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# An Open Plan

## The Development of the Griffith University Nathan Campus Plan, 1966-1973

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*The Nathan campus of Griffith University is well known in Australian architectural history for the architectural significance of its first buildings by prominent Queensland architects. In this paper, we focus on understanding the significance of the design of the campus plan at Nathan in relation to the proliferation of new universities internationally in the 1960s, and the emergence of an accompanying discourse on campus planning. The changes to the conception of the Nathan campus plan during its development between 1966 to 1973—from the original rambling picturesque master plan on the isolated bushland site by James Birrell, to the final plan by Roger Johnson characterised by urban-density and a linear spine—reflect an engagement with the key ideas of this international discourse. One of its most topical and disputed issues was the question of how to manage the unprecedented growth and on-going change expected in the university institution. In 1968 Joseph Rykwert suggested that the new university campuses were archetypal buildings of the age. In situating the Nathan campus design within an international context, this paper aims to reveal not only how ideas about planning from Britain, Europe and America came to have an influence in an Australian context, but also to reflect on Rykwert's proposition and suggest that the 1960s university campuses materialised how the changed urban scale of the post-war period had become a self-conscious problem for architecture.*

In a 1968 article titled “Universities as Institutional Archetypes of our Age,” architectural historian Joseph Rykwert suggested that:

Historical epochs might almost be classified by the kind of building which is the archetype or paradigm . . . to all that gets built in the age. That is what the temple was in ancient Greece; the city . . . to republican . . . Rome; the Cathedral



to the Middle Ages; the palace to the XVIIth century . . . the block of flats in the period 1920-40. And for us, now, it is the university.<sup>1</sup>

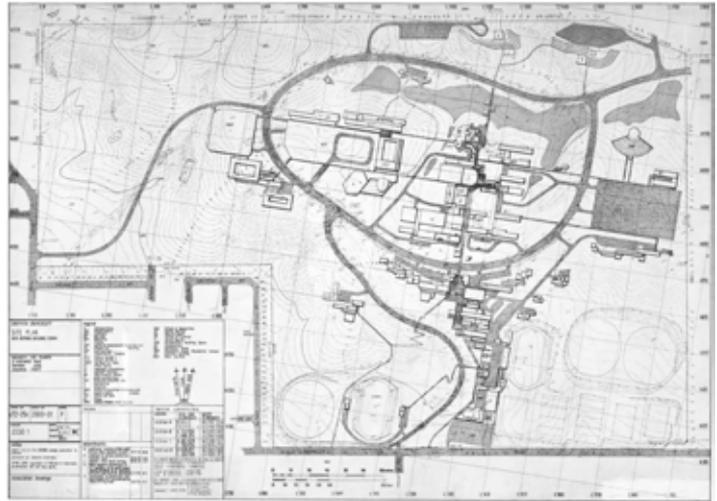
Rykwert's analysis recognised the large-scale expansion of the university sector and the proliferation of new university campuses that had occurred in the 1960s and its significance in relation to concurrent social change. The new university campus of the 1960s were also significant for how ambitions for new social patterns intersected with planning techniques, and how the changed urban complexity of post-war society had become a self-conscious problem for architecture. One of the most topical and disputed issues of the international discourse on campus planning that accompanied the expansion of the university sector, was the question of how to manage the unprecedented growth and on-going change expected in the university institution, which resulted in a preoccupation with the development of plan configurations that would respond to change.

The growth of the university sector in Australia in the 1960s and 1970s also resulted in new university campuses in its major cities and regional centres. A second university was proposed for Brisbane in 1964 and resulted in the development of the Nathan campus of Griffith University. The plan for the Nathan campus was developed between 1966 and 1973 and involved the preparation of three significant documents. An initial planning report prepared by James Birrell in 1966, proposed a series of buildings picturesquely arranged in groups around topographical features and in harmony with the green-field landscape. A subsequent report, prepared by G. J. Harrison in 1971 after the formalisation of the Griffith University governing body, recommended a shift in direction from a dispersed arrangement to a campus with a compact plan and an urban density. The implemented plan made by Roger Johnson in 1973, pursued a compact arrangement of buildings along a primary linear circulation spine with a series of pedestrian branches that created a matrix of proposed building envelopes and established a formal logic for future expansion. The changes to the conception of the campus plan evident between Birrell's and Johnson's plans reflect an engagement with the key ideas of the international discourse.

In this paper, we focus on situating the design of the Nathan campus plan in relation to the proliferation of new universities and the emergence of an international campus planning discourse

1. Joseph Rykwert, "Universities as Institutional Archetypes of Our Age," *Zodiac* 18 (1968), 61.

Figure 1. Griffith University Site Plan With Notional Buildings Shown. Roger Johnson, “Griffith University Site Planning Report.” (Brisbane, 1973). Reproduced by permission of Griffith University



in the 1960s. We explore how planning ideas from the United Kingdom, Europe and America came to have an influence in Australia, even as international interest in them waned; and also how these ideas intersected with the local context and site conditions.

The need for a new university in Brisbane, and its eventual development came about in relation to the rapid increase in student numbers in the late 1950s, and the planned growth of the higher education sector outlined in the Murray Report of 1957, which recognised both its social and economic benefits for Australia. As a result of the Murray Report, the Committee on the Future of Tertiary Education in Australia was set up in 1961 to investigate “the best way of making most efficient use of available and potential resources” for the expansion of the sector, and in its 1964 report authored by Sir Leslie Martin it recommended new universities for the metropolitan areas of Sydney, Melbourne and Brisbane.<sup>2</sup> The new Brisbane university was to be developed initially as a subsidiary college of the University of Queensland, which was expecting to reach an enrolment figure of 8,000 students by 1969 or 1970.<sup>3</sup> From this early stage, the issue of ongoing growth influenced the planning process, including the selection of a suitable site for the new campus. Forty-one sites were considered by the University of Queensland committee established to plan the development of the new university.<sup>4</sup> Suitable land “sufficiently large to enable it to develop at a later stage into an autonomous institution” was acquired in 1965 in the Mt Gravatt Cemetery Reserve, south of the city, adjacent to Toohey Forest,

2. Sir Leslie Martin, “Report of the Committee on the Future of Tertiary Education in Australia to the Australian Universities Commission: Conclusions and Recommendations of Volumes I and II” (1964), 3.

3. James Birrell, “New University Institution for Mount Gravatt Site Plan Report,” Brisbane, 1966, 2.

4. Noel Quirke, *Preparing for the Future: A History of Griffith University 1971-1996* (Nathan, Qld.: Boolarong Press for Griffith University, 1996), 1. This included sites at “Redcliffe, Strathpine and Aspley in the north, to Moggill, Centenary Estates and Inala in the west, and Capalaba, Woodridge and Toohey Forest at Mt Gravatt to the south of the city” (1). After the establishment of the Griffith Interim Council in 1970 suitability of the Nathan site was reevaluated and other sites were again considered including the site above Roma Street Railway in the Brisbane CBD (4).



and in 1965 James Birrell, in his capacity as Architect for the University of Queensland was commissioned by the Coordinator General of Public Works to prepare a master plan for the site.<sup>5</sup>

Birrell's 1966 plan emphasised the natural beauty of the site and was influenced by botanical and geological surveys of the site that identified unique flora species and rock formations.<sup>6</sup> Drawing directly on his work completed at the University of Queensland in the early 1960s, he suggested that the Griffith buildings "should ramble through the building areas in sympathy with contours and vegetation much in the fashion of Union College, St Lucia."<sup>7</sup> His plan positioned low rise building envelopes "informally" in "fluid arrangements" and advocated the use of sympathetic materials such as dark brick and exposed concrete "in harmony with the natural colours of the site."<sup>8</sup>

The separation of vehicles and pedestrians was taken for granted as a fundamental principle of urban planning at this time, and Birrell planned a ring road that followed the ridge line of the site, delineating a generous building area and separating the circulation of vehicles from pedestrian precincts. Birrell argued that this separation allowed for flexibility in the arrangement and development of the campus, suggesting that a "conventional" layout of precincts spaced within the landscape would enable efficient servicing and unconstrained expansion.<sup>9</sup> The ring road was constructed in anticipation of expediting the new campus so that it might be open to take students by 1970, a process that was stalled by a change in the funding priorities of the Universities Commission and also the change of government in Queensland in 1968. It was not until 1970 that the Griffith Interim Committee was formed and not until 1975 that the university took its first students.<sup>10</sup>

The growth of the higher education sector in Australia in the 1960s had a direct corollary in the United Kingdom, which became an important reference point for Australia. During this decade twenty-three new universities were instituted by Royal charter, many as new institutions and campuses, doubling the number of universities in the United Kingdom.<sup>11</sup> In the United Kingdom the Robbins Report published in 1963 registered the "sudden and belated insistence . . . that there must be a rapid and ambitious expansion of English higher education, to cater for the 'bulge' of the postwar birth rate and the 'trend' for more and more children to stay on at school."<sup>12</sup> Like the Martin Report in Australia, the Robbins Report formalised the natural growth in the higher

5. Quirke, *Preparing for the Future*, 1.

6. Birrell, "New University Institution," 15, 19.

7. Birrell, "New University Institution," 23.

8. Birrell, "New University Institution," 32-33, 37.

9. Birrell, "New University Institution," 29.

10. Quirke, *Preparing for the Future*, 1-2, 5.

11. "The Spread of the Universities," *Architectural Review* [hereafter *AR*] 147, no. 878 (April 1970): 240-41.

12. Marcus Cunliffe, "The Educational Contribution," *AR* 147, no. 878 (April 1970): 248.

education sector in the United Kingdom, recommending and setting out processes through which new tertiary institutions would be funded and developed.

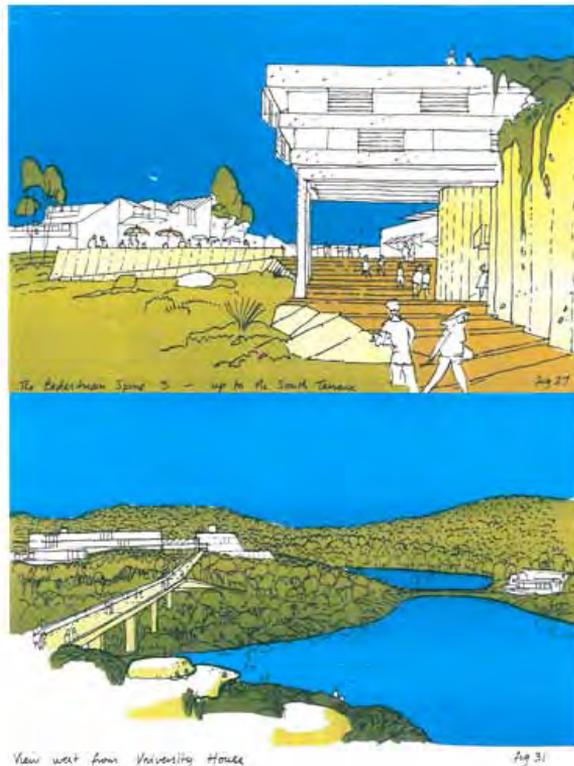
The diversification of the new student population in the United Kingdom, and new ideas about teaching also suggested opportunities for the creation of a new kind of university with new organisational and curriculum models, which would distinguish these universities from their Oxbridge and Red Brick predecessors.<sup>13</sup> Michael Beloff coined the term “Plateglass Universities” to describe them, a term which emphasises their aspiration to openness as much as their use of modern construction materials:

the new universities . . . will not be new for ever . . . “Greenfields” describes only a transient phase. “Whitebrick,” or “Whitestone,” and “Pinktile” hardly conjure up the grey or biscuit concrete massiveness of most of their buildings... ‘Newbridge’ is fine as far as novelty goes, but where are the bridges? . . . I have chosen to call them the Plateglass Universities. It is architecturally evocative; but more important, it is metaphorically accurate.<sup>14</sup>

13. Thomas William Heyck, “The Idea of a University in Britain, 1870-1970,” *History of European Ideas* 8, no. 2 (1987): 205-17. See also Bruce Truscot, *Red Brick University* (1943, Hammondsworth, Middlesex: Penguin Books, 1951).

14. Michael Beloff, *The Plateglass Universities* (London: Secker & Warburg, 1968), 11-12.

Figure 2. Sketches of pedestrian views, Griffith University. Roger Johnson, “Griffith University Site Planning Report” (Brisbane, 1973). Reproduced by permission of Griffith University



Beloff used the term in relation to the first seven “new campus” universities in the United Kingdom, which included Sussex (1961), Essex (1961), East Anglia (1961), York (1963), Lancaster (1964), Kent (1964) and Warwick (1965).<sup>15</sup>

15. Beloff, *The Plateglass Universities*, 11-12; Michael Brawne (ed.), *University Planning and Design: A Symposium*, Architectural Association Paper No. 3 (London: Lund Humphries for the Architectural Association, 1967).

The prospect of ongoing growth in the sector influenced the selection of suburban sites for the new universities, and the quantification of growth trends had an ongoing impact on their planning. The Robbins Report made a clear recommendation that “many of the multi-faculty universities of this country should expand to accommodate 8,000 or even 10,000 students.”<sup>16</sup> As the development of most of the first seven Plateglass Universities had been started before the publication of the Report, “considerable revisions had to be made in several cases to allow for its forecasts on student numbers,” which had tended to under-estimate student numbers based on the more gradual trajectory of growth of the first half of the 1950s.<sup>17</sup>

16. Quoted in Sir Leslie Martin, “Tertiary Education in Australia: Report of the Committee on the Future of Tertiary Education in Australia to the Australian Universities Commission: Volume 1” (1964), 53.

The issue of growth and change evident in the campus planning discourse of the 1960s seemed to distinguish the new campus universities as a particular design problem in architectural discourse for which precedents were not obvious. In 1963 Lionel Brett, in his commentary on the new universities, noted that “complexes of buildings that take their cue from the inevitability of change are rare in architectural history.”<sup>18</sup> However the idea of developing new urban building types that were responsive to the conditions of the post-war city and society had already been identified in relation to the expansion of existing universities underway in the 1950s, and was a preoccupation of post-war architectural discourse more generally. In reference to their 1953 competition design for an extension to Sheffield University, a Redbrick university that was granted its Royal Charter in 1905, Alison and Peter Smithson made the point that existing university precedents were no longer useful, suggesting that a new kind of “architecture-urbanism” was required which “must not only be able to ‘take’ change but should *imply* change” with an aesthetic that was “‘open’, non-geometric, and if necessary, impermanent.”<sup>19</sup> Their design for Sheffield University focused on the development of a new urban building type that utilised urban circulation patterns as a formal determinant and absorbed it into a compact continuous building which in its scale “implied” the “city Sheffield.”<sup>20</sup>

17. Michael Brawne, “Introduction,” *The New Universities*, special issue, *AR* 147, no. 878 (April 1970): 241; Michael Cunliffe, “The Educational Contribution,” 247-48.

18. Lionel Brett, “Site, Growth and Plan: Problems of Planning the New University,” *AR* 134, no. 800 (October 1963), 259.

19. Alison Smithson and Peter Smithson, “Aesthetics of Change,” *Architectural Association Journal* 8 (1957), 14, 22.

20. Smithson and Smithson, “Aesthetics of Change,” 17; “About the University,” online at [www.sheffield.ac.uk/about/history](http://www.sheffield.ac.uk/about/history) (accessed May 14, 2013).

In Australia, the Martin Report used the Robbins Report as a reference point on the question of university size, and while it

21. Martin, "Tertiary Education in Australia," 54.

22. Roger Johnson, "Griffith University and its Landscape," *Landscape Australia* 1 (1981): 41

23. G. J. Harrison, "Griffith University. The Development of the Nathan Campus: Preliminary Report" (Adelaide, 1971). Harrison knew Birrell and had worked with him on a campus plan for the University of Papua New Guinea in 1966, at the same time that Birrell was preparing his master plan for the Nathan site.

24. "Online History of Flinders University: 1958-1965: From the ground up," online at <http://pandora.nla.gov.au/pan/88366/20080829-1420/www.flinders.edu.au/about/our-university/our-history/1958-1965-from-the-ground-up.html> (accessed January 24, 2013).

25. Alison McDougall, "Harrison, Geoffrey (Geoff) John," *Architects of South Australia*, online at <http://www.architectsdatabase.unisa.edu.au> (accessed January 21, 2013).

26. Chirstina Demarco, "Stephenson, Gordon," in *The Encyclopedia of Australian Architecture*, ed. Philip Goad and Julie Willis (Port Melbourne, Vic.: Cambridge University Press, 2012), 652.

27. Karmel was also involved in the development of the University of Papua New Guinea for which Harrison and Birrell did the master plan in 1966.

did not "believe that an optimum size should, or even [could], be laid down," it did suggest that "under Australian conditions, the disadvantages of smallness may become significant for universities of less than about 4,000 students and those of largeness for universities of more than about 10,000."<sup>21</sup> The issue of managing growth projections was an important parameter in the development of the Nathan campus. It also became a conspicuous term in relation to the reduction in growth projections that happened in the late 1970s due to declining birth rates.<sup>22</sup>

In 1971, Geoffrey Harrison, who at the time was the architect for Flinders University in South Australia, prepared a report on the development of the Nathan campus for the newly formed Griffith Interim Council after they assumed responsibility for the planning of the new campus from the University of Queensland. Harrison's report reflected both his experience at Flinders University and his knowledge of the international campus planning discourse.<sup>23</sup>

As one of the new capital city universities instituted in Australia in the 1960s, Flinders University had evolved in a similar way to Griffith, developed initially as a new campus of the University of Adelaide at Bedford Park and becoming a separate institution in 1965.<sup>24</sup> Harrison had been Staff Architect at Adelaide University at the time of its initial planning and was "sent overseas in 1962 to Europe and North America, the latter being on a Carnegie Corporation Travel Grant, to research university planning and liaise with potential consultants."<sup>25</sup> The masterplan for what would become Flinders University was prepared by Harrison in 1962 in conjunction with the well known British planner and architect Gordon Stephenson who had come to Australia in 1952 to work on the first metropolitan plan for Perth, and was subsequently involved in campus plans for the University of Western Australia and Murdoch University. It is also worth noting that Stephenson was also a mentor of Roger Johnson, the eventual author of the Griffith Nathan campus master plan.<sup>26</sup>

Harrison's knowledge of the international discourse on campus planning resonated with the Griffith Interim Committee's desire to engage with the prospect of building a new kind of institution. In 1970-71 Managing Director of this committee Ted Bray and Secretary John Topley conducted their own research study tour and made contact with Professor Karmel then Vice-Chancellor of Flinders University.<sup>27</sup> Flinders thus became an important reference point for Griffith, both through Harrison and through the Griffith Interim Committee. Griffith went on to adopt an interdisciplinary



school structure that was similar to Flinders.<sup>28</sup>

An interdisciplinary curriculum was one of the educational innovations associated with the Plateglass Universities. Flinders was modelled on Sussex, one of the first universities to pursue an interdisciplinary organisational structure. In the design of the Sussex campus, on a green field site between Brighton and Lewes, a new approach to the “physical conditions for teaching” that would match its “inter-disciplinary approach to studies” was sought.<sup>29</sup> For those involved in the discourse, which included architects and academics involved in planning the new universities, there seemed to be a natural synergy between contemporary ideas about density and flexibility in architectural discourse, and the ambition for an interdisciplinary organisational structure of the new universities.

The campus plan at Sussex, designed by Sir Basil Spence in 1959, was structured as a series of open courtyards repeated in an informal way across the site. While Spence was engaged with the issues of growth and flexibility prevalent in the discourse, his architectural reference points were Ancient Greece and Rome and the courtyards of the old collegiate universities.<sup>30</sup> Sussex was initially planned to cater for 3,000 students, however after the publication of the Robbins Report this projection went up to 10,000. Spence’s response was to suggest that the courtyard pattern could be extrapolated as required:

The method of adding courtyard on to courtyard seems to me to be the logical way of doing this . . . I feel strongly that a rigid axial plan will fall by the wayside. I am sure the basic idea of planning is providing for growth, and appreciation of the fact that with growth there is a change of idea . . . I am against a formal, rigid plan.<sup>31</sup>

Despite obvious differences in their architecture, Spence echoed the Smithsons’ interest in a-formal planning. The master plan for Flinders pursued a similar plan of repeated courtyard buildings to Sussex.

As the first of the seven Plateglass Universities, Sussex was in many ways at the centre of the UK campus planning discourse. In a special issue of *Architectural Review* on university buildings, published in 1963, which surveyed the extensions to many of the existing universities undertaken during the late 1950s, Sussex was included to represent the issues of the new campuses. In

28. Quirke, *Preparing for the Future*, 8. The first four schools at Griffith University were the School of Modern Asian Studies, the Australian School of Environmental Studies, the School of Humanities and the School of Science.

29. Lord Fulton, “University of Sussex,” in *University Planning and Design*, 26.

30. Sir Basil Spence, “University of Sussex,” in *University Planning and Design*, ed. Brawne, 27-29.

31. Spence, “University of Sussex,” 27.

1964 Sussex hosted the symposium “University Planning and Design” organised by the Architectural Association and the RIBA, attended by both architects and academics involved in the planning of the new universities, which surveyed the architecture, planning and educational innovations of the Plateglass Universities.<sup>32</sup> As noted by Michael Brawne, the convenor of the Sussex symposium, in his introduction to its published outcomes in 1967, there was a:

preoccupation with the formulation of planning principles which acknowledged change and increase, which . . . conformed with the state of uncertainty as it obviously existed and was likely to continue to exist for a long time to come.<sup>33</sup>

The diversity of plan types that emerged in the growth of the higher education sector internationally in the 1960s can be attributed in some part to the unresolved status of this issue. The classification and analysis of plan configurations became an integral part of the discussion of the new campuses in architectural publications throughout the 1960s and 1970s.<sup>34</sup>

In his appraisal of the new universities in a subsequent special issue of the *Architectural Review* on campuses published in 1970, Brawne identified an historical progression through four campus plan types: the precinct, linked nodes, linear planning and grids or networks.<sup>35</sup> Brawne’s examples of linear planning, which “implied both a structuring method and a recognisable system of growth” were the “the deck at Essex, the long covered walkway at Lancaster, (and) the Parade at Bath,” where “enlargement could take place both longitudinally as well as laterally, thus making it possible for the whole as well as the parts to grow.”<sup>36</sup> He noted the evolution of network systems from linear schemes as they increase in complexity. One of his network planning examples, Loughborough University also evidenced a shift in “the basic assumptions behind university planning . . . [which] begins by analysing the characteristics of the dominant spaces . . . and then bases its plan on a network formed by adding these together. It thinks of the university very much more as a building type than as a site layout.”<sup>37</sup> Loughborough engaged systems building and the application of computer technology to the planning of the university as a problem of space management.<sup>38</sup>

In the five years between Birrell’s master plan and Harrison’s preliminary report the projected number of students to be

32. Brawne, *University Planning and Design*. It also included a discussion of international activity in campus planning in the USA and in Germany and included an analysis of the Free University of Berlin by Josic, Candilis and Woods.

33. Brawne, *University Planning and Design*, 10.

34. This included several special issues of architectural journal: *AR* 122, no. 729 (October, 1957); *Architectural Forum* (March 1963); *L'Architecture d'Aujourd'hui* 137, no. 4/5 (1968); *Era* (New University Planning) 1, 1968; *Architectural Review* 147, no. 878 (April 1970); and Tony Birks, *Building the New Universities* (Newton Abbot: David and Charles, 1972).

35. Michael Brawne, “An Appraisal,” *AR* 147, no. 878 (April, 1970), 253.

36. Brawne, “An Appraisal,” 253.

37. Brawne, “An Appraisal,” 253.

38. Brawne also makes a connection between the strategy at Loughborough and the research being done on University planning at Cambridge University by Nicholas Bullock, Peter Dickens, Philip Steadman and Sir Leslie Martin among others. Brawne, “An Appraisal,” 254. See also Bullock, Dickens and Steadman, “Activities Spaces and Location,” *AR* 147, no. 878 (April 1970): 299-306.



accommodated at Griffith had more than doubled, increasing from 3,500 to 8,000.<sup>39</sup> Harrison dedicated a separate section in his report to the issue of growth and change where he considered strategies for managing development on the campus in an orderly way.<sup>40</sup> In particular, he argued that the campus should be “as dense as possible,” citing Lancaster, Bath and Bochum, in Germany, as examples of universities at urban densities on greenfield sites, and that a “system for gradual linear growth” may be a suitable type for the Nathan site.<sup>41</sup> These recommendations marked a shift in the plan for Griffith from the low-density, rambling precinct proposal by Birrell. Elsewhere in the report Harrison suggested the campus plan should be understood as an incomplete, or open, “flexible framework,” and that a system of modular planning should be used so that space across the campus would become a generic pool to be allocated and reorganised as required.<sup>42</sup>

In addition to Lancaster, Bath and Bochum Harrison made reference to a range of Australian and other international universities as examples of how Griffith might variously address these issues. The University of Melbourne was referred to in relation to the idea of urban density as a solution to growth.<sup>43</sup> The Ballarat Institute of Advanced Education was used as an example of changing functional structures within universities.<sup>44</sup> While the University of Dortmund, Germany, and the University of California, Irvine campus, were both cited as examples of attempts to integrate the suburban campus with the surrounding community.<sup>45</sup>

39. Birrell, “New University Institution,” 6; Harrison, “Griffith University,” 4.

40. An important reference for Harrison was Dr. Clarke Kerr, Executive Chairman of the Carnegie Commission on the Future of Higher Education, and author of influential book *The Uses of the University* (New York: Harper and Row, 1966). Kerr had identified three areas of change confronting universities, which Harrison quoted in his report: “growth, shifting academic emphases, and involvement in the life of society.” Harrison, “Griffith University,” 3.

41. Harrison, “Griffith University,” 17.

42. Harrison, “Griffith University,” 4, 15.

43. Harrison, “Griffith University,” 17.

44. Harrison, “Griffith University,” 7.

45. Harrison, “Griffith University,” 6.

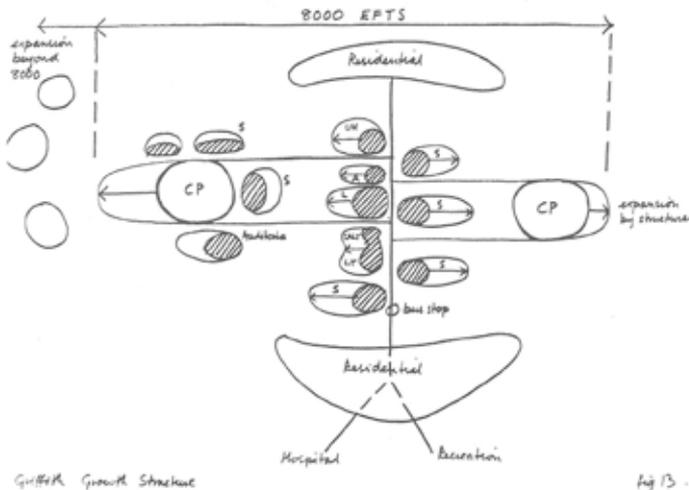


Figure 2. Griffith Growth Structure. Roger Johnson, “Griffith University Site Planning Report” (Brisbane, 1973). Reproduced by permission of Griffith University

46. Griffith's appointment of Johnson may be related to his connection with Stephenson whose involvement with the Flinders Campus plan would have been known to the Griffith Interim Committee.

47. Ken Charlton, "Johnson, Roger" in *The Encyclopedia of Australian Architecture*, ed. Goad and Willis, 372.

48. Griffith's appointment of Johnson may have been related to his connection with Gordon Stephenson whose involvement with the Flinders Campus plan would have been known to the Griffith Interim Committee.

49. Roger Johnson, "Griffith University Site Planning Report" (Brisbane, 1973), 45.

50. Johnson, "Griffith University Site Planning Report," 119.

51. Johnson includes Lynch's 1960 *The Image of the City* in the report's bibliography.

52. Johnson, "Griffith University Site Planning Report," 47-49.

53. Johnson, "Griffith University Site Planning Report," 47-49.

In 1972 the Griffith Interim Committee appointed Roger Johnson to prepare a master plan for the Nathan campus.<sup>46</sup> At that time, Johnson was chief architect for the National Capital Development Commission in Canberra and had been working on the redesign of the Parliamentary Triangle.<sup>47</sup> Johnson was educated at Liverpool University under Gordon Stephenson, and came to Western Australia in 1962 to work with him on the development of the University of Western Australia campus.<sup>48</sup>

For Johnson, there were certain well established planning objectives to be incorporated into the Griffith plan including the separation of vehicles and pedestrians, the creation of pedestrian precincts, flexibility, functional zoning, short walking distances and low-rise development.<sup>49</sup> These were set out in Brawne's analysis of the Plateglass Universities, and Brawne's publication of the outcomes of the Sussex symposium was one of the references cited by Johnson in his planning report for the Nathan campus.<sup>50</sup>

Johnson developed Harrison's suggestion for a linear plan, organised around a centrally located pedestrian spine. However Johnson's justification of the spine extended beyond the consideration of growth, and also emphasised its potential as a street, and for the utilisation of visual planning techniques popularised by Kevin Lynch and others in the 1970s, to give a strong image to the campus.<sup>51</sup> Johnson wrote:

the street offers a directional focus and gives an easily-understood "image" for orientational purposes. With enough variety and activity along it a simulation of the town street can be provided . . . It becomes itself an activity centre and it offers opportunities of changing visual experience as one moves along it.<sup>52</sup>

In his report Johnson illustrated these ambitions with a series of perspective sketches showing the sequence of views along the spine.

Johnson also stressed the importance of maintaining the compactness of the campus, and was concerned that a linear system of growth would eventually conflict with this principle.<sup>53</sup> The degree to which the campus would be able to grow along the spine was also limited by the pre-existing ring road and topography. To address the question of growth while maintaining density, Johnson's plan applied a comprehensive "University



Grid” across the site (oriented 18° East of True North) to which all buildings were to align. The movement pattern along the street was modified “to follow a grid pattern with activities of special interest associated with the points of intersection.”<sup>54</sup> The growth of the campus would occur perpendicularly to the spine and be governed by the University Grid. Johnson describes this as “uni-directional . . . expansion of each element, rather than decanting or omni-directional expansion of dispersed elements.”<sup>55</sup>

54. Johnson, “Griffith University Site Planning Report,” 49.

55. Johnson, “Griffith University Site Planning Report,” 45.

Johnson argued that together the spine and grid established the foundation for a coherent campus image that would allow each building to be designed by a different architect, a strategy that was supplemented through the establishment of a palette of materials for all buildings.<sup>56</sup> Johnson used the term “Notional Design Plan” to differentiate his plan from what he referred to as “the now somewhat discredited term of ‘Master Plan.’”<sup>57</sup> The first buildings of the campus were constructed between 1975 and 1978 by prominent Queensland architects including John Dalton, Robin Gibson and Blair Wilson.<sup>58</sup>

56. Johnson, “Griffith University Site Planning Report,” 167.

57. Johnson, “Griffith University Site Planning Report,” 55.

58. Jennifer Taylor, *Australian Architecture since 1960*, 2<sup>nd</sup> ed. (Canberra: The Royal Australian Institute of Architects, National Education Division, 1990), 128-30.

The landscape significance of the site remained an important determinant in Johnson’s plan. However where Birrell had described a harmonious relationship between buildings and their setting, Johnson was concerned to accentuate the contrast between them “with little or no moderation of one towards the other.”<sup>59</sup> The palette of materials for buildings was dominated by off-white coloured concrete blocks, off-form concrete and metal roof sheeting, to create an obvious distinction between the constructed objects of the campus and the qualities of the unique and attractive flora. Similarly, the continuity of floor level datum from one building to another within the University Grid accentuated the natural topography of the site as it fell away from one end of the pedestrian spine to the other, and beyond it towards Mimosa Creek.<sup>60</sup> The landscape quality of the campus has continued to play an important role in the identity of the campus. In 1978 the campus was awarded a Royal Australian Institute of Architects Queensland Chapter award for Civic Design, and in 1986 its landscape was awarded a Letter of Commendation by the Australian Institute of Landscape Architects.<sup>61</sup> The matrix of buildings and bushland courtyards that has evolved from Johnson’s Notional Design Plan is recognisable and affective.

59. Johnson, “Griffith University and its Landscape,” 42

60. Johnson, “Griffith University Site Planning Report,” 99.

61. Johnson, “Griffith University and its Landscape,” 44; “Griffith University Landscape, Qld.: Letter of Commendation: Institutional complexes,” *Landscape Australia* 8, no. 3 (1986): 223.

For both Harrison and Johnson the issue of ongoing growth in student numbers had been a significant determinant in the design of Nathan campus, and international examples had

provided important reference points for the development of its plan. However, already by the early 1970s, the international discourse on campus planning had moved into a phase of critical reflection. In his appraisal of the new universities in 1970, Brawne identified the focus on managing change in the configuration of the plan as largely an architectural preoccupation, and recognised the growing scepticism about the correlation between programme and built form. Strategies for dealing with the issue of growth became less focused on the physical manifestation of the university, tempered by the increased role of information technology and changed funding conditions. In the case of the Nathan campus, there was a decline in growth projections that continued throughout the 1980s, and a review of the campus plan conducted by Griffith University in 1988 noted that the student population had not yet reached the projection of 8000 that had guided the 1973 plan.<sup>62</sup> Subsequent phases of development of the Nathan campus have generally occurred within the framework of the Notional Design Plan established by Johnson. For Griffith University more generally it has occurred also through amalgamation with other tertiary institutions and the establishment of a dispersed string of campuses between Brisbane and the Gold Coast, as well as virtually through its association with Open Universities Australia.

62. Roger Johnson, Sam Ragusa, Neil Thyer and Ray Morley, *Griffith University Site Planning Review*, September 1988, 2.

Similarly, the preoccupation with growth was quickly superseded by the issue of community connectivity and engagement, which recognised the shifting parameters of social change provoked by the student unrest of the late 1960s and early 1970s.<sup>63</sup> These shifts in the international discourse made the suburban siting of the new universities conspicuous. Various propositions for making a physical connection between the Nathan campus and the surrounding communities were made, in Johnson's plan and through later proposals for student housing that were to be located between the Ring Road and Kessels Road. However the 1988 review of the campus plan noted access to the campus and the lack of a significant point of arrival as unresolved problems.<sup>64</sup>

63. Michael Brawne, "Conclusion," *AR* 147, no. 878 (April 1970), 307.

64. Johnson, et al., "Griffith University Site Planning Report," 6-7.

65. Rykwert, "University As Institutional Archetypes of Our Age," 63; Stefan Muthesius, *The Postwar University: Utopianist Campus and College* (New Haven, Conn.: Yale University Press, 2000).

Rykwert's "argument for finding the paradigm for the city in the university", has been taken up in subsequent analysis of the new universities of the 1960s that has focused on their utopian aspirations, drawing attention to the way the city operated as a referent for community.<sup>65</sup> In this paper we have focused on recognising the significance of the university campuses of the 1960s and 1970s as useful historical artefacts that reveal an



important episode in the development of urban planning ideas in architecture. Beyond this, the Nathan campus provides an example of how the preoccupation with the development of plan types resulted in a unique conjunction of buildings and landscape. It is in this context that their value in contributing to a general understanding of the frameworks determining the creation of large-scale built environments can be considered.