



WHAT IF? WHAT NEXT?

# **SPECULATIONS ON HISTORY'S FUTURES**

## **SESSION 4A**

### **THE COUNTERFACTUAL**

**What If? What Next? So What? Exploring the Historical Consequences of Choices**

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# **THE GROWING HOUSE AND THE PARADOX OF PRESERVATION**

**Philip Goad** | University of Melbourne  
**Alan Pert** | University of Melbourne  
**Paul Walker** | University of Melbourne

*What if the 'new' could be considered significant in the context of additions and extensions to Heritage buildings? Typically, in the context of Heritage and Preservation, the old is seen as more culturally relevant, significant and valuable than the new or the contemporary. If an evolutionary mandate was implied and expected in a buildings' original program and morphology, such as a 'Growing House', for instance, then the new could expand and evolve the architectural 'object', as well as its place in a wider historical context. This paper explores six significant case study projects to explore whether, through the production of the new, we may uncover an untold history that adds a level of significance through the process of change and adaption.*

*Robin Boyd, in a letter discussing his design for the Fishbowl wrote, "I look mainly for an idea – that is, one main idea per building – instead of the more usual assortment of little ideas which are shaken up together to make a building..."<sup>1</sup> In contrast is the work of Ernest Fooks who planned specifically in his projects for the future, through program, stylistic and morphological flexibility to allow adaptation and growth. His oeuvre, heavily influenced by precedent, history, context, and lineage, resembled a disparate collection of ideas rather than a singular approach. His buildings tell multiple stories informed by the world as a network of relations and correspondences.*

*It is through this covert prospect of the 'new' that these buildings could evolve, adapt, and reform, overlaying a new level of significance and richness to their history and providing the 'next' in approaches to Heritage Preservation as well as 'Speculations on History's Futures'.*

## Introduction

Walk around any suburban street and you will see houses that have sprouted new growths over the decades: small houses with an unsympathetic box dropped on their roof; narrow houses that grow fat with rear extensions; ubiquitous loft extensions with their new dormers; verandas that enclose bedrooms. Extensions get added both horizontally and vertically, rooms get knocked through, divided, joined up again and used for countless other purposes. We are as such accustomed to the idea of extending our homes when the need arises, but why aren't there more houses specifically designed to accommodate change?

The paradox of this problem is that there is now strong evidence of a collection of significant case study houses throughout the twentieth century, that were designed to 'grow'. Research for this paper begins with the archives of Viennese émigré architect Dr Ernest Fooks (Ernst Fuchs pre-1945) (1906-1985), and his 1932 competition submission for *Das wachsende Haus* (The Growing House). The influence of 'the growing house' in relation to alterations and additions to his own house at 32 Howitt Road, Caulfield North in Melbourne (1964-6) is considered but so also are the origins of *Das wachsende Haus*, which emerged as a broader European response to housing challenges in the immediate aftermath of World War I. Fourteen years later, in 1932, German architect Martin Wagner asked:

What is a 'growing house'? This question encompasses not only an idea of space, but also a value and purpose. The house of the future should not only grow spatially, i.e. by means of extensions, but also move from the level of the simple to the level of the perfect in the furnishing of the individual rooms. It should also change its purpose and be able to reconstruct it in the easiest possible way and be capable of a different conception of time. As I have already said, the new settlement should free us from the rigidity and limitations of today's urban habitat and make us adaptable and thus more resistant to all the effects of the crisis.<sup>2</sup>

Foreshadowing a more comprehensive study, the legacy of the ideas explored by Fooks and Wagner can be traced through six case study projects bookmarked in the Fooks archives: Richard Neutra's, Bailey House, California (1948), Kiyonori Kikutake's Sky House, Tokyo (1958), the PREVI competition, Lima (1969), Herman Hertzberger's Diagoon Housing, Delft (1967-1970), Merchant Builders' Pavilion House, Melbourne (1969) and Cocks & Carmichael's Growth House, Melbourne (1970). The paper concludes by revisiting the restoration of Fooks' own house as way of incubating new life within it, while at the same time, the work of one of New Zealand's best-known architects, Ian Athfield is explored. Athfield's own house and office (1965-), said to be his "most important building", is recognised for its heritage significance and as "an enduring experiment in communal city living",<sup>3</sup> which continues to evolve organically. It has been noted that, while being heritage protected, Athfield, "never had a fixed end-point in mind for the house",<sup>4</sup> he intended that it would grow.

## Context: The Ernest Fooks House

In August 2020, real estate agents Gary Peer & Associates relisted the Ernest Fooks House at 32 Howitt Road, Caulfield North for sale. The relisting was the result of nearly seven years of protracted negotiations between the 'new' owners and Heritage Victoria. The house had been occupied by Ernest Fooks' wife Noemi up until her death in 2013 (Fooks passed away in 1985) at which point it was sold to a local family who had been caring for Noemi over a ten-year period. Following the sale of the property, Alan Pert began leasing the home while carrying out extensive research into Fooks' Vienna and Melbourne careers, his built-work, writings, publications and paintings.

Two permits allowing for ground floor alterations and additions to the rear of the block were granted during this seven-year protracted period but the preferred option of 'growing' upwards to avoid impacting upon the heritage garden was refused by Heritage Victoria following initial support for such a proposal. Rather than compromise the unique characteristics of the ground

floor layout, landscape relationships and interior sensibility by extending the existing floor level, the owners decided to put the property back on the market. The estate will as such remain unaltered and unoccupied for the time being, its growth and its evolving future, 'put on ice'.

When the house was heritage listed in 2009, there was little evidence of Fooks' interest in the 'growing house' concept.<sup>5</sup> It could be argued that the 'growing house' as a projective idea was, in fact, frozen in time through the listing process with no recognition of its role and influence. The passing of the original inhabitants, Ernest and Noemi Fooks, with their distinctive lifestyle had stripped the house of its 'curators'. In addition, the loss of the contents of the house – loose furniture, artworks and artefacts – which were intrinsic in the detail design of the house, left behind a modernist shell awaiting a kind of second coming. Pert's temporary occupation of the house began as a twelve-month lease but ended up becoming a six-year research residency and associated archival project. This included a public exhibition, "The House Talks Back" staged in 2016 in partnership with students and staff from the Melbourne School of Design.<sup>6</sup> The exhibition was the first time that Fooks' 1932 competition entry, which appeared in *Wachsende Häuser* by L.W. Rochowanski was publicly exhibited.<sup>7</sup> In an accompanying exhibition catalogue, Philip Goad described the relationship between Fooks' 'growing house' and his later architecture:

This is the same theme that Fooks would take forward in his own architecture: externally, an abstract, reduced architecture but inside, Fooks would work hard to produce highly wrought, often rich interiors, invariably adorned with furniture also designed by Fooks. Stage II of the Fooks team's 'Growing House' was the addition of a bedroom and bathroom block at right angles to the rectangle of the *Kernhaus*. Another L-shape was thus formed, this time not internally but externally. The result was another embrace of space, this time, the outdoor room of the garden. The connecting element for the two blocks – located at the internal corner of the L – was the tiled porch/vestibule/air-lock. It acted like a necessary pivot in the composition, in much the same way that Frank Lloyd Wright's L-shaped Usonian houses of the late 1930s would also hinge to define distinct living and sleeping blocks that embraced a shared private landscape.<sup>8</sup>

While the concept of purchasing a heritage house (designed for a couple with no children and nearing retirement) with the intention of extending (to suit the needs of a large family) might appear counter intuitive, this decision by the new owners in 2014, should be considered in the context of a long-term relationship that had developed between them and Noemi Fooks. The owners had spent many years caring for Noemi in the house. They had openly discussed the purchase of the house and Noemi had stated on numerous occasions that, there was "room to expand" at Howitt Road.<sup>9</sup> Noemi also talked about Ernest's fascination with the idea of the elasticity of a house. She mentioned their own house, which had been used to host lectures, weddings, gallery openings, and Jewish festivals.<sup>10</sup> In conceiving an extension to the Fooks house, extensive reference was made by Pert in the heritage impact statements to *Das wachsende Haus* (The Growing House).<sup>11</sup>

In 1932, *Das Wachsende Haus* was an idea realized as a kind of 'model settlement' at that year's Vienna Spring Fair and it became a well-defined term in Vienna thereafter. Fooks had brought the original competition publication with him to Australia and it included eighteen designs selected as the best from a competition held amongst Austrian architects to determine a liveable and affordable minimum house that might grow with time as a family's needs and income grew. The 'Growing House' competition considered that the house:

was built with the least amount of effort and gradually expended upon, depending on necessity and resources, this becoming the archetype of the growing house. And even if it ever was so modest, it remained together with the land, on which it stood, the foundation for the development of the family: the parental home.....from the smallest beginnings, a closed and uniform whole should become reality, through two expansions. The house should grow deliberately. The architecture community has successfully shown, in what different fashions this goal can be achieved.<sup>12</sup>

Represented in the 'model settlement' were many well-known Austrian architects like Josef Hoffmann, Oswald Haerdtl, Erich Boltenstern, Leopold Bauer and Siegmund Katz. There was also new talent: the third prize-winners were a team of young architects, W. Fabjan, W. Stepf, A. Tröster and E. Fuchs (Ernest Fooks). Each competition entry had to show that it might be able to grow in three stages: first stage, the *Kernhaus* (literally translates as core or nucleus); second stage, I Ausbau (enlarge); and third stage, II Ausbau. The *Kernhaus* of the Fooks team entry was a simple rectangle, approximately 4 x 9 metres, that comprised essentially two spatial units: an open, combined living-dining space (4 x 6 metres) and a service block (4 x 3 metres) that included a U-shaped kitchen, a stair down to a basement, and a toilet that opened onto a tiled porch/vestibule/air-lock that gave access to either the kitchen or living space.

Proud of his 1932 design for *Das Wachsende Haus*, Fooks published an article on it in *Australian Home Beautiful* in 1940<sup>13</sup> and in 1945, his competition entry with fellow émigré C.J. Lipsett in *The Sun Post-War Homes Competition* was described as "Design in Five Stages for Growing Family".<sup>14</sup> There, the *Kernhaus* (core) was replaced by Fooks with the capitalised term, NUCLEUS.<sup>15</sup> By 1964, when Fooks designed his own house at 32 Howitt Road, there continued to be echoes of the conceptual humanism of the 'Growing House' of three decades before. Present was the additive compositional strategy of multiple L-shaped forms that grow off the core of Fooks' central living/dining space. A tiled vestibule was again the connecting hinge and the garden was designed as a series of 'furnished' outdoor rooms that gave each interior a direct connection with a series of different 'natures'.

From a detailed examination of the drawings archives of Fooks' domestic architecture held at the State Library of Victoria, it is clear that this principle of growth was embedded in numerous of his post-war house plans. Fooks appeared to be anticipating the changing circumstances of the inhabitants or alternatively that the property might change hands over time. 43 Howitt Road, from 1964 (now demolished) is a good example where Fooks explored single storey and two storey options for the clients and this is a design, which is very similar to his own house at 32 Howitt Road. Fooks believed that as people grow and their lives change, so should their houses. In 1932, he concluded – melodramatically – an article on *Das Wachsende Haus*:

Because we must never forget, that far more important than money and economy, far more important as art and technology is man, the people and their life. A people that does not build, does not live, it dies.<sup>16</sup>

### ***Das wachsende Haus* (The Growing House) and its Origins in Europe**

Fooks' appreciation of the 'growing house' concept was part of a larger interest shared by progressive European architects after World War I. During the 1920s and 1930s several European countries affected by the war began to construct inexpensive socially-directed housing estates. Almost all these countries witnessed an architectural revolution based on social and political movements. One interesting proposal to emerge from this intense interest in the housing problem was the so called, "growing house", an idea promoted by some of the most important modern movement architects. In 1920, as Bettina Schlorhauser has recounted, political economist, sociologist and philosopher Otto Neurath founded the Austrian Settlement and Allotment Garden Association in Vienna and for this body, architect Margarethe Schütte-Lihotzky designed a series of small *Kernhäuser* (core houses) that could be extended as required by their owners without the involvement of architects.<sup>17</sup> Many of these houses grew 'naturally', some completely enveloped by their extensions.

In Germany, other architects like Bruno Taut explored similar ideas in Magdeburg between 1921-4 but it was Berlin city architect and chief planner Martin Wagner who developed the idea more fully. In 1932, he published *Das wachsende Haus*, a book that presented a new concept of an 'intelligent house' that was ergonomic, ecological, economical and flexible.<sup>18</sup> 24 architects' proposals were published and these had been constructed at full-scale in the Berlin fairgrounds, as part of an exhibition held from May 7 to August 7, 1932 entitled: *Sonne, Luft und Haus für Alle*. Wagner's selection was made from entries in a competition held between November and

December 1931 and initiated by Han Poelzig and in which more than 1000 architects participated. Prominent architects were represented, including Hans Poelzig, Otto Bartning, Walter Gropius, Hugo Häring, Ludwig Hilberseimer, Erich Mendelsohn, Hans Scharoun, Bruno Taut, Martin Wagner and garden architect Leberecht Migge amongst a host of others. The idea of the 'growing house' concept was to give the inhabitants plots upon which they could shape their house and garden according to their individual needs. Importantly, as Jadwige Urbanik notes, the houses were designed to be extendible and also capable of being mass produced. Unlike the self-built and self-help additions of the early 1920s Austrian examples advocated by Neurath, this was not a DIY proposal:

The growing house was meant to be a technologically advanced product, with gas heating, excellent thermal insulation and electric lighting. The house was meant to increase not only in size, but also in quality and to be possible to relocate if the family needed so. The houses... were planned to be mass produced in the future, with the assistance of private companies.<sup>19</sup>

In the same year, in Vienna's city fairgrounds and in parallel to the completion of the Vienna Werkbund Siedlung in the suburb of Lainz, twenty different versions of *Das wachsende Haus* were constructed as a demonstration village as part of the annual Viennese Building Fair. As with the Berlin event, these 'growing houses' were initiated and funded through the auspices of building associations rather than through the architectural community or its professional association.<sup>20</sup> These Austrian and German experiments of the 1920s and 1932 were not the end of architectural thinking on the extendible family house. As numerous competitions for small houses were held around the world in 1945 as World War II was ending, the idea of a house that might 'grow' resurfaced – again as a project of recovery. It was also an idea that kept recurring over the next thirty years across a wide range of architects and differing architecture cultures and differing social and economic settings. As such, its persistence as an idea suggests an ongoing preoccupation with the organic potential of domestic architecture.

Six well-known projects exemplify this interest. Richard Neutra's Case Study House #20 (Pacific Palisades, CA, 1947-8) was designed for a growing family. Two bedrooms only houses were the rule for young families after the war: keeping the size and budget low was mandatory. However, the abundance of land surrounding the house allowed for future additions. From the outset, it was acknowledged that the family would most likely outgrow the 2-bedroom home and eventually expand it as they earned more money. Throughout the home's early life, Neutra designed successive additions, working with limited square footage and a low budget and designing flexible living areas that could expand into the large lot. Even the car porch could be eventually closed and roofed to obtain an extra room. Similarly, in post-war Japan, questions of growth became formal preoccupations for some architects, especially as the increasingly disparate rates of change in cities required new paradigms for architectural and infrastructural design. Metabolic change (later termed Metabolism) was one such paradigm. Kiyonori Kikutake's Sky House (Tokyo, 1958) served as a prototype for a 'capsule' device that might grow. Consisting of one open square room, floating above the ground on piers, possible expansion from the main cell was suggested via what Kikutake called "move nets", which could be plugged in beneath the floor and enable the provision of bathrooms, storage space and additional bedrooms as required for the family as it grew or contracted.

Such a project had broader urban implications and this notion of wider, mass application also informed the influential PREVI (Proyecto Experimental de Vivienda) experimental housing competition for Lima held in 1968. Led by British architect, Peter Land, the competition was a pioneering attempt to reconcile the conflicting forces of informal growth and top-down planning. The brief called for low-rise, expandable housing, grouped together in neighbourhoods (*unidades vecinales*), each house to comprise a few rooms but be capable of expansion to accommodate eight to ten inhabitants, if required. These requirements for adaptability were neatly realised in James Stirling's courtyard houses. Arranged in clusters of four, the houses shared common party walls and services. The clusters were grouped into larger clusters of 20-21 houses, creating a neighbourhood of some 400 houses. Stirling's design provided a simple basis for growth: four

columns provided a permeable enclosure to the courtyard. Prefabricated concrete sandwich wall panels facilitated speedy and economical construction. Load bearing party and perimeter walls allowed the units to grow vertically. Flexibility is evidenced by the fact that one of them was transformed into a four-storey school. Adaptability was facilitated by lightweight reinforced concrete beams with hollow pot infill for roof/floor units, light enough to allow residents to effect desired modifications themselves.

This notion of a generic but adaptable carcass house similarly informed Herman Hertzberger's Diagoon experimental housing in Delft (1967-70). Eight prototypes were built but in principle they were incomplete, the occupants able to decide how to divide the space and live in it, where they sleep and eat. If the composition of the family changed, the house could be adjusted, and to a certain extent enlarged. It was an incomplete framework, the skeleton a half-product completed according to the occupants' needs and a strategy to depart from persistent stereotypes which continue to dominate housing today. At a more prosaic but in many respects more realistic application of similar ideas, project house builders in Australia developed 'growing house' designs that could be inserted into typical suburban settings. In Melbourne, the company Merchant Builders launched in 1965 a 'growing house' in the form of their Pavilion house. Conceived for people who could not afford a family-sized house when they bought their first home, the Pavilion came in three units: the first, a small house; the second, a family wing; and the third, an extended living space or self-contained unit. The units could be attached in any configuration, depending on the shape of the land. It was infinitely versatile. Also, in Melbourne, Cocks and Carmichael's 'Growth House' (1970) for Civic Constructions was a modular design which could be expanded as finances permitted. Given the evidence of such a strong design tradition within 20<sup>th</sup> century architecture, it could be argued that these works constitute a specific form of built (and future) heritage in their own right.

### **Preserving a Growing House (An Evolutionary Architecture)**

The basic principles of preservation (to maintain something in its original or existing state) sets up a paradoxical position when the object or artefact to be protected has in-fact been designed for growth (the process of increasing in size). In other words, "the basic principles of flexibility start with its opposite – namely that inflexibility should be designed out". While the definition of flexible housing includes the possibility of choosing different housing layouts as well as the ability to adjust one's house over time, the 'growing house' is specifically about expansion (and possibly contraction). The 'growing house' is as such less about an interior flexibility and more about a phased approach to one's life and the life of the building. Architecture can create conceptual as well as physical boxes around us, leading us to assume that everything in life should neatly fit the containers we construct for them. The 'growing house', might cause us to question that assumption.

One should not underestimate the relative importance that 'the growing house' plays in Fooks' buildings, including his own house. The Fooks House as a 'growing house' expresses the idea that nothing ever entirely fits the boundaries drawn around them, and that life is a series of overlaps and intersections from which new life might grow. The 'growing house' as such suggests that the house starts with one story and evolves to accommodate a different story. The Fooks house as such becomes an evolutionary project anticipating a future beyond the life of Ernest and Noemi Fooks. What began life as a house designed for a couple moving towards retirement might evolve and expand to accommodate a completely new set of circumstances. Like Neutra's Bailey House or Kikutake's Sky House, the Fooks house was designed to be 'elastic'. Not only was it designed to accommodate the myriad of public functions and events that Ernest and Noemi curated in the 'nucleus' of their home but it was also anticipating a future beyond their lifetime.

Ian Athfield's own house in Wellington, New Zealand was heritage listed in 2018 and cited as, "a relatively rare example of a communal housing 'experiment' which continues to evolve in a dynamic and organic way."<sup>21</sup> It was an ensemble of buildings designed with an evolutionary mandate. Athfield, implied and expected that the building's original program and morphology,

could expand and evolve over time, which places the project in a wider historical context. Athfield first designed the house for an exposed site on a hill above Wellington harbour in 1965, and it continued to grow till his death in 2015. Athfield had worked briefly for the Christchurch practice of Warren & Mahoney in 1961-62<sup>22</sup> when the firm was moving away in its domestic architecture from modernist orthodoxy towards a manner in which the house was articulated into separate volumes – living, kitchen, bedrooms – each with its own pitched gable roof. Athfield took the additive logic which this implied and turned it from an abstract aesthetic into a lived reality. The Athfield house first started as a modest two storey building. Over nearly 50 years, extensions and additions rarely ceased. The house moved down its hilly ridge towards buildings owned by Athfield on the street at the bottom of its site and moved up the hill to swallow two of its banal suburban neighbours. Built mostly of roughly plastered concrete block, looking more like town than a house, its aesthetic departed from that of his neighbours and of most New Zealand architecture of its period. With Roger Walker's contemporaneous Wellington houses, it was in part motivated by the diminutive spaces of 19<sup>th</sup> Century settler vernacular. As well, like many other architects of the period, Athfield fell in love with north African and southern European villages, in his case probably through attending a lecture by Aldo van Eyck during his 1963 visit to New Zealand.<sup>23</sup> The lessons Athfield took from these villages were not only about form, but also about process: a great deal of the building work on his house was done by Athfield himself. His unfinished, self-build ethos was an aspect of the antagonism he bore towards the planning rules and the stifling social conformity of the suburban world in which his house squarely sat.<sup>24</sup> The house also grew programmatically, to accommodate not only the architect's immediate family but also elderly parents, friends, and – in contravention of code – Athfield's architectural practice of up to 30 partners and employees.

What if the Fooks house, conceived as a 'growing house', was treated as an evolutionary project reflective of a modern era that has evolved from and has continuously altered the past to deal with the present. What if the project was about the coexistence of the past and the future, where heritage and preservation acknowledged and embraced the concept of 'growth' as a way of pulling our disciplines forward? By allowing the house to 'grow', more knowledge might be uncovered or revealed about Fooks, about the house and about his architecture that was previously invisible. Just as the temporary occupation of the house revealed new knowledge and new lines of enquiry, one might consider the 'growing house' as a "laboratory for other investigations". Heritage, understood through archival research might suggest, "that preservation itself is a forward-thinking celebration of life, that it is a way of looking at something that seems to be fading or gone and incubating new life within it".<sup>25</sup> Could, in fact, the act of realising the 'growing house' be conceived as a work of 'total' preservation?

Mark Wigley in his introduction to *Preservation is Overtaking Us* suggests that, "preservation is a progressive art form", when talking about the legacy of Paul S. Byard, who from 1998 to 2008, was the director of the Historic Preservation Program at Columbia University in New York.<sup>26</sup> Wigley further suggested that, "for Paul, taking care of a building might mean knocking a wall down and revealing something that wasn't seen before. Preservation is understood as an always radical act".<sup>27</sup> Such ideas related to heritage are not new. There has always been an understanding of the fluid nature of what constitutes time within heritage discourse. As Paul Eggert notes:

The historic building, any historic building, will always have been in a process involving, in varying degrees, conscious alteration, accidental change and natural decay... The building does not and cannot have a stable constitution.... Thus, adapting Adorno, we can say that the building as work does not stay identical with itself....<sup>28</sup>

In contrast to Athfield who made it clear before his death, that he "never had a fixed end-point in mind", Fooks never published or wrote about his own house as a 'growing house'. Thus we cannot verify that this was the original design intent but the 'growing house' research project provides a body of evidence that 'growth' was a consistent preoccupation throughout his career. In 1949, for example, in a lecture titled 'The Home of Our Age', Fooks prophetically stated that "our homes of yesterday do not meet the requirements of today's life, of our social life, our private life, our

family life”.<sup>29</sup> Preserved ‘as is’, the Fooks house may be concealing, rather than revealing Fooks’ true intentions. If it were allowed to ‘grow’, might the ‘new’ overlay a new level of significance that adds richness to the history and could one consider the new and the old trading places in the future? Could one make the risky proposition and speculate that in history’s future the new is seen as more culturally relevant than the old?

## Endnotes

- <sup>1</sup> Robin Boyd, Letter to schoolboy.
- <sup>2</sup> Martin Wagner, quoted in L.W. Rochowanski, *Das Wachsende Hauser*, 18 (Wien: Verlagsbuchhandlung Emmerich Becsei, 1932).
- <sup>3</sup> <http://wellingtoncityheritage.org.nz/buildings/301-450/380-athfield-house>.
- <sup>4</sup> <http://wellingtoncityheritage.org.nz/buildings/301-450/380-athfield-house>.
- <sup>5</sup> H2191 Ernest Fooks House, Victorian Heritage Database Report, see <https://vhd.heritagecouncil.vic.gov.au/places/26858/download-report>.
- <sup>6</sup> ‘Ernest Fooks: The House Talks Back’, exhibition and catalogue was the outcome of the graduate seminar Critical and Curatorial Practices in Design run by Alan Pert and Philip Goad in Semester 2, 2016.
- <sup>7</sup> L.W. Rochowanski, *Das Wachsende Hauser*, 18 (Wien: Verlagsbuchhandlung Emmerich Becsei, 1932).
- <sup>8</sup> Philip Goad, “The Growing House and Fooks”, in Alan Pert (ed), *Ernest Fook – The House Talks Back* (Parkville: Melbourne School of Design, University of Melbourne, 2016), 15. See also Philip Goad, “Ernest Fooks and *Das wachsende Haus*, 1932”, in Philip Goad, Ann Stephen, Andrew McNamara, Harriet Edquist and Isabel Wünsche (eds), *Bauhaus Diaspora and Beyond: Transforming Education Through Art, Design and Architecture* (Carlton, Vic and Sydney: The Miegunyah Press and Power Publications, 2019), 54-55.
- <sup>9</sup> 32 Howitt Road, conversation with Alan Pert, and Property Owners, 2015.
- <sup>10</sup> 32 Howitt Road, conversation with Alan Pert, and Property Owners, 2015.
- <sup>11</sup> Alan Pert, heritage impact statements; Permits: P24024 / P30159
- <sup>12</sup> Rochowanski, *Das Wachsende Hauser*.
- <sup>13</sup> “A Growing House”, *Australian Home Beautiful* (March 1940): 26-27.
- <sup>14</sup> “Design in Five Stages for Growing Family”, *The Sun Post-war Homes Architects’ Competition Design* (Melbourne: The Sun-News Pictorial, 1945), 24-25.
- <sup>15</sup> Fooks and Lipsett’s 1945 competition entry and its relationship to apartment design is described in Philip Goad, “NUCLEUS meets the minimum: Ernest Fooks, the small house and the flat in post-war Melbourne”, *RMIT Design Archives Journal*, 9: 1 (2019): 39-59.
- <sup>16</sup> Ernst Fuchs, “Das wachsende Haus”, *Der Abend* (17 March 1932): 7.
- <sup>17</sup> Bettina Schlorhauser, “Growing House: The “rationalization of happiness” was not born in the concept of “incremental housing”, 21 June 2016, [architecturaltheory.txt](http://txt.architecturaltheory.eu/?p=2085&lang=en): 1-3. See <http://txt.architecturaltheory.eu/?p=2085&lang=en> For further scholarship on the ‘Growing House’ and ‘Kernel House’, see Sophie Hochhäusl, “From Vienna to Frankfurt Inside Core-House Type 7: A History of Scarcity through the Modern Kitchen”, *Architectural Histories*, 1: 1 (2013), 1-19 and Jesko Fezer et al (eds), *Martin Wagner: The Growing House* (Leipzig: Spector Books, 2016).
- <sup>18</sup> Martin Wagner, *Das wachsende Haus. Ein Beitrag zur Lösung der städtischen Wohnungsfrage (The growing house: a contribution to the solution of the city housing problem)* (Leipzig: Deutsches Verlagshaus Bong, 1932).
- <sup>19</sup> Jadwiga Urbanik, “‘The Growing House’ – The way to Solve the Housing Problem in Interwar Germany”, in Jerzy Charytonowicz and Christianne Falcio (eds), *Advances in Human Factors in Architecture, Sustainable Urban Planning and Infrastructure* (Zurich: Springer, 2019), 247.
- <sup>20</sup> Schlorhauser, “Growing House”, 17.
- <sup>21</sup> <http://wellingtoncityheritage.org.nz/buildings/301-450/380-athfield-house>.
- <sup>22</sup> Julia Gatley, *Athfield Architects* (Auckland: Auckland University Press, 2012), 6.
- <sup>23</sup> Gatley, *Athfield Architects*, 5.
- <sup>24</sup> Gatley, *Athfield Architects*, 26-33.
- <sup>25</sup> Mark Wigley, “Introduction”, Rem Koolhaas, *Preservation is Overtaking Us*, GSSAP Transcripts, Columbia.

<sup>26</sup> Mark Wigley, "Introduction", Rem Koolhaas, *Preservation is Overtaking Us*, GSSAP Transcripts, Columbia Books on Architecture and the City, New York, 2014, see: <https://www.arch.columbia.edu/books/reader/6-preservation-is-overtaking-us>.

<sup>27</sup> Wigley, "Introduction".

<sup>28</sup> Paul Eggert, *Securing the Past: Conservation in Art, Architecture and Literature* (Cambridge: Cambridge University Press, 2009), 238.

<sup>29</sup> Ernest Fooks, "The Home of Our Age", typescript of lecture, dated 7 July 1949. Fooks Collection, State Library of Victoria.