3. Promoting the New Paradigm: Seidler and the Zwar House

Throughout the history of architecture there have been many pamphleteers, publicists and polemicists who have helped to shift public perceptions of existing doctrines, and to promote the advantages of new ways of thinking. Robin Boyd was one such individual within Australian modernist discourse. Another was Harry Seidler, whose campaign in the early 1950s to introduce modernist ideas gained much publicity. ‘High Priest of the Twentieth Century’, ‘Modern Master: How Harry Seidler Changed the Way We Live’, and ‘Harry Seidler Preached the Gospel of Modern Architecture to His Adopted Country’ were just a few of the headlines he received.¹

Seidler’s campaign attracted the attention of many Australians who followed architecture, art and design. One of these was John Zwar, a young plant physiologist who arrived in Canberra to take up a position at the CSIRO in 1952.

¹ People presented a four-page article on Seidler in January 1951 in which he was ordained the ‘High Priest of the Twentieth Century’, one whose duty was to persuade ‘conservatives that his houses are just right for this modern age’. Seidler was presented as a form of avenging angel who ‘wears bow ties, walks on crepe-soled shoes, and talks with an American accent’. People (17 January 1951): 17–20. The other references are by Philip Drew, [Domain], Sydney Morning Herald (16 March 2006): cover, 8.
One of the first scientists recruited by Frankel to the Division of Plant Industry, Zwar had read many of Seidler’s articles, along with those of the architect’s mentor, Walter Gropius. He also owned a dining suite designed by Charles Eames. A significant part of Zwar’s attraction to Seidler was his reputation as a vanguard of modernism—an individual who was prepared to challenge accepted conventions of taste and design. Zwar, for whom existing domestic architecture in Canberra was moribund—both aesthetically and functionally—saw Seidler as a kindred soul. Here was someone who not only shared his own views about house design, but also was prepared to stand up for his principles. Zwar was impressed by Seidler’s well-publicised victories over planning authorities, noting how ‘several municipalities had challenged his plans and he’d gone to court and won every one’.2

Seidler was aware that some of the interest in his architecture was generated by his growing notoriety and recent successes in the Land and Evaluation Court. But he believed that the principal reason he was in demand was because many clients, like Zwar, saw that it was time for a change: ‘a lot of people were genuinely sick of the rather routine brick boxes that were built everywhere at that time, and the place was simply ripe for new things.’3

In 1955—the year after he bought an elevated site with a view over the city at 12 Yapunyah Street, O’Connor—Zwar read Seidler’s *Houses, Interiors and Projects*. He was particularly impressed by the seven pages of plans, sections and photographs dedicated to the Bowden House in Deakin.4 He decided to approach Seidler. But the architect’s formidable reputation was also a deterrent, and for some time Zwar hesitated in contacting him. Would he accept such a modest commission? And would Zwar be able to get along with the architect who, like his boss, Frankel, already had a reputation as a ‘stormy petrel’?5 Zwar mulled over these issues. Following discussions with his work colleagues, he

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2 John Zwar, Interview by the author, 26 September 2008. *Australian Home Beautiful* published a proposal for a binuclear house in May 1950, and in September of the following year it published an article explaining how Seidler had become embroiled in ‘a three month fight’ to obtain a building permit for another house. The Rose Seidler House was published by *Woman’s Day and Home* and *Australian Home Beautiful* in 1952, the latter describing how Seidler—‘a young man now barely 30, a “New Australian” of a few years standing, who was already one of the most controversial figures in Australian architecture’—had won the 1951 Sir John Sulman Award for architectural merit. In 1954 Seidler’s prefabricated steel ‘House of the Future’, a one-bedroom house for ‘a young married couple’, was assembled at the Armco factory in Sutherland, NSW, and later erected inside the exhibition floor of the Sydney Town Hall as part of the Architectural and Building Exhibition. The exhibition was opened by Walter Gropius on a visit to Australia. Details and photographs of the house, which had been drawn by Colin Griffiths, were published in *The Australian Women’s Weekly* and other publications.


was eventually persuaded to contact the architect. But he was disappointed with the response: Seidler was grateful to receive the inquiry, but would not be able to accept, due to other commitments. At this point, Zwar was ready to concede defeat, but his colleague suggested that he visit Seidler in person and try to talk him into accepting the commission. With nothing to lose, Zwar drove to Sydney, picked up another friend for moral support, and went looking for Seidler’s Point Piper office.6

Figure 3.2 Bowden House, view from south-west, 1954

After parking outside 4 Wolseley Crescent, Zwar descended a long flight of steps and arrived at a solid, blue-painted door. The door was set, off-centre, in a Mondrian-like pattern of square, horizontal and vertical glazing panels. Looking through those panels, Zwar could see right into the office. Behind Seidler, who was already getting up from his desk on the right, there was a freestanding open bookcase that separated the front office from the living area.

6 As was the case with the Fenner House, with the Zwar House, it is difficult to establish the role that Zwar’s wife, Heather, played in the process. John said that she did not travel to Sydney with him to meet Seidler. When asked how much she was involved in discussions regarding the house, he said ‘Oh, a bit’. John Zwar, Interview by the author, 26 September 2008.
to the rear. The modulated compartments of the bookcase—containing books, architectural models and other objects—formed a composition that countered the glazed panels of the entrance wall. When viewed together, the patterns of these surfaces created visual tension across the depth of the space and formed a coherent spatial composition.7

Figure 3.3 Harry Seidler’s Point Piper Studio at night

Photograph: from Art and Design, no. 1, 1949, 26

The visual interplay experienced by Zwar was an example of what Seidler referred to as ‘counterpoint’—a musical term he borrowed to describe an interaction between contrasting elements. Seidler believed that counterpoint—an ideal composition containing the right balance between opposing characteristics such as solid against void, vertical against horizontal, curved against straight or dark against light—was capable of invigorating a work of art or architecture.8

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8 ‘Visual opposition will give life to environment. Not all transparency and not all solidity, not all soft and not all hard, but a skilful visual interplay between opposites; planes opposing each other, verticals against horizontals, solid opposed by void, hard-rough texture against soft-smooth, dark against light, cold colour against warm, curve against straight line, and above all in Australia’s climate sunlight against shadow.’ Harry Seidler, ‘Notes on Architecture’, in Harry Seidler, Houses, Buildings and Projects 1955/63 (Sydney: Horwitz, 1963), 11.
The effect was further enhanced by the use of colour. The side and rear walls, carpet, ceiling and freestanding bookcase were all grey, while the curtains were yellow. Contrasting with this were small highlights of strong colour: doors and cushions of bright blue, red and yellow, and a cantilevered, black wall unit. Zwar found the overall effect of this composition impressive—as had Seidler’s first Australian client, who requested the exact colour scheme for her own house.9

Believing that Seidler was out of his league, and that he, as a young scientist on a modest income, would not be able to impress him, Zwar opened the discussion on safe territory. He said that he liked the Bowden House, and described his Yapunyah Street block—photographs of which he had previously sent to Seidler’s office. Confident that the conversation was going well, Zwar decided to make his pitch. In his matter-of-fact manner, he explained that his budget was £5000, and added: ‘That’s the amount of money. I want a house—the sort of house you design. What can we do for that?’ Perhaps it was Zwar’s enthusiasm that impressed Seidler, because he soon agreed to take on the project. A brief discussion followed, during which it was decided that Seidler would design a basic module that could be added onto as the family grew. The architect added that he knew a good firm of builders in Canberra—Primmer and McPhail, who had constructed the Bowden House—and said that he would talk to them once the plans were ready. Some time later, Primmer and McPhail’s quote of £4600—comfortably within Zwar’s budget—was accepted.10

Zwar met Seidler in Canberra on a number of occasions, both prior to and during construction of the house. He found that, in spite of his architect’s reputation for being difficult, he was ‘a charmer’—the easiest man to get along with. But he was aware of the reason for this: he agreed to almost everything his architect suggested. Had that not been the case, Zwar believed the situation might have been quite different.11

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9 People (17 January 1951): 18. The studio was linked, via an intellectual framework of European modernism, to Seidler’s first studio in New York. There, at 222 Riverside Drive on the Upper West Side, he had decorated the walls with a Mondrian-like pattern of black and yellow lines. As Penelope recalled, Mondrian was ‘the connecting thread between both of Harry’s apartments’. Philip Goad, An Interview with Penelope Seidler, The Architect’s Studio, 1948–49’, 117.

10 The final cost of the house was closer to £5000. John Zwar, Interview by the author, 26 September 2008. Rather than going to open tender, Seidler preferred to cultivate a select group of builders who were familiar with his working methodology and could be trusted to maintain his high standards of workmanship. Once the documents were ready, he negotiated a price with them. There were other advantages in maintaining relationships with builders: through McPhail, Seidler obtained a commission to design the South Canberra Bowling Club in Austin Street, Griffith. It is possible that Seidler returned the favour in kind: the Harry Seidler Collection of Architectural Drawings, 1948–1987 contains sketch plans of a proposed house in Ryrie Street, Campbell, for Miss June McPhil.

11 In this respect, Zwar cited John Philip, the subject of a later chapter, as an example of a client who would not have been as compliant as he was. John Zwar, Interview by the author, 26 September 2008.
Seidler personally prepared the colour scheme for the Zwar House. He specified colours and finishes for all external and internal surfaces, including fabrics for curtains, upholstery and cushion covers, and stipulated where the various items and materials could be purchased. Zwar visited Rene’s in the Strand Arcade in Sydney to find a black-and-white curtain fabric that Seidler had selected, and followed his architect’s instructions as much as his limited budget would allow. When the house was finished, Zwar was criticised by his friends for following his architect’s colour scheme so faithfully: ‘What, you’re letting your architect dictate your taste?’ They thought he was mad.12

Nearly 50 years later, when his wife, Heather, had died and his family had grown up, Zwar decided that it was time to sell the house. Before he did so, he rang Seidler. Zwar explained that he had been ‘very happy with the house’, and recalled that they had a pleasant conversation. Seidler, who remembered Zwar and the house, said that he appreciated the call. As Zwar noted, it was not long after that when the architect passed away.13

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12 Ibid.
13 Ibid.
Point Piper Laboratory

Harry always liked to do houses because it was sort of his laboratory—you were always searching for types…they were experiments, there were versions that never went anywhere, but somehow [they] became the launching pad for other variations.

— Colin Griffiths

In mid-1955, Colin Griffiths was briefed by Seidler and began to prepare the sketch plans for the Zwar House. Griffiths was one of Seidler’s first employees, having joined the office at the beginning of 1954 to replace Don Gazzard, who had travelled overseas.

The Zwar House, a ‘one-box’, square house measuring approximately 11.6 m by 11.6 m (excluding the garage block and bedroom extensions), conformed to a particular type of small house that Seidler and Griffiths were continually developing and adapting: a compact, minimum, low-cost model that could be manipulated to respond to the topography and solar orientation of various sites. Griffiths recalled that the small houses presented a constant challenge, particularly in finding the right builders and keeping within budget. They were simple brick houses with a mono-pitch, ‘shed’ roof of corrugated, ‘Super Six’ asbestos. Usually square in configuration, they often incorporated a split in level to accommodate the slope of the site. The square form was partly based on the rationale that the lowest budget was obtained through the most compact plan form, and that any attenuation of that basic form increased the wall areas and material costs. But this plan type was also influenced by Bauhaus aesthetics. Griffiths recalled how it was based on the Bauhaus idea of beginning with a pure, platonic form that was then manipulated as required. Internal spatial variations were explored, while the external form was modulated by puncturing voids, or by pushing out or recessing various elements.

Sometimes referred to by Seidler as ‘ring plan’ houses, the first of these compact models was a proposal for a house in Beecroft. The Marcus Seidler House in Turramurra, of 1949–51, was an enlarged version, as was another in Gordon. The standard Universal House proposal, designed by Seidler for the Small Homes Bureau of the Royal Australian Institute of Architects—and drawn by Griffiths—was a further variation. The 1956 Heyden House in Miranda, the 1956 Breakspear House in Clontarf, a 1958 house in Kangaroo Point, the 1958

15 The sketch plan is dated 4 August 1955.
17 Seidler, Houses, Interiors and Projects, xvii.
Luursema House in Castlecrag, the 1958 Bland House in Coogee and exhibition houses in Pennant Hills of 1960 and Carlingford of 1962 were all variations of the same theme.18

Seidler used the split between the two levels, which divided the house into two equal rectangles, for two functions: to follow the natural site slope and to separate the house into functional zones. In the Zwar House, the bedrooms and the living area were placed on the lower level, while the dining room and ‘service rooms’—kitchen, laundry and bathroom—were located on the upper level. It was the nexus between the way in which the internal plan was split according to the functions and the need to provide a change in level to correspond with the natural site conditions that provided Seidler with an opportunity to achieve one of his principal goals: maximum spatial effect for minimum use of material. The split-level configuration of the Zwar House provided a higher volume through the central area, which dramatised the experience of the house at key points.

![Figure 3.5 Zwar House, cross-section](Image: from ‘John Zwar House, Lot 68 Yapunyah O’Connor ACT’, drawn by Colin Griffiths for Harry Seidler, 4 August, 1955. John Zwar Collection)

But the corridor, which divided the plan across the centre and separated the bedrooms and living room from the rest of the house, also conceptually divided the Zwar House from Seidler’s other variations on the square, compact house type—none of which contained a corridor.19 While it is clear that the main reason

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18 Details of these houses are included in ibid.; Seidler, *Houses, Buildings and Projects 1955/63*; and Frampton and Drew, *Harry Seidler: Four Decades of Architecture*.

19 The one exception was a short section of corridor in the 1960 Pennant Hills exhibition house.
for the central passage in the Zwar House was to accommodate the proposed main bedroom addition to the south-west, other houses in the compact series solved that problem without providing a separate corridor.

Seidler’s overall approach to the production of design and documentation was one of extreme efficiency. Fundamental to this was the establishment of archetypal solutions that functioned well, and the adaptation and reuse of these for future projects. Griffiths described his former employer as a ‘performance-based operator’ who ‘didn’t muck around with the design’ once it was accepted. Seidler saw no advantage in arriving on a Monday morning with a new scheme and starting all over again, and if a solution was successful it was reused.20 Proof of this can be seen in the 1958 Bland House in Coogee, which was demolished in 1988. This house utilised virtually the same plan as the Zwar House, even though its orientation was turned through 90 degrees. The main differences between the houses consisted of adjustment of fenestration, roof form and sun shading. Even the built-in joinery units separating the dining area from the entry and living spaces were similar.21

Seidler’s methodology had to be streamlined in order to function within the small office that he shared with Griffiths. Seidler sat at a desk perpendicular to the front wall, while Griffiths was stationed nearby at a collapsible drawing table. They worked on all aspects of projects together. When they discussed a drawing Griffiths would turn around and kneel on the floor with his arms resting on Seidler’s desk. In that way they were able to work on a drawing together, and turn it around to view the composition from alternative angles. The confined space meant that Griffiths worked a lot from memory: ‘there was no layout space, so you devised the plan, and you kept that and all its dimensions and that was put aside and you put another piece of paper [on the drawing board] and you started the sections and elevations by recalling all that.’22

While Seidler’s office was efficient in operation, there was no lack of information in the documentation. In spite of the modest budget and scale of the Zwar House, the working drawings consisted of seven drawings of approximately B1 size.23 In addition to the standard floor plans, sections and elevations, there were subfloor, roof-framing and electrical plans, and a comprehensive series of details, many of which were drawn full size. These covered all aspects of the kitchen, laundry, bathroom, bedrooms, built-in furniture and fireplace. This

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23 The tracings measure approximately 925 x 725 mm; B1 size is 1000 x 707 mm. Harry Seidler Collection of Architectural Drawings, 1948–1987.
was possible because of the reuse of standard details from previous projects. For example, Seidler developed two types of freestanding metal fireplaces: a conical version and a triangular version, with the latter specified for the Zwar House.

Figure 3.6 Portrait of Harry Seidler with Walter Gropius


A number of parallels can be drawn between the way in which Seidler practised architecture and the way in which scientists operate. Seidler was committed to what might be termed a ‘scientific approach’ to all aspects of the design, documentation and construction phases. One manifestation of this was the extreme efficiency of his operation. Another was the importance that he attached to the science of building. Griffiths recalled that they regularly consulted the Commonwealth Experimental Building Station (CEBS) reports.
and studies. To step back from the details of Seidler’s houses and look at the bigger picture, it could be argued that his primary motivation for practising architecture was essentially the same as those that led scientists, such as Zwar, to practise science. Underlying the CSIRO’s separate research areas were a number of common ideologies. Many of these—the ideas of working for the public good to improve the human condition, and faith in scientific rationality and in knowledge transfer between disciplines—were shared by practitioners of modern architecture. After attending Gropius’s Master Class at the Harvard Graduate School of Design in 1945 and 1946, Seidler wrote how Gropius had instilled in him ‘the firm belief that we are to bring about vital changes to the physical environment—to better the man-made world’.

But the most important similarities between Seidler’s methodology and that of scientists were not related so much to his ‘scientific’ use of technical data, or to his primary motivations, as much as they were to his modus operandi. Conrad Waddington, a scientist who spent a large part of his career exploring the overlapping territories between his own field, biology, and those of art and architecture, identified a potential link between Seidler and scientific procedure. In *The Nature of Life*, he examined the key differences between scientific and artistic methodology. Waddington described how one of the central tenets of scientific research was that it was never the work of one individual—or even a succession of individuals—but was based on cooperative effort. To illustrate this point, he employed a constructional analogy:

An individual man can, of course, add a brick to the structure, or even lay out the plan of a new room, but his brick must be added to a wall which others have already partially built, and his new room must join on and communicate with the rest of the whole palace of knowledge.

Waddington believed that science, more than any other cultural activity, was built on the foundations set down by previous research. While there was generally an uneasy relationship between tradition and originality in the arts—painting, poetry and literature—no such suspicions were aroused in the field of science. As Waddington explained, if a work of art displayed obvious references to previous examples, the artist would probably be dismissed as derivative. But in scientific work, unless the scientist could demonstrate understanding and

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respect for the work of predecessors, he or she would not be taken seriously. This ‘communal, co-operative nature of scientific endeavour’, Waddington believed, was one of its main strengths. While disputes still arose in the scientific world regarding individual authorship—it was widely known, for example, that Fleming, Florey and Chain had a falling out over that very issue in regard to penicillin—Waddington had a valid point, and one that, although he did not identify it himself, applied as much to architecture as it did to art or literature.

If Seidler’s approach to architecture is considered in regard to Waddington’s statements, a number of issues come to light. Seidler saw his domestic architecture in Australia as being a logical continuation of the modernist houses that Breuer was building on the east coast of North America. Between 1946 and 1948, Seidler had prepared working drawings for a series of Breuer’s houses in the architect’s New York office. The experience had left a lasting impression on Seidler’s design philosophy and work practice, leading architectural writer Philip Drew to describe Seidler’s architecture as ‘East Coast Modern, the American idea of the Bauhaus idea restated by Breuer’.

The opportunity to design a house for his parents in Sydney had lured Seidler away from Breuer to set up his own practice in Australia. Within a week of arriving, Seidler recalled how he ‘drove around Sydney and looked for large areas of land like we built on in Connecticut while working for Breuer’. As his biographer, Alice Spigelman, explained, he was thinking of ‘the houses Breuer and Gropius had built in the rural settings of Cambridge’. After the family settled on a 6 ha bushland site in Clissold Road, Turramurra, Seidler set about designing his first house, which became known as the Rose Seidler House, after his mother. Designed and built between 1948 and 1950, it was the precedent for the Zwar House, which Seidler would design some five years later.

Seidler was quite open about the international origins of this house: ‘It was probably…a direct transplantation of European through Eastern United States developments in architecture centred in Cambridge, Massachusetts, just plonked straight into the North Shore of Sydney.’ He was not exaggerating: what he ‘plonked’ onto his parents’ site was in fact a previous design that he had prepared in Breuer’s office in 1947. In association with Rolland Thompson, the son of the

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28 Ibid.
29 ‘Anyway in the two years that I spent in Breuer’s office I did most of the drawings for the houses he built between 1946 and 1948, including his own, well-known cantilevered timber house—which has been very much publicized in the world—in New Canaan. He had a great influence all round on me, obviously my total…coming to grips with a building, from design right to the finish, was really experienced in his [Breuer’s] office, and that had an influence on me, particularly in the early years of my practice in this country.’ Harry Seidler, Interview by Hazel de Berg, 13 January 1972, NLA Oral History Program.
30 Philip Drew, in Frampton and Drew, Harry Seidler: Four Decades of Architecture, 15.
32 Harry Seidler, Interview by Hazel de Berg, 13 January 1972, NLA Oral History Program.
client, Seidler had designed the Thompson House for a site overlooking a lake in Foxborough, Massachusetts. While that house was never built, Seidler retained the model and brought it to Australia with the rest of his belongings. When it came to designing his parents’ house in Turramurra, Seidler took the Thompson House and turned it through 180 degrees to relate to the southern hemisphere location. Aside from that, the house remained substantially unchanged; in fact, the designs were so similar that the scale model Seidler presented to his parents for their house was actually the original model of the Thompson House.33

It was not important to Seidler that his Australian houses were ‘original’ works of art. But it was vital that they originated from a sound pedigree—that they were linked genetically to established architectural forebears. Seidler made no secret of the origins of his architecture—and made no apologies for it. By propagating the ideologies and forms of Gropius and Breuer, he believed that he was spreading the word and showing Australians the correct way to build.

Of course, Seidler was not the only Australian architect to borrow overseas models. Boyd, for instance, had taken Breuer’s binuclear house plan and reproduced it on two different sites in Canberra. But when the work of Boyd is considered in its entirety, these direct transplantations were isolated examples. Boyd’s house designs varied significantly throughout his career, and he frequently incorporated input from a number of sources. Seidler, on the other hand, stayed true to his original mentors. This is not to say that he repeated exactly the same forms and spaces as Breuer’s originals. Over time he tinkered with, adjusted and improved aspects of these transplanted designs. But in spirit and ideology, they remained European modernist—via east coast North America—in origin.

Seidler’s process of incremental modification began at an early stage. As with most architects’ first houses, with the Rose Seidler House, there were problems. Seidler was unaware of the strength of the Australian sun and had to retrofit heavy curtains on the window of his parents’ bedroom to block out the morning sun.34 The Rose Seidler House, and other early houses with flush glass facades, weathered badly in the harsh Australian conditions. Seidler ‘felt so guilty’ about some that he and Griffiths would visit them on weekends to ‘caulk joints and paint window frames’. But Seidler learnt quickly from his mistakes and adapted his designs to suit local conditions. Observing that ‘the sun used to come in and fade curtains’, he began to avoid east and west orientation for windows, and introduced more substantial eaves overhangs, or recesses in the house form, to provide protection from sun and rain. At the same time, he ceased to construct

34 Spigelman, Almost Full Circle: Harry Seidler, A Biography, 178.
houses of lightweight, timber-framed external walls, clad with asbestos cement sheets—which provided poor thermal insulation—and adopted masonry construction.35

In relation to Waddington’s theory of scientific practice, the strength of Seidler’s Australian houses was not that they were isolated, independent structures, but that they constituted fragments of a bigger picture—fragments that both acknowledged the existence of international architectural discourse and claimed their place within that community. Building on the solid foundations of previous research, Seidler made clear and explicit references to previous work by Breuer. While, in Waddingtonian terms, these aspects of Seidler’s approach were his strength, to many observers those same aspects were his biggest weakness. Seidler was often accused of being derivative and of not attempting to address the Australian context. These were criticisms that Seidler—who did not believe in either the existence of or the need for a unique ‘Australian’ culture—usually dismissed with contempt. One commentator who saw Seidler’s lack of connection to Australian culture as a problem was Drew. Citing Seidler’s formative years at Harvard, Drew wrote: ‘the universals which animate Seidler’s work are European not Australian…the price of sticking to the task of faithfully enlarging Modernism was the exclusion of Australian content.’36

Underscoring the debate about Seidler’s possible lack of Australian substance was an ongoing debate regarding regionalism that can be traced back to the Gropius House at Lincoln, Massachusetts, designed by Gropius and Breuer in 1937 and 1938. In 1954 Sigfried Giedion cited that house to be an exemplar of the ‘New Regionalism’. For Giedion, the concept and structure of the Gropius House placed it firmly within the canon of contemporary architecture, yet aspects of its design also displayed empathy with the ‘natural conditions of its region’. These latter aspects included a reworking of the traditional New England front porch and its traditional timber frame clad with white-painted weatherboards. In fact, the only difference that Giedion claimed to see between this house and its more traditional New England neighbours was that the weatherboards ran vertically rather than horizontally.37

But what Giedion failed to comprehend were the considerably more significant dissimilarities: the floor plan was not based on traditional New England models, nor was the flat roof. Joachim Driller believed that, rather than being an example of a ‘New Regionalism’, the Gropius House was nothing more than an

amalgam of Gropius’s and Breuer’s previous European buildings and projects. This, he believed, was confirmed by the Gropius House’s lack of a southern roof overhang to protect it from the sun. If Gropius and Breuer had been genuinely attempting to consider the natural conditions of New England, he asked, why would they have made such a fundamental omission? Breuer’s first house, located just down the hill from the Gropius House, suffered from a similar lack of regard to local weather conditions and poor detailing. Six months after it was completed, the majority of the window frames leaked; after two years so did the flat roof, and there were ongoing problems with the oil-fired central heating.

It was this area—the failure to adequately address local climatic conditions—that created serious flaws in the regionalist argument. This was also where Seidler was most frequently criticised—and where the problems with the Zwar House began.

The Dilemma of the Universal Paradigm

Everywhere you go you always take the weather with you

— Neil Finn and Tim Finn

In overall concept, the precedent for the Zwar House was the Rose Seidler House, designed and built some five years earlier. Like its predecessor, the Zwar House was a fragment of international modern architecture. Precise and hard edged, it stood detached from its site and was only notionally site specific: subject to hemispheric solar orientation and repositioning of internal steps to traverse the slope, it could just as easily have been located, with varying results of human comfort, on any site in Sydney, North America or Europe. Which it was: Seidler admitted that his houses stretched ‘from one side of the United States to the other’, and he had no hesitation in building a second ‘Zwar House’ in Coogee three years after the Canberra version.

39 The Gropius and Breuer Houses were funded by Mrs James Storrow, who donated the land and paid for the construction. Driller, *Breuer Houses*, 104, 125.
40 Ibid., 130.
42 This is a reference to the Bland House—see earlier. Seidler was proud that ‘[h]omes to the specification of my plan stretch from one side of the United States to the other’. Harry Seidler, Quoted by Peter Emmet, *Rose Seidler House, Wahroonga 1948–50: Conservation Plan* (Sydney: Historic Houses Trust of New South Wales, 1999), 92.
In his 1954 *Houses, Interiors and Projects*, Seidler published details of buildings and projects completed during the first five years of his Australian practice. Almost all of his commissions were in and around Sydney—a location that he termed ‘South East Australia’, where he believed inhabitants enjoyed a climate ‘comparable to that of some Mediterranean countries or of California’. Seidler claimed that ‘few countries in the world’ were blessed with the mild conditions of south-eastern Australia, where there were no extremes, and where temperature variations between summer and winter were so minor that, if a building took into account ‘special local conditions’ (whatever that meant), no heating or cooling would be required.43

*Houses, Interiors and Projects* also included houses for contexts outside Sydney: a sheep station at Quirindi, in country New South Wales, the Bowden House in Canberra, and two projects for standardised houses for various locations.44 The binuclear Quirindi farmhouse design represented a departure from Seidler’s Sydney houses. Designed to accommodate the ‘intense summer heat and bushfire danger’ of its specific location, it contained a force-ventilated roof cavity. A similar roof form was evident on the 1959 Paspaley House in Darwin, NT, which incorporated additional measures to address the tropical climate.45

Seidler did not, however, appear to consider the specific conditions of the national capital as much as he did those of Quirindi or Darwin. Except for a small courtyard recessed into the north-eastern facade for shelter, the Bowden House was not substantially different to the architect’s Sydney houses of the same period.46 The problem most likely originated from Canberra’s geographical location. Relatively close to Sydney, and technically within the region of south-eastern Australia, Canberra nevertheless experiences vastly different climatic conditions from Sydney due to its high elevation and inland location. These differences include higher daily and seasonal temperature fluctuations, and frosts. Canberra’s climate is certainly not benign, and not Mediterranean. In winter, temperatures at night drop to –6º Celsius, making some form of heating essential. Although Seidler visited Canberra on a number of occasions, it is possible that, due to time constraints, he returned to Sydney the same day and did not experience the overnight drop in temperature for himself.47

Seidler made a number of further generalisations about the Australian climate. On one occasion, he claimed that heating was more of a luxury than a necessity,

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44 These last examples included a ‘Universal House’ to be ‘used on any reasonably flat site regardless of its orientation’, and a prefabricated house.
47 Zwar recalled that Seidler visited Canberra on ‘two or three occasions’ in regard to his house. He did not think that Seidler stayed overnight. John Zwar, Interview by the author, 26 September 2008, and In discussion with the author, 7 December 2008.
and conflated survival with comfort: ‘In this country...people are just simply uncomfortable. It’s not as bad as it is in Europe where...you have to protect yourself from the cold otherwise you can’t exist.’ To Seidler, the fireplace—which he included in almost every one of his houses—was a symbolic and formal device more than a functional item. Like the Zwar House, most of Seidler’s houses were divided into two zones: bedrooms and living. In the centre of the living zone was a fireplace that he believed marked the geometric and spiritual centre of the house: ‘Although anything but an efficient method of heating’, Seidler wrote, ‘the psychological warmth of the sitting group around the open fire is still the centre of the present-day home’. Seidler’s fireplaces were divided into two basic types: masonry or metal. In houses of more than one level, the former type, which usually originated on a lower level and extended through the floor to the main living area above, formed an additional formal and aesthetic function: a device that visually and tectonically anchored the house to its site.

Perhaps it was Seidler’s view of fireplaces as being mainly symbolic and visual that contributed to a common lack of functionality in their design. Griffiths remembered how there was ‘a long history of unsuccessful fireplaces in the houses’, with a number of them discharging smoke into the living room. In an anecdote reminiscent of Boyd’s nightmares of rain-soaked clients disappearing into billows of smoke, one client refused to pay his final fees instalment because Griffiths and Seidler could not prevent his fireplace from smoking inside the house.

While Zwar was generally very happy with the house, he found the fireplace to be quite inadequate. One of Seidler’s standard, triangular-section metal fireplaces welded together by a boilermaker from 6 mm thick mild steel plate, it required constant stoking to maintain an effective temperature. In the late 1960s, Zwar removed the fireplace in order to demolish the internal dividing wall between the living room and bedroom. Heating was then supplied by a rudimentary oil heater, which he installed on the north-eastern living room wall. Left on almost permanently in the colder months, it succeeded in keeping only some of the chill off, and was replaced with an electric unit in the 1980s.

49 Seidler, Houses, Interiors and Projects, xv.
50 See, for instance, Rose Seidler House, Turramurra (1949–50), Marcus Seidler House, Turramurra (1949–51), and Harry and Penelope Seidler House, Killara (1966–67).
51 John Zwar, Interview by the author, 26 September 2008.
52 Ibid.; and John Zwar, Interview by Brendan Lepschi, 2005. Brendan Lepschi, ‘Canberra Post-War Houses Project, No. 12 Yapunyah Street, O’Connor’, November 2005. Griffiths agreed with Zwar’s reservations, admitting that, in Canberra, a single fireplace was not appropriate. He confirmed that, although Seidler’s early training and experience were in North America, he was not aware of the coldness of some Australian locations, and did not install sophisticated heating systems into his houses well after the Zwar House. Colin Griffiths, Interview by the author, 31 October 2008.
53 John Zwar, Interview by the author, 26 September 2008; and John Zwar, Interview by Brendan Lepschi, 5.
Seidler was aware that a compact building such as the Zwar House was the most thermally stable. He was also cognisant of the implications of various materials, stating: ‘Light and open construction is thermally unstable. A solid, heavy building will have a desirable heat storage capacity, ready to dissipate heat in our cool evenings.’ But these issues were not particularly well resolved in the Zwar House. The entire north-western wall and a large proportion of the south-eastern wall were single-glazed, providing large surface areas for heat to escape. The two remaining external side walls, although constructed of double brickwork, provided minimal heat storage due to their orientation. Additionally, the timber-floored house was particularly vulnerable to heat loss through that perimeter. To minimise heat loss from the downstairs living area, which was originally separated from the dining and family rooms by a half-height wall only, a full-height wall was installed between the passage and living room in the late 1970s. Constructed of alpine ash boards with glazed panels above, it incorporated a sliding door for access.

Seidler also understood the importance of providing adequate protection from the heat of the sun. In 1963 he wrote: ‘It is impossible for us to live comfortably in buildings which admit too much of the sun’s heat.’ Zwar recalled that Seidler was particularly concerned about that aspect of the house, and believed that he generally got it right. But there was one problem: before the upstairs bedroom was added in 1967, the glazed north-western wall admitted too much sun in late afternoon when the western sun came in low over O’Connor Ridge. When the addition was added, Seidler placed a timber screen to shade the upper part of the windows, but Zwar found that it was largely redundant in that location.

Counterpoint

With the benefit of more than half a century of hindsight, Zwar looked back on his approach to obtaining a site, choosing an architect and building a house, and decided that he must have been ‘pretty naive’. Perhaps that was partly true. But it was a combination of his youthful optimism and quiet determination that resulted in this small but significant house being built. The relatively young age of the major contributors was significant: in 1955, when he commissioned Seidler, Zwar was twenty-eight years of age, Seidler was thirty-two, while Griffiths was barely twenty.

55 Ibid.
56 As Zwar recalled, ‘the sun did come in a bit, in the autumn...when it's getting round to the west...It was all right in the middle of the day when the sun was high, but it...could get quite warm’. John Zwar, Interview by the author, 26 September 2008.
57 Zwar believed that might have been because of the shade provided by a nearby tree. Ibid.
The notion of counterpoint, which was so central to Seidler’s architecture, entered the story of the Zwar House well before that day in 1955 when the client stood, apprehensively, outside the blue door and peered into Seidler’s Point Piper office. In fact, it was the search for a counterpoint to Canberra’s 1950s architecture that led Zwar to that destination. Modest and unassuming by nature, he claimed little credit for his role, saying that it was essentially limited to providing the site and stipulating the maximum budget. Yet without Zwar’s pursuit of Seidler—a quest that he followed with some determination and tenacity, given his limited means—the house would not have eventuated. Fundamental to Zwar’s attempt to engage Seidler was his desire to build a radical modernist house in the national capital as a counterpoint to the existing architecture—including the Black Mountain Laboratories where he worked.

When the Council for Scientific and Industrial Research decided in 1929 to establish two lines of research—economic botany and entomology—in the federal city, Bertram Dickson, a mycologist, was made Chief of the Division of Economic Botany (later renamed the Division of Plant Industry). Establishing these divisions was a long and drawn-out process that tested the patience of those involved. Many scientists felt isolated and cut off from the rest of the scientific community, regarding themselves as ‘outcasts in a scientific and social wilderness’. To make matters worse, the Canberra location was far from ideal for entomology—the severe winters and barren soil were quite unsuited to botanical work—and there were long delays in completing the laboratories and glasshouses. As a result, the long, grey facades of the classically inspired Black Mountain Laboratories became a symbol of lost opportunities for Dickson, who sardonically compared them with ‘Queen Hatshepsut’s funeral buildings at Dayr al-Bahre in the Valley of the Kings of Ancient Egypt’.

Zwar considered the existing domestic architecture of the national capital to be mundane and functionally deficient. The government-owned Tocumwal House, at 2 Todd Street, O’Connor, which he and Heather rented from when they married in 1954 until their new house was built, was one of about 100 almost

58 A botanist who studies fungus.
59 To a large extent, the delays were unavoidable. The Federal Capital Commission was attempting to complete a large number of buildings in time for the relocation of Parliament and the Public Service. Henry Rolland recalled that the deadline for the completion of Parliament House was so tight that on the opening day, 9 May 1927, he still had carpenters working in the building, Henry Rolland, Over the Years: An Autobiography of H. M. Rolland, OBE, FRAIA (Hawthorn, Vic.: 1971), 15. But, for Dickson and his staff—who were temporarily housed in the Botany School in Sydney and then in the upper floor of the entomology wing—the prolonged disruption to their research was a constant source of frustration.
identical houses lined up in rows. Each house was oriented to a street front, regardless of solar orientation. Windows were generally small and the houses were dark and cold.

Sheena Jackson described what it was like living in Todd Street: ‘a row of fibro and wood boxes perched on the rotary-hoed clay in the wettest winter for years, no trees or shrubs anywhere and sheep paddocks and flies at the end of the street. It was a real shock after the gentle, manicured streets of Melbourne.’61

The idea of counterpoint was followed through in many aspects of the built fabric of the Zwar House. Although it was not elevated above the landscape like its more illustrious predecessor, the Rose Seidler House, the Zwar House was a constructed, geometric object that sat starkly in a field of grass, with no attempt at mediation between nature and artifice. Zwar claimed that he, like Seidler, had little time for or interest in gardening.62

The external walls comprised two types: bagged and painted brick walls running parallel from north-west to south-east, and infill cross walls that were mostly glazed. The fenestration of the cross walls continued the interplay of contrasts: small window openings were punched through large, solid walls on the south-western facade, while the brick walls to the garage and courtyard were peppered with small, vertical slots to form grilles. The infill walls were subdivided into studied compositions of squares and rectangles—the latter with alternating horizontal and vertical thrust. The counterpoint effect was further highlighted through the use of complementary colours: teal blue, lemon yellow and salmon pink.

The play of opposites continued through to the interior of the Zwar House, with colour juxtapositions and contrasting window proportions. The interior contained extensive areas of timber. These included alpine ash floors and vertical boarding to selected walls, alpine ash door and window frames, and a combination of solid ash and Canadian plywood to built-in joinery units. The warm hue of these surfaces, coated in clear polyurethane, contrasted with the adjacent painted walls. Yet in spite of these visual contrasts, the overall result was a coherent and homogeneous internal space, mainly due to consistent detailing and the repetitive use of a family of fixtures, fittings and materials.

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61 Sheena Jackson, ‘Remembering Todd Street’, in The Tocumwal Archive (Canberra: ACT Heritage Library, Woden Library). Tocumwal Houses are now appreciated by many in the Canberra community.
62 John Zwar, Interview by the author, 26 September 2008.
Figure 3.7 Zwar House, view from south

Photograph: Brendan Lepschi, 2005

Figure 3.8 Zwar House, view from dining area

Photograph: Brendan Lepschi, 2005
Neighbours and visitors did not know what to make of the Zwar House, as was the case with the Fenner House. The plain lines and lack of traditional ornamentation reminded some of austere government buildings of the time, prompting tradesmen to ask if it was a ‘guvvie’ (government house)—presuming that no-one in their right mind would actually choose to live there. To others, it appeared out of place, like a small beach house that had somehow been washed up on a Canberra hillside.63

**Economy**

Zwar, like Fenner, saw modern architecture as a potential solution to practical problems. Yet both scientists were just as attracted to the visual appearance of this new phenomenon—to the details, forms, materials and colours. What fascinated them was how modern architecture combined these material aspects to become a physical manifestation of a new world—a modern, postwar world whose emergence and progress were so intimately tied to their own fields. When Zwar paid Seidler for his design and documentation services, he was essentially purchasing a modernist artefact that reflected these aspirations as much as he was commissioning a house to provide shelter for his family. This aspect of the transaction between client and architect was summarised by the fact that Seidler presented his client with a print by the Bauhaus student and teacher Josef Albers to hang on the wall of his new house. Titled *Seclusion* and dated 1942, it now hangs in Zwar’s new residence in the Canberra suburb of Pearce. With Zwar having sold the Zwar House in 2003, and the new owners demolishing it to make way for a much larger residence, *Seclusion* is the only surviving element of Seidler’s comprehensive vision for an affordable small house in the national capital.64

The house that Seidler designed for John and Heather Zwar represented a return to one of the earliest tenets of modern architecture: response to social need. Unlike Breuer’s houses, which increasingly exemplified a consumerist notion of modern architecture as an expensive and fashionable commodity, the modest Zwar House was a demonstration of affordability. Seidler was aware of this distinction, writing how different his first Australian clients were to Breuer’s in New York, ‘who were wealthy and wanted modern houses mainly for elitist-visual reasons’.65 Just how affordable the Zwar House was is evident when the cost—£5000 in 1956—is compared with that of other houses. The Rose Seidler

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63 Neighbouring resident of Yapunyah Street in discussion with Brendan Lepschi, 19 January 2009.
64 Zwar was surprised, believing that Seidler usually sold these to his clients. John Zwar, Interview by the author, 26 September 2008.
House had cost approximately £8000 to build in 1948–50, while the cost of the Fenner House was £8500 (excluding heating) in 1954. Breuer’s first house in Lincoln, Massachusetts, cost about US$10 000 as far back as 1939, while the monumental Frank House in Pittsburg, designed with Gropius, cost a mammoth US$250 000. Breuer’s averaged-sized house, Geller House I, which Seidler documented between 1946 and 1947, had a budget of US$25 000, while his relatively modest House II of 1947–48, which Seidler also draughted, cost more than US$17 000.

After 1955—the year the Zwar House was designed—Breuer rarely built any house for less than US$100 000, and many cost significantly more than that. While average salaries were higher in the United States than they were in Australia at the time, it was clear that Breuer was not designing houses for average clients. And when he attempted to do that, he failed miserably. His demonstration ‘House in the Museum Garden’, built in the grounds of the Museum of Modern Art, New York, in 1948–49, was intended to be a display house for clients on average incomes. But the cost—between US$20 000 and $27 500, depending on the choice of variations—placed it out of reach of those for whom it was supposedly designed.

Seidler’s entire approach to domestic architecture was informed by Gropius and Breuer. From Gropius came the desire to build a better world by making modern design available to people of average incomes, and the will to promote modernist principles. From Breuer came the design and documentation methodology—the idea that each house was part of an integrated, coordinated process limited to a few recurring set pieces: standard floor plans and universal details combined in various permutations.

That Seidler never departed far from the underlying themes and ideologies of his mentors’ original doctrines when he designed houses in the Australian context was not, in itself, a problem. Nor was it a problem that he chose to do that instead of pursuing a uniquely ‘Australian’ architectural vocabulary—in the form of references to the vernacular or to traditional ways of building. By importing an established ideology on which to establish a local architecture, Seidler avoided such issues, and had no need to invent a new architecture from scratch. Instead, working on a sound intellectual platform, he could build on the knowledge of others within the international architectural community.

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67 The costs of houses are all based on figures that were current at the time of their construction.
68 Driller, *Breuer Houses*, 20, 125.
69 Ibid., 186.
By testing, analysing and modifying those established models, Seidler approached Waddington’s description of the way in which scientific knowledge is advanced through publishing, sharing and building upon earlier research.

But as described earlier, the Zwar House contained some technical flaws. Principally associated with inadequate heating and cooling, these problems seem to have arisen from a lack of accuracy in the methodology. It is possible that information regarding sun angles and temperature fluctuations was not adequately considered in relation to details of the roof overhangs, the sun screening, the type of heating or the thermal properties of materials. The lack of any true scientific analysis of these factors seems to have occurred because of a form of blindness on the part of Seidler—an affliction from which Gropius and Breuer also suffered. Problems that were already inherent in their New England houses were further compounded when Seidler imported the same minimalist white boxes to Australia, and failed to adequately adjust them to suit prevailing conditions.

In spite of the rhetoric about the age of science that was often discussed in the popular architectural and design journals of the time, a true scientific approach was not implemented to adapt these houses to local conditions at any stage of their migration from Europe to New England, Sydney and Canberra. Seidler, like his mentors and their supporters such as Giedion, were blinded by the visual qualities of these icons of modernism. This was a self-inflicted form of blindness that came from being seduced by the formal qualities of the crisp, modern forms that had come to represent the modern world. It was not simply that they were naive. The problem they faced was that the formal qualities of this new architecture that they so vigorously espoused were entirely dependent upon a few set pieces: minimalist, sharp-edged, white boxes in various combinations.

And so the image of the house, and what it represented, became more important than its ability to function as a series of comfortable, habitable spaces. Although Seidler tinkered with aspects of his houses, he was reluctant to modify the inherited designs beyond a certain point. The archetypal clean, crisp box was easily lost once the multifarious requirements of a fully functional house—roof eaves to provide shade and protection from the weather or recessed doors to form transitional spaces between inside and outside—were considered.

But these same limitations enabled Seidler to operate so efficiently, and to produce affordable, modern houses such as the Zwar House. While not as well known as some of his other buildings, the Zwar House was part of an ongoing experiment into the compact, modern house type, in which Seidler sought to inject the maximum amount of modern design for the minimum cost. In this respect, the Zwar House exemplified an outstanding commitment to intellectual rigour, and to the pursuit of what an affordable postwar house could be.