

# **What's it all About, Monarto?**

## **John Andrews, Boris Kazanski and the centre of South Australia's unbuilt second "new town".**

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In December 1974, when the Monarto Development Commission's Town Planning Division asked this question, the new town of Monarto – arguably Australia's last such project to date – had less than a year left as a serious proposition. Monarto was to be South Australia's second such development after Elizabeth, and it was hoped its creators would learn from the mistakes and drawbacks not only of that city established two decades earlier; but also from the perceived mistakes of Australian urbanism in the postwar era. The new city was often described as incorporating remnant natural features and swathes of rugged open space; innovative ecologically sensitive design; and in its "fresh start" a "reconsideration of the role of technology" particularly for transport. The new city's proponents aspired to "pre-empt... social problems, or dysfunctions" with design.

While Monarto continues to generate interest in its environmental innovations, most of the studies were either done by people directly involved or in the aftermath of its failure: this paper seeks to offer a fresh perspective. It examines the social research underpinning the Monarto plans, and the expectations regarding the role of education, family and community in the new city; and offers a more complex understanding of the national and international influences operating on the city designs by Boris Kazanski and John Andrews. It asks what we can learn from the Monarto plans about the state of knowledge on ideal city design in Australia in the early 1970s.

## Introduction

In 1975 the Town Planning Division of the Monarto Development Commission set about answering the question “What’s it all about, Monarto?” with an idealistic treatise concluding:

Monarto is about quality of life, about extending and enhancing the South Australian’s traditional concern for the social, physical and cultural wellbeing of the average man... a city built to human scale which recognizes nature, which returns to traditional and relaxed living styles but is radical in its use of technology as a support and in true social development to enrichen [sic] the everyday lives of its citizens (Town Planning Division 1975, p.4).

The unbuilt new town of Monarto occupies an ambiguous space in the history of Australian urban planning. Although admired by some scholars for its early ecological concerns and environmental innovations including solar and wind power (Iwanicki and Jones, 2010) others have inscribed Monarto in a moral narrative of profligacy and political opportunism. Two years after the scheme’s demise, John Wanna (1982, p.266) was quick to condemn the exorbitant sums spent on land acquisition, funding of a bureaucracy and commission of architects and planning consultants as “a misappropriation of state funds on a grand scale”. The project cost \$30 million in total, some of which was Federal funding delivered under the Whitlam government’s New Cities programs. The broad suspicion that the city was never meant to be built – that it was nothing more than a political stunt for the electoral advantage of the incumbent state government – has attached itself to Monarto (Wanna, 1982; Forster 1990, p.33).

Launched shortly after the election of the South Australian Labor Government in 1970 (under the provisional title “Murray New Town”) and shelved officially one year after the Coalition assumed power in that state in 1980, the plans for the new city came to exemplify the failed Fabian socialist dream – not least because of the project’s role in the Whitlam government’s conceptualisation of urban Australia. While the failure to realise the new town was partially the consequence of the changed political climate and the economic conditions of the 1970s, Monarto’s development also took place through a period of ideological revaluation of the discipline.

## Australia’s new towns

An important question, rarely asked, on the matter of Australian new towns is why more have not been built. The nation, federated for over a century, contains large areas of undeveloped country with small populations which nonetheless wield considerable power federally. Its largest cities are both ports and centres of government, much larger than its inland regional centres. Strong “new state” movements have risen and fallen over time, most of which include a platform of “new state capital” development, including decentralization from the traditional mercantile/distributor cities, at their hearts (Clark 1952, p.11; Sproats 1984, p.34). Yet despite these “pull factors”, and the prominent primary industry sector and long-enduring fears relating to the exposed and vulnerable nature of its coasts and their cities, only once has the nation embraced the value of drawing populations (or new settlers) from the state capitals to new purpose-built urban areas. But Canberra’s story is of a city built for reasons far removed from concerns over urban expansion.

In 1945 Walter Bunning wrote about satellite towns (as opposed to New Towns) in an Australian context: these he saw as “entirely practical”. They were also desirable as creating conditions for improved housing, “more open space and easier access to the countryside” and served to “reduce the congestion of industries and transport which has made city dwellers a race of “straphangers” on their way to and from work.” Bunning imagined a hypothetical town of one mile across for 10 000 people, including five suburban areas of 2000 residents each separated by a green belt from the town centre (Bunning 1945, p.91). Six years later Sir George Pepler suggested the Commonwealth Government “should set up a town planning ministry with finance, and found new towns to relieve overcrowded Australian cities” (Anon 1951). Between Bunning’s and Pepler’s ruminations the South Australian Housing Trust began to acquire the land to build what would become known as Elizabeth, “unique in Australia at the time as an example of comprehensively planned urban development” (Forster and McCaskill 2007, p.87) but for all intents and purposes an outer suburban extension to Adelaide rather than what it was dressed as – a “new town”. Despite the rare exceptions of comprehensively planned projects such as Elizabeth, throughout the 1960s and into the 70s many (particularly left-wing) politicians and bureaucrats as well as many planners continued to decry the traditional governmental approach of what Robert Lansdown (1966, p.175) described as “ad hoc unco-ordinated decision-making” in the face of “continuing population increase” leading to a “spread of suburbs lacking in basic services and natural centres around which some simple sense of community can develop”.

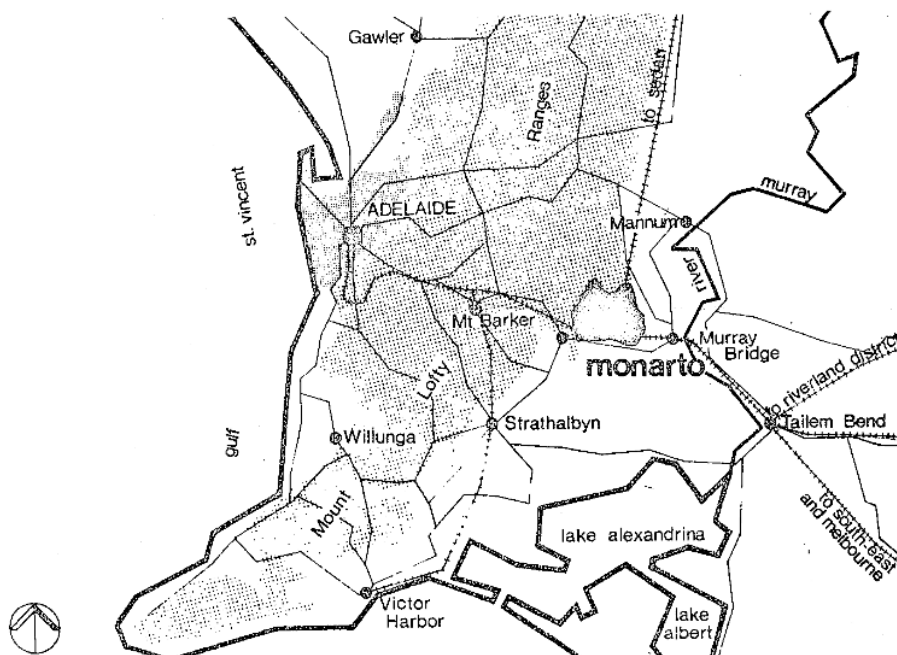


Figure 1: Monarto in geographical context. From Town Planning Division (1975) *Monarto Planning Studies* Adelaide, Monarto Development Commission, p. 13.

The closest Australia has come to a genuine “new towns” strategy comparable to European models is the period in the early 1970s during which the Whitlam government brought together a range of newly projected cities under the “growth centres” banner. Though the impetus for sites and

composition came largely from state governments in NSW (Bathurst-Orange, Albury-Wodonga, Campbelltown), South Australia (Monarto), Western Australia (Salvado) and Victoria (Albury-Wodonga), it was Whitlam's commitment to quality of life for urbanized Australia that furthered the discussion, and, despite the tensions inherent between State and Federal authorities, gave the state-based schemes the form of a network.

The machinations behind the identification of the Murray Bridge area as an ideal site for a "true" new town (Figure 1) lie in demographic projections: a 1966 Government report predicting population surge in Adelaide which would see the city reach one and a half million by 2000. Monarto was intended to draw away almost 200 000 residents (Forster and MacCaskill 2007, p. 95; Hutchings 1997, p.124). Fears that Adelaide's infrastructure would not cope with the surge, and that sprawl would encroach on arable lands to the east of the city supporting the increasingly valuable wine industry, were also key. Within months of the Labor victory of 1970 under Don Dunstan the Murray New Town Steering Committee was set up to undertake preliminary international research on social policy and environmental impacts and issues (Britton-Jones 2002, pp. 2-3).

South Australian architect Newell Platten was appointed Commissioner of the newly established Monarto Development Commission in 1972, and the site of 15 200 acres near the township of Murray Bridge, 60 kilometres north west of Adelaide was selected for the new town (Hutchings 1977, p.127). Forced acquisition of the land followed with the passing of 1972 the Murray New Town Land Acquisition Act (later renamed the Monarto Land Acquisition Act). Dunstan (1981, p. 191) would claim that "the planning was done with great care – no new city had had such careful study carried out for its establishment this century." His praise of the "care" involved notwithstanding, the project had a very short development trajectory and indeed most time spent was on "study". In 1974, urban designer Boris Kazanski published the *Concept Plan for Monarto*, and the following year John Andrews produced the *Monarto City Centre Stage One Design Proposal*. Kazanski and Andrews both had recent experience working on the Canberra suburban node of Belconnen for the National Capital Development Commission.

Andrews' Belconnen involvement had involved the Cameron Offices, a long term project which had drawn him back to Australia from his successful Toronto-based practice in 1969, but which was not complete until 1976. A vast complex in its own right – to house 4000 federal government bureaucrats – Cameron Offices was but a part of the NCDC's broader project for Belconnen, a new Canberra suburb including not only significant provision for government administration, but also its own town centre, shopping and commercial facilities, and transit centre to connect it to the rest of the city. Belconnen was a part of the NCDC's Y plan decentralising Canberra as it grew; Woden, another key location where new growth was to be concentrated, would also feature a major Andrews project.

The work of Kazanski's and Andrews' offices were not the only examples of importations and cross currents between the NCDC and the planning of Monarto. In 1972 former NCDC architect Hank Den Ouden was appointed Director of the MDC Architecture unit. The culture of the newly formed MDC reflected wider social questioning of traditional hierarchical and siloed managerial styles. Keen to distance himself from the centrally controlled bureaucracy of his former workplace in Canberra, Den Ouden was intent on developing an interdisciplinary approach to planning on Monarto<sup>1</sup> and worked

closely and consultatively with the social planning, town planning and engineering divisions of the MDC. He would be a conduit for these ideas and his influence would impact on designs produced.

To the public, at the time and in retrospect, the Monarto Development Commission planners promoted the Australian, and specifically *South* Australian, planning influences of William Light, Charles Reade and Hugh Stretton whose seminal work *Ideas for Australian Cities* had been published in 1970 (Hutchings, 1989). According to the MDC's Director of Town Planning Alan Hutchings (1977, p. 126) Monarto was to be a quintessentially Australian city for ordinary people where the buildings would not overpower "human scale". Preliminary research for Monarto begun by the Steering Committee in 1970, however, suggests an international focus which belies the self-confessed parochial focus of the later Monarto Development Commission. New towns in Britain and Scandinavia were the subject of one Steering Committee investigation, as were the social benefits of higher density: "I don't think it was *called* urban consolidation in those days" reflected former secretary to the Committee Sue Britton-Jones, who confirmed that the town "certainly" emphasised "more intensive development" (Britton-Jones 2007, pp. 2-3). Extensive international experience also informed the two consultancies responsible for the principal plans of Monarto.

Adelaide born and educated Boris Kazanski had recently returned to Australia from Germany where he had worked under the architect Rolf Gutbrod, bringing an impressive consortium of international architects and designers with him to the Monarto project. One of these, the British firm Shankland Cox, had wide European urban design experience (Shankland 1973, pp. 463-467) and an established interest in social planning. Prior to establishing their partnership, Oliver Cox and Graeme Shankland had worked for the progressive London City Council on the new town of Hook with sociologist Peter Willmott (Willmott, 1967). Gutbrod was another associate on the new project; together with Frei Otto, he had designed the German Pavilion for Expo 67 in Montreal, highly regarded for its innovative tensile structure. In 1974 Gutbrod and Otto were also working on the Mecca Conference Centre in Saudi Arabia, again deploying a tensile roof structure. Gutbrod, as Kazanski recently noted, "had vast experience in building in arid zones similar to flat and dry areas of Monarto".<sup>2</sup>

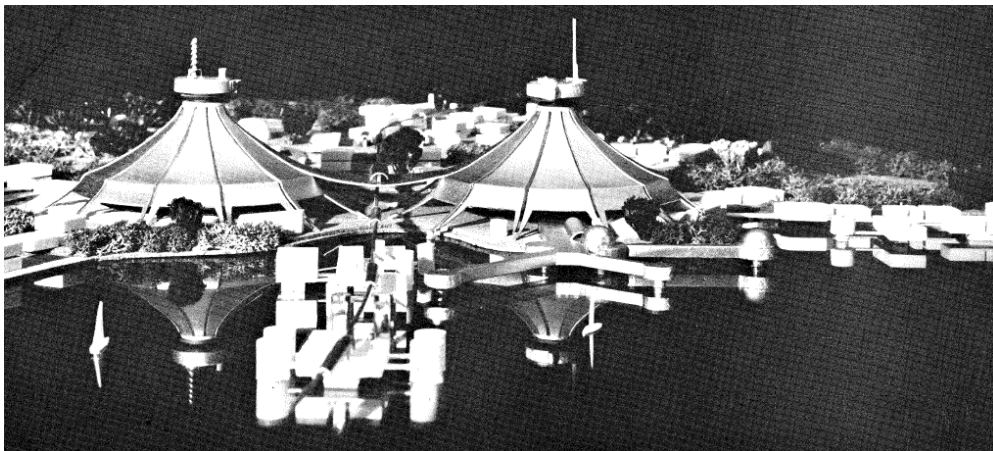


Figure 2: Kazanski's "Honky Tonky" entertainment precinct. Kazanski and Associates et al (1974) *Monarto Concept Plan* Adelaide, Monarto Development Commission.

The Kazanski plan was met with intense resistance from the Monarto Development Commission. Hutchings took particular exception to the plan's megastructures which would overshadow the people and the environment. He also objected to the more avant garde elements of the plan, in conflict as it was to the (imagined) ordinary Australians who would populate the new town: "the vast tent-like structures built over the proposed central lake which was to become "one of the two 'Honky Tonky' areas of the city centre" (Figure 2). These comprised the *urbanisme ludique* or "fun-city" concept of Archigram and similar groups' (Hutchings 1989, p. 172). One element of the plan which would survive through to the next design stage, led by Andrews, was the lake – a reflection, surely, of the success of the long-mooted, but recently filled, Lake Burley Griffin (Figure 3): this project would have loomed large in the minds of many directly connected to Monarto.

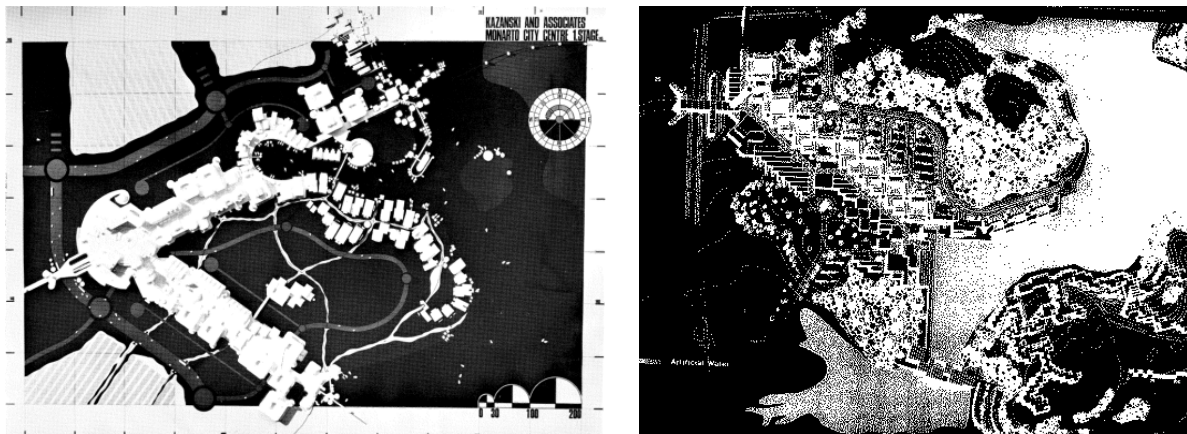


Figure 3: Kazanski's and Andrews' differing conceptions of the Monarto City Centre, from 1974 and 1975 respectively. Both centre on waterfront living.

Andrews' urban trajectory begins with his masters education at Harvard's Graduate School of Design in 1957-8. The GSD was then under the direction of Josep Lluís Sert, the Catalan architect who had been president of the Congrès Internationaux d'Architecture Moderne from 1947 to 1956. Sert had a strong intellectual interest in the phenomenon of the city, pursued not only in his own practice work but also in his institutional roles. While his 1942 book *Can Our Cities Survive?* reflects the urbanism of the second phase of CIAM from the formulation of the Athens Charter in 1932, under Sert's guidance the immediate post-war conferences of CIAM – particularly the 7<sup>th</sup> at Bergamo (1949) and the 8<sup>th</sup> at Hoddeston (1951) – had refocused on the question of the city centre and its symbolic role. This was in keeping with Sert's simultaneous promotion of a new monumentality for modern architecture, most famously formulated in the 1943 text "Nine points on monumentality" written with the architectural historian Sigfried Giedion and the painter Fernand Léger (1993, p. 29). In the 1960s, at Harvard, Sert would establish the first Master of Urban Design program (Mumford 2012) but this urban interest was already apparent in the architecture curriculum studied by Andrews under Sert in the late 1950s, when the design studio subject in the program Andrews undertook

focused on “Advanced problems dealing with (a) complex building of monumental character and (b) civic design” (Anon 1957).

A combination of focused research and prevalent ideology drove both Kazanski’s and Andrews’ central Monarto plans, and the broader conceptions of the overall urban form. The town was to feature dense population areas, yet be as spacious as possible; while it was to be an urban society with attractions of any city, it was not to stifle the purportedly innate desire of inhabitants to be close to nature, and it was not to be unrelentingly “new”. This was a period in which not only a planning backlash, but also a backlash against many elements of the urban (as opposed to “natural”, if not “rural”) environment, was in full swing: the cover of Kazanski’s report featured not a streamlined urban environment, but a decrepit rural farmyard. Few wanted to be party to a new town of “dulling... hectic newness,” to quote one critic of the British new towns (Brooke-Taylor 1972, p. 124).

The culmination of the processes at play can be seen in Leonie Sandercock’s 1975 report to the Monarto Development Commission, *Public Participation in Planning*, published contemporaneously with the demise of the Whitlam government – and effectively, of Monarto as a realizable project. A survey of the state of engagement between community, planners, and government, Sandercock’s text posited the notion that the new city might reasonably be developed in consultation with its residents-to-be. This was an unusual situation – generally speaking, the actual population is the last component of a new urban area – but possible in Monarto as it was to be peopled in large part by public servants working in administrative departments relocated from Adelaide. Sandercock wrote:

Since its establishment the M.D.C. has gone some way to fulfilling its legislative requirements with respect to participation by using the traditional techniques of exhibitions, leaflets, publicity, some questionnaires, addressing community groups, conferences and so on. This is now almost standard activity among planning authorities, and the difficult but potentially innovative role of the Commission is yet to come. This involves the attempt to identify future “stakeholders” in the new city and involve them both before they move, and once they are at Monarto (Sandercock 1975, p. 134).

Indeed, an extensive series of social research seminars, colloquia and consultations had been undertaken in the lead up to the unveiling of Monarto. Bruce Pennay (2005, p. 63) says of Monarto’s immediate forerunner, and would-be north-eastern older sibling, Albury-Wodonga that its “planning process was deliberative and consultative – and consequently slow”. Monarto was to be a much more speedily grown product, with six years between its formal beginnings in 1972 and the pioneers (aside from any extant residents) locating permanently in 1978.

The discourse surrounding the planning of Monarto in the first half of the 1970s reveals, then, a remarkable moment in Australian political and cultural history, as well as a period of a planning profession which was, if not in crisis, certainly gearing up for reassessment. Architectural discourse at this time also reflected growing environmental and sociological awareness. The city of Monarto was “to be planned at a time when concern for the environment and for the quality of life of the people are receiving growing attention,” Governor Mark Oliphant declared at the opening of a 1972 seminar to discuss its development (Whitelock and Corbett 1972, p. 1). At the same time, while its primary *raison d’être* was “to siphon off from Adelaide excess population,” (Bakewell 1972, p. 7)

recognition was also given to the push and pull factors of a town like Monarto. R. D. Bakewell suggested in 1972 that:

The development of any new town covers – but not necessarily in this order – firstly, planning, secondly, land management, thirdly, policy related to a leasehold control, and fourthly, the social development of the town and the social participation arising from the need to assimilate into the new town a rapid influx of people (p. 5).

Australia had made some headway with the construction of purpose-built regional centres, as well as with extensive “newtown”-styled suburban public housing areas added to extant cities (such as Sydney’s Green Valley, which like Elizabeth was “not strictly speaking, a New Town”) (Sorell and Gibson 1970, p. 13). It was now possible to identify social problems associated with such developments, some of them not dissimilar to those in other countries, such as in the UK where “problems” were “mainly of a sociological nature...” (Bakewell 1972, p. 4). Elizabeth was by this time two decades old; concerned citizens, NGOs and the town’s creator, the South Australian Housing Trust, hoped to learn from its experience. Its CEO Alan Ramsay suggested in 1972 that “even before a person lived in Elizabeth, the Trust was very conscious that the main difficulties in a new town would be social,” and that “anything we can learn today to apply to Murray will be of great use and significance” (Ramsay 1972, p. 15).

In line with much of the best participative planning, Monarto’s planners, and the planning fraternity and its fellow travellers, were propagandists for the project even as it took shape. The question of the specific attractions of the new town were key. Amos Rapoport, the Polish- Australian theorist who, in 1972, was lecturing at the University of Melbourne, suggested that:

The town must have an appropriate overall character or “image”. The study of images is developing, as is the appreciation of their importance. It may now be possible to discover, or at least get some inkling into, the appropriate images for the centre and the major symbolic elements as well as the overall quality of the town. This would give the new town a flying start which is a most important consideration for such a project (p. 15).

Ron Caldicott, who spoke at the same seminar, ruminated on the community value of the established 19<sup>th</sup> century suburb of North Adelaide, but saw many lessons to be taken from its particular successes:

I do not think that we should by any means create a facsimile of North Adelaide, but there we have an example of housing designed for the climate, shopping and other commercial activities, together with a small amount of industry and a ready access to parklands and other recreational facilities such as the Botanic Gardens, the Zoo and boating on the Torrens to mention only the most obvious (p. 39).

Education was to be a prominent feature of the new city. Caldicott suggested that Monarto “should certainly have its own educational and occupational complex, covering a whole spectrum of community needs, and this could be the focal point of the city” (p. 41). Other attendees, as members of a study group on “social problems” opined that Monarto should be “a completely new kind of town with a minimum of roads, houses facing onto common ground and plenty of walking areas for

children to walk to school, etc. There should be an integration of all resources such as educational and community facilities” (Whitelock and Corbett 1972, p. 58).

Large-scale investment in new facilities was, unsurprisingly, seen as core to a successful new town. Participants in social research NGO Australian Frontier’s consultation on “the New Town of Murray” expressed the view that as the town was “being developed to ‘save’ Adelaide, it should receive privileged treatment, even if this involved some penalty to Adelaide.” This including ensuring the new town would be “given the top headmasters and a disproportionate share of the good and experienced teachers” (p. 24). This approach was hotly criticized by social welfare organisations in South Australia “because of the adverse effects on the rest of the State if too many of the scarce resources in this area are put into the one project” (Rushman 1977, p.30).

### **Monarto: a distillation of 30 years of research and dialogue**

The discussion over the values to be embedded in the Monarto plan was, then, ongoing; with 40 years’ hindsight, it reflects as much on South Australians’ opinions on Adelaide and Elizabeth as much as it does on the future new town. But how did such thinking impact on those called upon to create designs – however preliminary – for the place?

The role of John Andrews in the Monarto project was as principal architectural consultant. While Andrews collaborated with others on Monarto, in particular fellow architect Philip Cox, the part of the project that bears his imprint most directly is the plan for its centre which appears in the 1975 report *Monarto City Centre Stage One Design Proposal*. While somewhat schematic, the most architecturally resolved element of this is a cluster of office buildings for departments of the South Australian government organised along one side of a long pedestrian mall, which linked the lakefront at the southwest with a transit centre. A landmark tower is included, a nod perhaps to Rapoport’s suggestion of the need for a major, unifying symbolic element. Retail, commercial and educational services are incorporated into the mall design.

The Andrews work features aspects connected to the rest of his oeuvre. While the schematic organisation of the Monarto buildings is geometrically different from the contemporaneous Cameron offices at Belconnen – a series of wings connected around open square courtyards rather than the long building fingers of Belconnen – the principle of repeated geometry, staggered in section to fit to an underlying terrain which is then represented architecturally in the tiered forms of the building’s skyline, is common to both projects. So too is the sense that a single massive complex resolved into articulated parts gives multiple opportunities for entry points each with their own address: both Cameron offices and the Andrews buildings at Monarto were to accommodate multiple government departments, in the one case of the federal government in the other of the South Australian State. This articulation of the Monarto centre into building-scaled parts of equivalent compositional and planning significance distinguishes Andrews’ design here from that of meagstructural proposals for new urban centres elsewhere, such as the Cumbernauld Town Centre, outside Glasgow, by Geoffrey Copcutt, designed in 1960 and realized in phases subsequently, and perhaps also from Kazanski’s Monarto project. Reyner Banham associates Andrews’ career-making project, the design of Scarborough College in Toronto’s eastern suburbs (completed 1965) with Copcutt’s Cumbernauld as two key examples of the megastructure trend of the 1960s (Banham 1976: p. 167). However, Andrews’ subsequent work even when at urban scale is not based on

singular design gestures such as that at Scarborough, and as such is distinct from the megastructure trends of the 1960s and early seventies.

Andrews' Monarto centre appears also to have been planned to include some retail use at the ground level of its buildings, and apartments at upper levels of the wings away from the mall. The Monarto pattern of square courts would become a notable and rigorously explored feature in subsequent large scale Andrews complexes, the squares often chamfered to octagons, particularly the design for the Woden offices (designed 1973; only partly realised 1980), and the project from the 1980s for the Intelsat offices in Washington, where the courts are glazed at the top to become a series of atria. But residues of this planning approach – with square interstices between building nodes, usually disposed diagonally (both on the drawing and in relation to street grids on site) – can be found in many subsequent Andrews projects from the Hyatt Regency Hotel in Perth (1984), to the office building and hotel for the Adelaide Railway Station redevelopment project (1988), and the Octagon offices in Parramatta (1990). The cylindrical circulation towers at nodes between wings apparent in the Monarto drawings also became a key motif in many subsequent projects, but at Monarto they would house only stairs as the buildings were to be low enough to avoid the need for lifts.

All of the projects mentioned above demonstrate an ongoing investigation by Andrews of the urban potential of large building complexes; they also demonstrate an evolving interest in the environmental performance of architecture that was particularly significant both to Monarto's climatic context and contemporary concerns over pollution, energy and indeed urbanization in sum. While it is possible to at least provisionally trace the origin of Andrews' urbanistic concerns, the sources and influences of his focus on low energy strategies is much less apparent.

The potential for large scale buildings to play an urban role was consistently explored by Andrews, from Scarborough College, through African Place at Expo 67 in Montreal, to the student residences at Guelph (1968) where, at a very large scale, square diagonally oriented courts first appear in Andrews' work. The finer grained urban textures apparent in the residential areas adjacent to the Monarto town centre are explored by Andrews in the unbuilt project for Woolloomooloo Bay (1975) and the social housing at Little Bay in Sydney (completed 1975). Doug McKay, the principal architect from the Andrews office who worked on Monarto, had previously played an important role on the Little Bay design and had also worked on Belconnen.<sup>3</sup> While these projects show kinship with the planning strategies explored by the CIAM-inspired Team 10 generation (Andrews would be an admirer of Team 10 member Aldo van Eyck when he got to know of him through his colleague Peter Prangnell at the University of Toronto in the late sixties) it is clear that Andrews' own urban orientation also owes a great deal to the take on urbanism developed in CIAM circles at mid-century, the very context from which Team 10 rebelled. The Monarto water tower is consistent not only with Rapoport's views but also with the monumentality suggested in Sert, Leger and Giedion's 1942 text, or Louis Kahn's (1944, pp. 48-54) essay on monumentality.

The source of Andrews' environmental interest is less clear than the origins of his tendency to think in urban terms, and warrants further investigation. However his experience in designing Scarborough taught him to take climatic information seriously (Taylor & Andrews 1982, p. 32-33; Scrivano & Lobsinger, 2008), and his academic involvement at the University of Toronto in the 1960s most likely made him aware of the pioneering environmentalist advocacy of the landscape architect-

cum-planner Ian McHarg. He has also cited Sym van der Ryn as someone who interested him<sup>4</sup> but van der Ryn's work was not widely published until the environmental orientation in Andrews' own work was already well-established. This orientation is apparent in the green roofs of the Cameron offices at Belconnen (repeated at the Garden Island Parking Structure in Sydney (1980), and at Intelsat (1988)); an interest in passive cooling/ventilating systems, again culminating at Intelsat, in the atria which exploit the stack effect to draw air across pools of water and thereby increase its cooling effects), and in shading strategies consistently used in Andrews buildings, for example the light-weight triangulated steel rod screens, clad variously with polycarbonate or glass, used at the King George Tower, Sydney (1976), the Woden offices, and then Intelsat. Don Thomas (DS Thomas & Associates), the mechanical engineer with whom Andrews worked on several of these projects (significantly, both Belconnen and Intelsat) also gave advice for Monarto.

While the design of the Andrews building for Monarto did not develop to such levels of detail, the pools which were intended to feature in the courts of his town centre buildings were intended to have an evaporative cooling function, and the sight and sound of their sheets of moving water, as Jennifer Taylor has pointed out, would also have a psychological effect (Taylor & Andrews 1983, p. 155). A policy of using minimum energy resources led to the Monarto strategy of avoiding lifts for vertical transportation within buildings, and a plan to use solar energy for heating and air conditioning. More unexpectedly, the Monarto design apparently envisaged using the energy generated by the fall of water from its monumental tower to the lake to power an "electric trolley" that would run the length of the mall. The 1975 report on the city centre design in fact designates the tower as an "Energy Tower" that would with some unspecified technologies "take advantage of the year round energy availability of natural resources such as wind, solar energy and water." While Andrews had faith in the ability of Don Thomas to resolve inventive approaches to the environmental performance of buildings, and Kazanski's work with Gotbrud brought further technical expertise to the project, the idea of the "Energy Tower" entailed a technological leap of faith. This probably contributed to Andrews' sense that Monarto was unlikely to eventuate. Despite therefore not taking it very seriously (or so he claims in retrospect), Andrews' work on the Monarto city centre buildings is as outlined above an important link in the chain of development of urban and environmental ideas apparent in his work.

## Conclusion

The final conception of Monarto's centre was the work of Andrews, for whom it was both a challenge and a showcase. No doubt the choice of Andrews as designer for the town was made not only for his architectural ability but also in large part for his showmanship, his ability to cultivate publicity. This was important, as if Monarto was to perform its functions it would first need to "sell itself" as a feasible, attractive and perhaps even exciting city centre which would both fulfill its purpose and provide quality of life for residents and visitors (Figure 4).

While direct connections can be drawn between the research relating to Monarto – particularly the seminar papers and focus groups – and designs for it, Andrews' in particular, it seems unlikely that Andrews was directly responding to the swathe of proposals from South Australian professionals and laypeople. Such connections as there are most likely came about through the agency of Den Ouden. The main motivations of the Andrews design, however, in aspiring to create a place both modern and socially and environmentally responsive, came from broader issues facing the built environment

disciplines. In this regard these interlinking concerns can be seen as exemplars of global issues of the period.

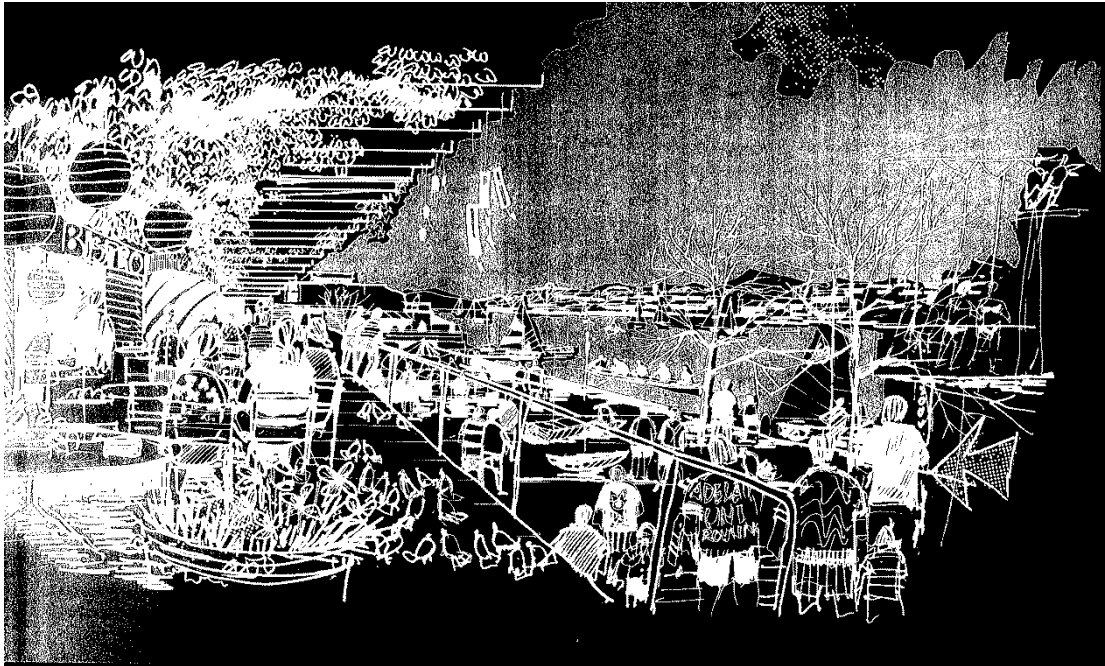


Figure 4: Conception of lakeside life at Monarto. From *Monarto City Centre Stage One Design Proposal* (1975) no page numbers.

In 1981, Dunstan wrote of regrets surrounding his time in state government. They included the failure to establish Monarto “and thereby protect... Adelaide from overdevelopment” (p. 316). However, if it was not clear in the early 1980s it would soon become obvious that Monarto was not needed, at least not for the purpose it was originally intended: to soak up overspill from Adelaide, preserving quality of life in the capital and producing a hi-tech, environmentally friendly new town blending old with new in an ecologically friendly environment.

Subsequent revisions of the Monarto story have sought to minimise its value. While the city was, plainly, never constructed in any form (Kazanski, in discussion with the present authors, takes credit for suggesting the site’s present use – a zoo) the talented individuals involved in its research, planning and design have left an extraordinary record of perspectives on best-practice city planning in that era; one in which international contributors positioned an ecologically sensitive, socially dynamic “new town” both in Australian and international contexts. Monarto – perhaps more than any other of the Whitlam “new towns”, and perhaps more than any other abandoned Australian “new town” – is surely worthy of further study and discussion.

<sup>1</sup> Den Ouden, pers. comm. 2013

<sup>2</sup> Kazanski, pers. comm. 2013

<sup>3</sup> Andrews J pers comm 2013

<sup>4</sup> Andrews J pers comm 2013

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