenous knowledge, honoured the relationships held in the space between nature, things and people. It was upon holistic, sensory, spatial and social ideals that Froebel built his pedagogy and introduced, perhaps more correctly, reintroduced the values of nurturing and respecting the individual and acknowledging their contributions within a larger

collective. Froebel’s approach, although instigated as early childhood education, has been widely credited with having had a direct “influence in the history of architecture and all plastic arts beyond any predictable proportion.”¹⁶ Having impacted Ruskin and Jones’ efforts the trajectory of Froebel’s teachings remained intact. It is well established, though not told as a part of design history’s narrative, that Froebel’s teachings also influenced the creative process and social ideologies of Walter Gropius (1883–1969), his Bauhaus masters Johannes Itten (1888–1967), Paul Klee (1879–1940), Wassily Kandinsky (1866–1944), László Moholy-Nagy (1888–1967), Swiss architect Charles-Édouard Jeanneret, known to all as Le Corbusier, (1833–1965) and prominent American architects and designers Frank Lloyd Wright (1867–1959), Buckminster Fuller (1895–1983) and Charles Eames (1907–1978), to name just the grandfathers of western modernism. Froebel’s ‘Gifts’, as his teaching tools are known, introduced a reductive graphic code based on a sparse grammar of straight lines, diagonals and curves to express the abstracted essence of form and space. The Gifts encouraged physical experimentation with scale, balance, unity, perception, connection and divisibility. Froebel’s Gifts shifted successively from simple to complex and from two-dimensional to three dimensional, moving through point, line and plane to create interconnected relationships with nature.¹⁷ It is of critical importance to note, that similar simple grammars and codified instructions for use can also be found in the dentate stamping on the pottery produced by the Lapita peoples dating as far back as 1500BC. The Lapita peoples are the common ancestor of the Polynesians, Micronesians, and Austronesian- speaking Melanesians who colonised the islands of the Pacific, including New Zealand.¹⁸ These markings are also represented in the patterns, symbols and visual manipulations of the Māori and Pacific cultures, and again in the much later work of Bauhäusler Gunta Stölzl’s weaving in 1928.

Further building on Froebel’s teachings were the holistic and abstractive theories cultivated by Itten and Moholy-Nagy within the German design academy, the Bauhaus (1919–1933). The efforts made by Froebel and Bauhäusler in fashioning the bedrock of a modernist aesthetic education have been acknowledged by numerous established historians. As part of this momentum and the reformist principles of design, Jones had extensively applauded, documented and used indigenous knowledge. The abstracted graphics, flat patterning and ornamentation of Māori and Pacific cultures contributed significantly to his reforms. These aesthetic strategies subsequently became embedded, albeit without reference to Jones’ accolades or recognition

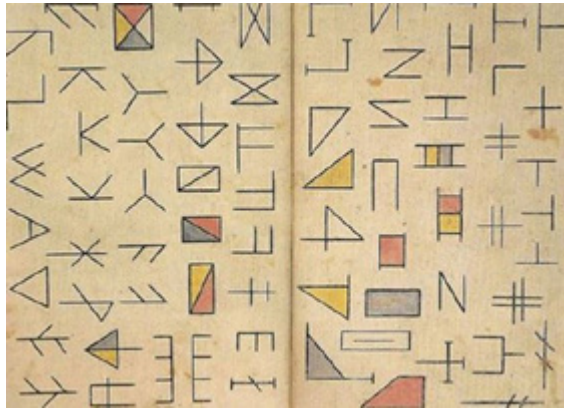


Figure 1. (From left to right) Examples of Lapita markings, 3200-2700 AD. Patrick Vinton Kirch. 'The Lapita Peoples: Ancestors of the Oceanic World', Wiley Global. (This paralleled Froebel's work). See also Norman Brosterman, 'Inventing Kindergarten'. Both show codified graphics that depict sparse grammars of straight lines, diagonals and curves to express the abstracted narratives.

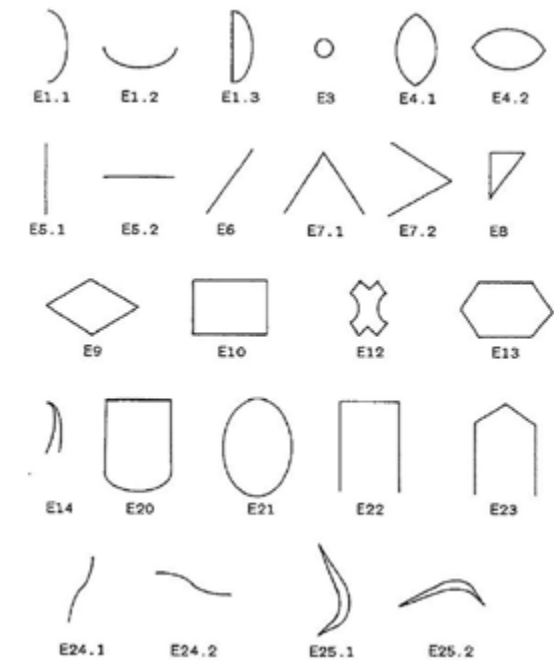


Figure 2. Examples of Owen Jones' Tribal Plates depicted in the 1857 'Ornament of Grammar'. Also see Bauhauslers Gunta Stolz's weaving '1928' (Creative Commons) which shows parallel uses of codified reduced graphic codes.

of the cultural influences, in modernist teachings. The new truncated version, devoid of indigenous recognitions continues to be widely disseminated within western design pedagogies and practices today.

CONNECTIONS AND INTERSECTIONS

Moving beyond aesthetic borrowings, the next comparison made discusses ideology, and posits further historic connections between design and indigenous knowledge that design history fails to incorporate. The ideals of *Ta-Vā* and *teu le vā*, championed by Tongan academic Hūfanga 'Okusitino Mahina in his Theory of Reality enable further ways to connect indigenous wisdom via history, but also project it forward in the annals of design. *Ta-Vā* is rooted in a holistic view of the Pacific as one, Moana. Although Tongan, the ideology is reflected in other Pacific cultures. The Samoan belief of *teu le vā*; the eternal nurturing of space relations and *vā tapuia*; sacred connections, all add a depth and breadth to the ideology.

Samoan academic and poet Albert Wendt's clarification of *vā* goes some way to articulate an understanding of the space created when connections, interactions and relationships occur and where *Tā-Vā* plays out. Wendt wrote, "The space between, the in-betweenness, not empty space, not space that separates but, space that relates, that *vā* holds separate entities and things together in the unity-in-all, the space that is context, giving meaning to things."¹⁹ Important to the notions of shared understandings is the common appreciation of the space and relationships that humans, nature and things hold within *Tā-Vā*. Within Māori world views, *kaupapa* Māori, the relationship between subject and object and culture and nature, also contrasts the western concept of space as separation. "In the Māori world, people and things have close relations that collapse spatial and temporal boundaries."²⁰

Beyond aesthetic qualities, Froebel also reasoned the existence of, and need to nurture, connections within space. By employing spinning to show how form is perceived to change when treated differently within space, Froebel described appearance and illustrated perception. Froebel historian, Norman Brosterman described this exercise as, "a straightforward demonstration of cosmic mutuality and universal interconnectedness."²¹ Contrasting the Western understanding that separation constitutes space, Mahina places an emphasis on tangible and intangible connections.

Froebel's exercises similarly expressed immaterial connections, sensory perception and shared understanding; all intangible yet present. Importantly embedded in *Ta Vā* is the connection to history and legacy and the value to learning held within it. Mahina proffers that, "People are thought to walk forward into the past and walk backward into the future, both taking place in the present, where the past and the future are constantly mediated in the ever-transforming present."²² Mirroring these sentiments Māori cultural ideology states *Hoki whakamuri kia anga whakamua*, look to the past to forge the future. *Teu le vā* speaks to the tethers within these pathways like *vā* that connect entities. These tethers, both tangible and intangible are intergenerational and eternal. Of most importance these connections promote and engender sustainability by instilling an understanding of constant nurturing.

Influenced by and developing on from Froebel's educational reforms and motivated by twentieth century industrialization, Bauhäusler Itten and Moholy-Nagy, as two of the most influential masters, shaped a preliminary year (*Vorkurs*) pedagogy.²³ Much of their teaching continues to be central within the modernist educational approaches that still inform aesthetic programmes worldwide. Important to this research is the recognition of the shared ideals between *Ta-Vā* and those that were embedded in Itten's *Vorkurs* methodology, understood to be the backbone of Bauhaus pedagogy. These tenets laid a pathway for the exploration and analysis of one's self, nature and the larger world.²⁴ This was not done to produce universal or popular stylizing, as wrongly interpreted within mid-twentieth century American design history. Ruskin and Jones had initially intended it as a shared and holistic approach to visual, physical and ontological understanding. Itten's tenets, like *Ta-Vā* and *teu le vā* offered students the ability to see, synthesize emotion and senses, and express the essence of form and space. Itten explained space as: "Walls with windows and doors form the house, but the emptiness in them establishes the essence of the house. Fundamentally, the material conceals utility; the immaterial establishes essence. The essence of a material is its effect on space, the immaterial. Space is the material of the immaterial."²⁵ Continuing these teachings Moholy-Nagy stated,

"Today spatial design is an interweaving of shapes; shapes which are ordered into certain well defined, if invisible, space relations; shapes which represent the fluctuating play of tension and force."²⁶

When the relevance of Moholy-Nagy's ethical, environmental and socially responsible doctrines were brought into question by his new employers in America in the late 1930s, Moholy-Nagy retorted of these relationships, "The artist's work is not measured by the moral and intellectual influence which it exerts in a lifetime but in a lifetime of generations."²⁷ This statement correlates to the indigenous appreciation of inter-generational legacy offered by *Ta-Vā* and now Transition Design where Irwin and her colleagues consider the importance of establishing a connection between past and present in order to vision the future. This paper argues that the importance of thinking in and designing for long horizons of time, as indigenous cultures have, and the application of indigenous, local, place-based knowledge as an example of healthy, long-lived societies, infrastructures, beliefs and relationships to enable modern society to become sustainable, cannot be overstated.²⁸

By paralleling the historic tenets of both Froebel and the Bauhaus in their endeavours to use reductive graphic codes and holistic principles alongside Mahina's theory, connections are exposed. Importantly, the congruence between the ideals imbued in *Ta-Vā*, *teu le vā* and contemporary design education also becomes evident. This acknowledgement points to the inclusion of indigenous knowledge as far more than an interesting historic or cultural deviation. This knowledge holds significant relevance to a design education that seeks to move beyond a 'solution or artefact based' manifesto to one of inter-connectivity between human things and nature that is both sustainable and enriching. Peder Anker states that, "Moholy-Nagy believed the future held the possibility of a new harmony between humans and their earthly environment if forms of design followed biological functions."²⁹ Although never before compared, I would suggest a correlation between the ambitions of Moholy-Nagy and Mahina. Findeli observed of Moholy-Nagy that "the key to our age is to be able to see everything in relationship."³⁰ The loss of the holistic applications to his teaching was possibly the most significant defeat Moholy-Nagy faced as part of his mid-twentieth century efforts in America. The capitalist and resource rich America had no need of the humanist approach or environmental concerns Moholy-Nagy saw as impacting future generations. Sitting very comfortably alongside Moholy-Nagy's 1947 work, *Vision in Motion*, is Mahina's argument that current global issues are exacerbated, if not caused by a loss of, "mutually holistic, symbiotic human-environment relationships."³¹

Also never told as part of New Zealand's design history is the 1965 visit by Richard Buckminster Fuller (1895–1983), one of the

most renowned and formative design scientists to shape the design profession. After Moholy-Nagy, but before such notions were standard environmental thinking, Fuller argued that “the resources offered by the universe; energy, materials and space, were finite and that they had to be seen in terms of their relationships to each other.”³² The little known anecdote, reported by American art critic, Calvin Tomkins is that Fuller visited a rather allusive cultural anthropologist in New Zealand. The word allusive is used because the research being undertaken in New Zealand at the time by Bruce Briggs and Peter Platt of Auckland University to create a Māori Music Archive has yet to agree on who it may have been. But there remains no doubt the anthropologist was, to use Fuller’s words, a “Keeper of the Chants of the Māori people.”³³ Recognising the value of these chants to more than just New Zealand’s anthropology but all of humanity, Fuller, encouraged his colleague to record these sacred stanzas. In these discussions, Fuller launched into extensive monologues, recalling seemingly irrefutable data on tides, prevailing winds, boat design, mathematics, linguistics, archeology, architecture, and religion. The apparent take away from his discussion was that Māori had been among the first peoples to discover and understand the principles of celestial navigation. Fuller highly commended Māori for their ingenuity and for being among the first to, “find a way of sailing around the world, a long, long time before any such voyages were commonly believed to have been made.”³⁴ Initially published in 1969, just four years after his visit to New Zealand, one of Fuller’s most popular works, *Operating Manual for Spaceship Earth* was published. It is a synthesis of Fuller’s world view. In it, Fuller investigates the challenges facing humanity. Fuller asks (and answers) how we can utilise our resources more effectively to realise our potential. He calls for a “design revolution and offers advice on how to guide ‘spaceship earth’ toward a sustainable future.”³⁵ This paper asserts that Fuller’s declarations around sustainable futures, that included the adoption of future technology, intersects significantly with indigenous knowledge. The suggestion that historic inter-generational, local and place-based technologies and tools can both lead and enhance global knowledge is evidenced when Fuller applauds the Māori navigators for their advanced capabilities. As a Froebel alumni and a kindred spirit to Moholy-Nagy, and I would hope Mahina, had they ever met, Fuller asserted “Space is irrelevant. There is no space there are only relationships.”³⁶ Having been lucky enough to meet, present my research to, and at Mahina’s invitation now call myself a fellow Ta-vā-ist, I note in a recent group invitation to the international release of his next work Mahina wrote,

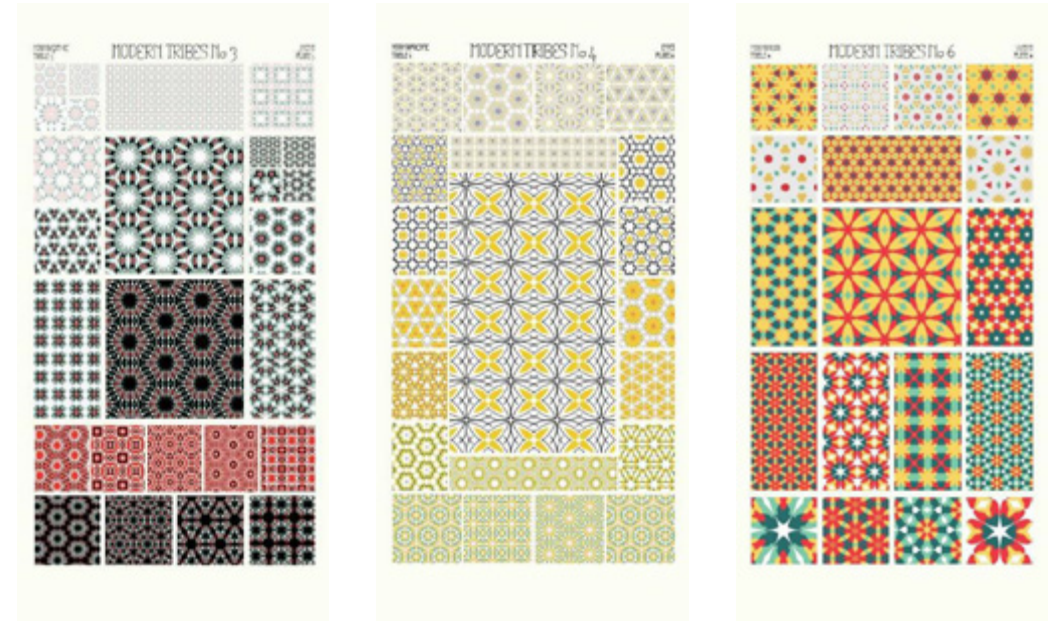


Fig 3. 3 of 6 plates from Modern Tribes; a first year design project where having identified their own cultural affiliations, students make patterns from the individual cultural symbols they designed and seek to express these as collective and complex group identities. Using the historic format introduced by Owen Jones in the Grammar of Ornament these are grouped as modern tribes within Moana. From left to right, Plate 3. Modern Tribes Moana/Gothic. Plate 4. Modern Tribes Moana/Maori. Plate 6. Modern Tribes Moana/Asia.

“Kiaora, Talofa, Fakalofa, Alofa, Aloha & Si’oto’ofa All Good Folks, Friends & Colleagues: I hope everything is fine with you all at your end of the so-called Global Village, Spaceship, Earth!” If Fuller is not here to make the connection between their ideologies, I am happy to see that Mahina, the man behind, in front of and a part of Ta-Vā, agrees there is one.

THE REALITY

In order to incorporate and enable the recalibration of design’s cultural compass the value of indigenous knowledge within creative process needs to be recognized. A deeper, more personal understanding of indigenous culture within the design work produced by and with New Zealand, Māori or Pasifika peoples is paramount as a part of this shift. With a focus on the cultural agency that this study argues needs to be included in our design histories, I reference Wendt. He speaks for all inhabiting Moana, not just Oceania, when he resonates; “I belong to Oceania- or at least I am rooted in a fertile portion of it. So vast, so fabulously varied a scatter of islands, nations, cultures, mythologies and myths, so dazzling a creature, Oceania deserves more than an attempt at mundane fact; only the imagination in free flight can hope, if not to contain her, to grasp some of her shape, plumage and pain.”³⁷ Acknowledging indigenous knowledge as part of our design histories enables both current and future generations of designers to benefit from the holistic indigenous ideologies, narratives and sophisticated visual aesthetics. This also encourages discussions of how respect, reciprocity, mutuality, symmetry and balanced socio-spatial relationships could be engendered into design thinking and practice. This would, I suggest both adjust the dial on the cultural compass that should be guiding our historic narratives and set us on a path towards the diverse and sustainable futures not only sought but now paramount to humanity. Although poised for change, design pedagogy is well overdue to open itself up to the wisdom embedded in diversity and difference but that unfortunately still remains unheeded in twenty-first century mainstream design curriculums.

This research asserts that by relinquishing the heroic, teleological and Eurocentric models currently followed within design education a more culturally calibrated compass can be discovered.

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