Sharing the Interior: economies in the Antipodes

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ABSTRACT

Economy is often neglected in the literature on housing, and the design of house interiors. Exploring emerging forms of interior environments, this paper examines the relationship between sharing practices and models of economic domestic interiors. It maintains that sharing can be seen as a sustainable desirable and economic practice because it reduces total housing cost (and total construction), provides opportunities for exchange through collective use of space, and increases overall quality of life by enhancing chances for social interaction. The paper then provides examples of shared housing drawn from the authors' current research and practice with respect to conjoined housing in New Zealand and Australia, and concludes by suggesting interior design strategies to better accommodate changing household structures and facilitate desirable sharing practices while achieving economies.

INTRODUCTION

Sharing as a concept and practice is inextricably tied to other spatially expressed cultural notions, such as territory and privacy. As a negotiated idea, the meaning and performance of sharing changes through time, not only culturally, but also at individual and social levels. Sharing involves an agreement between two or more persons, where parts or the whole of an artefact are exchanged or commonly used between the parties. It is a type of social contract that is made prior to the act of sharing but may vary during performance. Sharing in housing is the agreement that facilities, services, resources and space can be used commonly. Thus, in addition to its contribution to economy, because it can reduce a household's ecological footprint, and potentially improve householders' wellbeing, sharing can also be seen as a sustainable practice.

This paper has three parts: in the first part we develop a working definition of sharing as it relates to the economies of the interior. Building on this definition, in the second part we discuss the social construction of sharing in New Zealand and Australia, where there is a predominant cultural preference for the spacious single-family house and a general distaste for sharing living space with non-nuclear family members. We question this aversion and suggest that the desire to live in low-density, secluded single-family houses is not a fixed idea but is potentially a malleable cultural practice. We then present some evidence that a cultural shift toward sharing could be made possible through shared-house designs that are demonstrably *more desirable* (not only more efficient) than the traditional single-family bungalow. In the third part, we then focus on sharing in design, and present three cases from our Antipodean research and practice that suggest some rethinking of 'interior design', and demonstrate how the single-family house can be modified to accommodate changing household structures.

SHARING AS AN ECONOMIC CONCEPT

The populating of the landscape by spacious single-family houses in Western societies has been widely criticised as a product of the culture of privatisation and architectural gluttony [1] The finger has been pointed at consumer capitalism, which has commoditised the house and reduced it to being a receptacle for modern conveniences. As Schwarzer writes, '… new homes are bloated and domestic interiors are now galaxies unto themselves'. [2] In a critique on the socio-cultural reasons for unsustainable housing, Chiu aptly notes that the 'culture of maxima' promotes the seeking of bigger homes, and that we 'seldom ask ourselves whether we need all the space in our homes (e.g. the lounge rooms in Western houses), and whether we need the sizes of the rooms as they are'. [3]

Faced with a virtual sea of oversized developer 'spec' housing, Susanka[4] in the US and Brown & North[5] in Canada, who write from dual perspectives as academics and practicing architects, have turned the focus to the interior layout and design, analysing the use of space and the potential for internal rearrangement to optimise use and stop the tide of even more extensive additions to an already oversized housing stock. A converse architectural response has been to simply reduce the size of the house to its absolute minimum, as evidenced by the avalanche of books on small and micro-housing.[6] Both movements seek to achieve more sustainable living and a reduction of total housing space to achieve an economic but liveable home, with a focus on the interior. Sharing is a pragmatic extension to these strategies, but one that can only work when the interior spatial layout has been designed to enable interaction and foster sharing amongst members of a household, reducing individually occupied spaces but maintaining individual privacy.

Privacy is not a biological necessity like warmth, but like other similar cultural constructs such as territory, it is presumed to be innate and fixed. [7] While it is accepted that the need for individual privacy in the house exists universally for ontological reasons,[8] the levels and the means of finding privacy are culturally crafted, and are to a certain degree malleable.[9] The barriers to economic practices such as sharing are related to notions of privacy, spaciousness and nature idealism but also the notion of wealth and ownership. Privacy may be expressed differently in different cultures[10] but the common purpose of privacy is the control of unwanted interpersonal interaction and communication.[11] Privacy is about the freedom to close or open the flow of interaction and relies on the governing of access.

A counterpoint to privacy is sharing, whether personal or familial, and the distinction between these two poles concerns territoriality.[12] Sharing in households requires agreement about the common use of certain artefacts or space, and is (usually) an unspoken contract made between individuals before use of the space or artefact commences. Because the contract of sharing is socially negotiated, it can be interpreted differently by the various parties. In some cases this can cause conflicts or disagreement over what is shared, what is not shared and what is for personal use. To create boundaries between what is public and private, and to categorise certain things as being either one or the other.

The consideration of choice is deeply rooted in the meaning of economy. Appropriately, the word economy once meant 'the management of household' [13] but in more contemporary times, the study of economics has broadened to the study of that uniquely human behaviour that is the exchange of one resource for another.[14] Whether or not the resource is scarce, the essential point is that there must be exchange, the exercise of choice. This is consistent with the focus of economist Adam Smith's original work on the benefits of specialisation which can only be reaped if there is exchange [15] and Ricardo's theories of comparative advantage which show that opportunities for beneficial trade are more widespread than might appear at first glance.[16] For an exchange to take place the deal must be desirable for all parties or the transaction will not voluntarily take place. Following this line of reasoning, sharing can be seen as a strategy for trading and exchanging (economising) in the household. The benefits of shared housing may be more than financial; they might be an increase in utility, an increase in access, an increase in efficiency, or the ability to afford something collectively that is out of reach individually. The research question that arises is whether or not interior design (combined with social arrangement), can create new strategies to deal with interior spaciousness and habitability through innovations other than just creating volume and adding product.

HOUSE SHARING IN THE ANTIPODES

Both New Zealand and Australia suffer from a lack of alternatives to the conventional design layout of the detached single-family house.[17] As with other Western nations, the composition and size of households is rapidly changing due to demographic and economic variances. According to the Australian Housing and Urban Research Institute,[18] couple-only households, lone-parent households and single-person households all increased rapidly in the five years to 2001, a trend that was progressing much more rapidly than in earlier decades. Similarly, a New Zealand research report shows an increase in couple-only and one-person households.[19] Yet despite the contraction in the average size of households, dwelling sizes in both countries have become manifestly larger, averaging from 146 square metres in the 1970s, to the current average size of 194 square metres. Houses with four, five, and six bedrooms are also reportedly growing in popularity in New Zealand and new 'McMansion suburbs' are becoming a dominant feature of the new suburban landscape in Australia.[20] The number and diversity of minority culture households has also increased.[21] These groups include Pacific Island peoples and migrants from East Asian countries. Unfortunately, this diversity and the attendant change in the structure of households is not reflected in available housing options; New Zealand and Australian housing stock is uniform and the single-family dwelling remains the archetype, while the trend for building larger houses continues to grow unabated.

The Antipodean predilection for living in a house that is spacious and conveys a sense of being close to nature means New Zealanders and Australians tend to be averse to higher densities and shared facilities. This cultural preference is a barrier to the nation-wide adoption of economic initiatives such as those advocated by Smart Growth,[22] as essentially it promotes urban sprawl and the building of spacious, private houses in the suburbs connected by arterial highways. When seeking out opportunities for economy, the attention of designers and developers has more often been on architectural scale and form than on a close scrutiny of the interior when building anew. A mis-match of large existing house sizes with shrinking families in the affluent suburbs, and extended immigrant families with smaller, aging state houses in the less affluent suburbs demands a renewed focus on the economy of interior. Changing demographics overlaid with national (and international) imperatives for more sustainable living, and the recent reversal of fortune for many due to the recent global financial meltdown, posit opportunities for changes in cultural practice.

The primary design challenge then, is to address needs for privacy and status. Historically, privacy has proven to be highly marketable, and social status has been attached to the quantity and quality of it. In Antipodean housing, this is manifested in such features as the number of bedrooms offered to buyers; the number of en-suite bathrooms; the capacity of garaging to accommodate personal vehicles, and the overall area of the house.[23] The tight layout and functional determinism of the single-family house reflects how highly valued privacy and control is in the West. In exploring examples of sharing, we therefore need to deconstruct the economics of sharing, focus attention on people's behaviour with respect to privacy, and examine the contribution of the interior to overcoming the hurdles and aiding choices.

THREE EXAMPLES OF SHARING

Following a literature review of shared and compound housing in Australia and New Zealand, we extended our research in New Zealand to address the absence of literature. In this regard we carried out a survey of registered architects seeking examples of shared housing from which we found 20 cases. Grouping the examples from both countries, we found that there were three distinct strategies for economising through sharing. All three models were desirable in that the occupants established an acceptable exchange or form of sharing and all had options. With this in mind, using an auto ethnographic approach, we sought opportunities to design and construct shared houses and interiors to gain firsthand insight into these typologies, which have been developed further as examples. The process was one of research through design, working with real clients through numerous design iterations, then reflecting on both the literature and our own experiences.

The first strategy involved an entire household sharing one house. At first glance, this appears no different to the traditional nuclear family home, but on closer inspection there are important distinctions revolving around the definition of family. In this example 'family' includes a wide range of kin, to include multiple generations, cousins and remotely-related *whanau*[24] who might stay for indeterminate periods of time. The second strategy of shared housing involves an expansion of the meaning of housing to include the accommodation of business activities, guest accommodation, revenue-generating activities and other flexible uses. This second strategy involves the expanded use of a shared working agricultural home. The third strategy involves the sharing of space and furnishings individually, by separate households, in almost a time-share relationship. In this example, space is used only by one family at any one time. The examples further illustrate sharing strategies in a continuum from the most economically disadvantaged to the wealthiest, as well as the complexities of sharing arrangements.

EXAMPLE 1: EXTENDED PACIFIC ISLAND FAMILY HOUSE IN NEW ZEALAND

Our first example, a new state-owned house (Figure 1) designed to suit extended Pacific Island family living, is one in which the form of interior layout is modified from traditional Pacific housing forms. While shared housing for multiple generations is commonplace in the Pacific Islands, it is not so common in the housing provided by the state in New Zealand. Housing affordability and cultural suitability are major concerns for migrant Pacific Island households in New Zealand. In this example, the occupants do not own the house. Economically, the house had to be constructed within the very restricted capital and maintenance cost limits of its state-owner, Housing New Zealand Corporation.

The house consists of three main habitable parts. A simple two-storey block contains washing facilities and habitable spaces with different levels of privacy control that can variously be used for sleeping and living functions. This block is connected to a very open single-storey pavilion with verandas on two sides, and is an adaptation of the cook-house (traditionally separate from the main house, but here connected with outside and inside spaces for greeting visitors, entering the house, and eating together). The third part of the house is a long room with outside access only, officially a garage, but in practice a 'swing' space that can help accommodate less routine or special events including community meetings, sleeping quarters, catering, workshop and craft space, wet weather play area, and storage. The overarching design idea for the interior is that the use of space is open for interpretation, becoming a construct of its occupants in both a physical and metaphysical sense. For example, the ambiguous-use space adjacent to the kitchen can serve as a dining area; it can be a place for gathering and meeting near the entry; it can be a serving area supporting the kitchen, or it can be a service area linking the kitchen to the outside sink, cooking and eating area (X in Figure 1 and Figure 2). Similarly, the larger communal areas (such as Y in Figure 1) can be used for lounging, entertainment and socialising, or for sleeping and resting. Strategically speaking, functional ambiguity together with a 'loose fit' approach is key to economising on the total space required, in this case 20m² per person).

Requirements for privacy and sharing among three generations of Pacific Islanders are complex and unfamiliar to European eyes. For example, grandparents are often closely involved with the development of the grandchildren, particularly in teaching language, and the ways and traditions of their culture. The close bonds formed between young and old means that female children will talk, work, play and sleep with their grandmother in either a 'bedroom' or a 'lounge'. The space that would, in a Western house, normally be exclusively used as a lounge, may be set up for teaching/learning traditional crafts such as weaving. Parents will typically exercise strict surveillance of the children, particularly the girls. This influences the positioning of children's sleeping areas and views of access and egress to these areas. In Pacific cultures the extended family can include remotely-related kin who may visit for extended periods. In these circumstances,

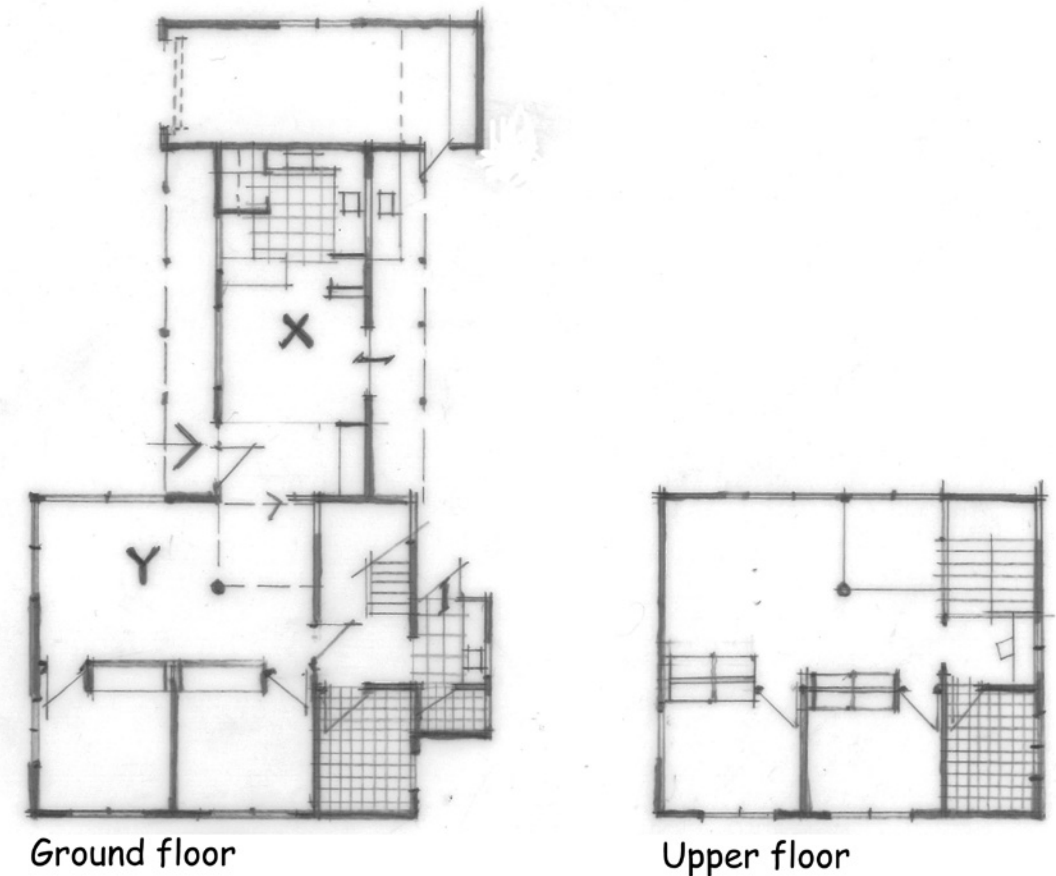

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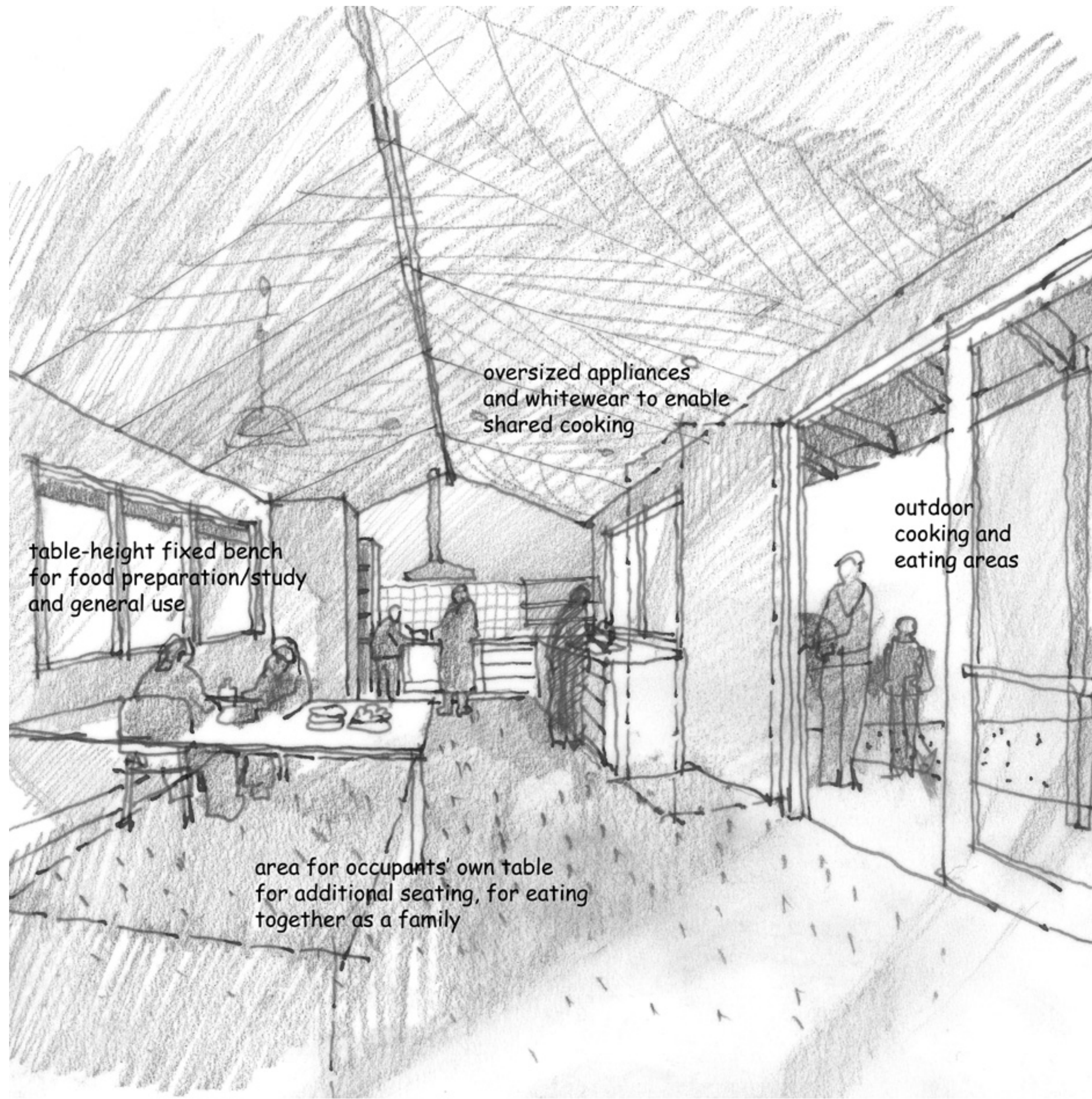
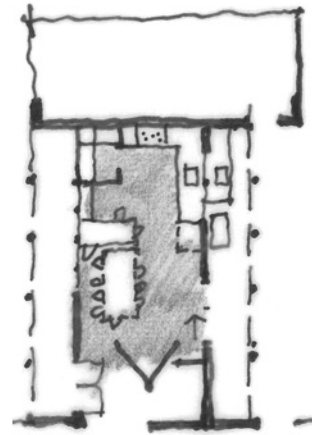
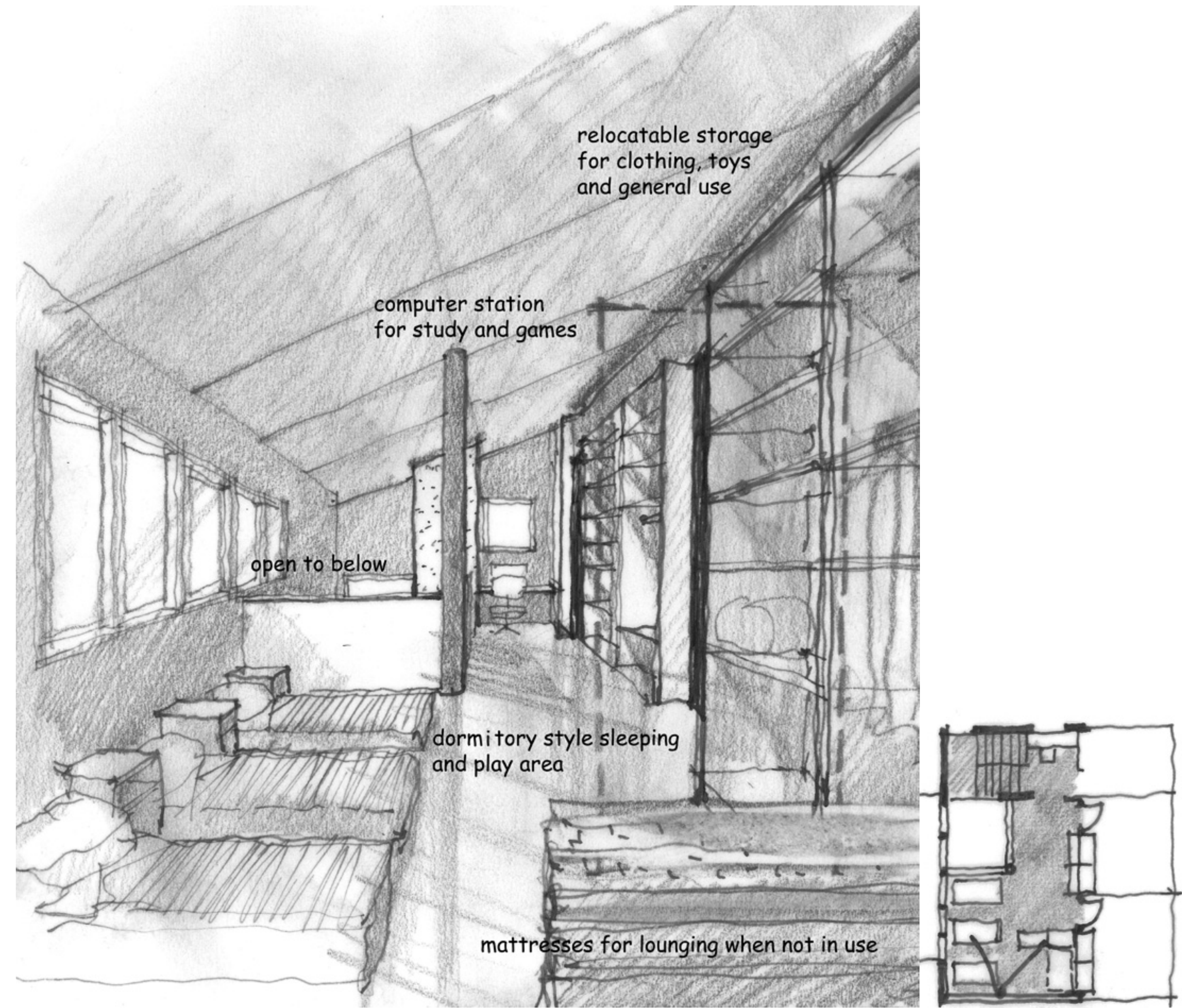
Figure 1: Plan of Pacific Island extended family house in New Zealand [25]







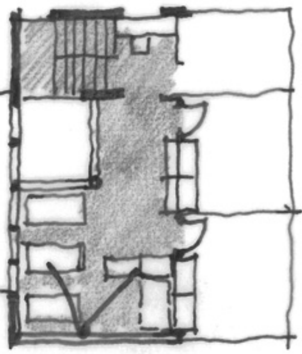


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Figure 2: Sketch of kitchen and dining area

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Figure 3: Sketch of upstairs dormitory, study and play area

the household will adapt by rearranging who sleeps where, including bringing into play the spaces normally given over to 'lounge' functions and 'garage'. On occasion it is also culturally expected that the household (and house) will host a larger gathering of friends and relatives from the local community or church. Again the house and furniture will be reordered to better accommodate these rituals. In all these exchanges, privacy requirements and territorial annexation are not so much negotiated as guided by tradition.

Various strategies were employed in the design of shared spaces. One of these was to carefully consider the size and dimensions of rooms for the household core elements, such as kitchen, bedroom and living areas, to allow for multiple layouts of various types and sizes of furniture. The larger sizes of some components (such as the stovetop and oven), were selected to facilitate shared cooking for the larger number of family members, while other areas such as the entranceway could be reduced as other spaces could assume those functions. The intent behind these strategies was to enable the householders to reconfigure spaces to better match changes in their living patterns. Related design strategies were to minimise the use of fixed furnishings and equipment that would define and 'fix' the use of space, and provide re-locatable bookcases and wardrobes that could be used by the occupants to adjust room boundaries. With increased intensity of use, the demands of health, and the landlord's need to minimise maintenance expenditure, comes the need for increased durability of finishes: concrete for flooring (not carpet), stainless steel for countertops (not laminates), plywood for cabinetry (rather than mdf). Socio-cultural demands for privacy regulation and supervision, particularly with respect to sleeping arrangements, were achieved though the positioning of external doors, stairs and primary circulation space, and the provision of a void between lower and upper floors that deliberately allows reduced aural and visual privacy.

The economies of space achieved through this form of shared living demonstrate the notion of exchange and the importance of desirability. Under Antipodean norms, the household would be accommodated in two or three separate houses, one for each family unit with corresponding doubling or trebling of facilities. By sharing one house, the Pacific Island family achieves a larger and more functional interior than they would otherwise. Potentially high cost items such as energy and rent are similarly spread over more income earners. The larger home makes it easier to sustain cultural practices, easier to manage the household through increased surveillance, and aids self-esteem through the ease of accommodating other family members in need. For the State landlord, sharing permits a reduction in the total number of households requiring housing, it reduces the gross area of house per person, it reduces overcrowding through an increase in sleeping and living areas, and it generally results in improved health.[26] In short, what we can conclude about extended family living among Pacific communities is that, in principle, the entire house is potentially shared by the entire household.

EXAMPLE 2: CONJOINED RURAL HOUSE NEAR MELBOURNE, AUSTRALIA

Conjoined housing is a Western version of the vernacular compound house: when two or more households come together to share common facilities.[27] As well as being purpose-built, a conjoined house can be formed by the interior modification of a single-family house. The second example is a farmhouse that has grown and changed to accommodate changing households and work or home relationships over an extended period (Figure 4). The original house (Household A) of three bedrooms was designed and built by the current owners in the 1970s. To assist with the operation of the farm, a second family (Household B) sought to move in, in order to lend a hand and to aid their ageing parents. The two families were kin, established home owners, and partners at work in an agricultural setting.

The familial relationships in this example are much more Euro-centric in cultural orientation when compared with those in the previous example. The original family has a wing of the house and the son and his family share the other wing of the house. Each wing is conventionally self-contained. The shared spaces in the conjoined rural house (Figure 4) are centred in the middle between the two privately occupied areas. While from the outside, the house appears to be a single family home, on closer examination, there are three separate entrances to the house, one for each of the two families and one for the shared intermediary area. Spaces in the two wings are easily labelled as the functions are less flexible and are clearly defined to separate rooms. The shared areas, in contrast, tend to be less functionally limited and more robust (Figure 4 and Figure 5). Even though the various spaces are conventionally separated from each other through the use of doors and corridors.

Thus, the intermediary space can be used in various ways. It can accommodate farm office activities and provide social spaces for employees during harvests or busy agricultural periods. It can also function as a generous guest house or a granny flat, and it can even accommodate requirements for formal social events and parties. The use of the conjoined space in this house is negotiated between the two families. For farmhand and agricultural office use, the men negotiate with their partners for occupation. For visitors and special occasions, the two families negotiate with each other. Strategies for use, made possible through the extensive use of storage spaces, allowed for a variety of 'stage settings', from the most elegant and formal to the functional and

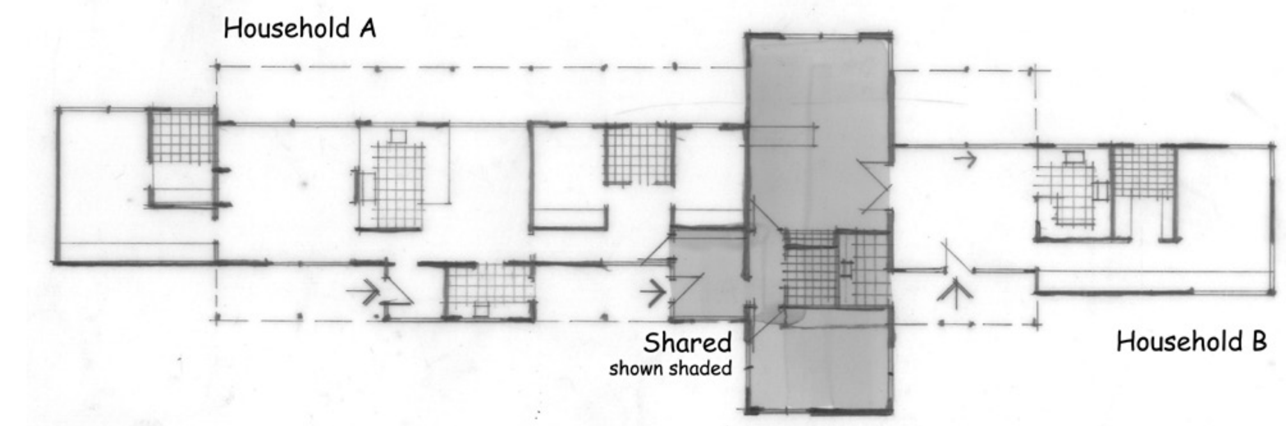

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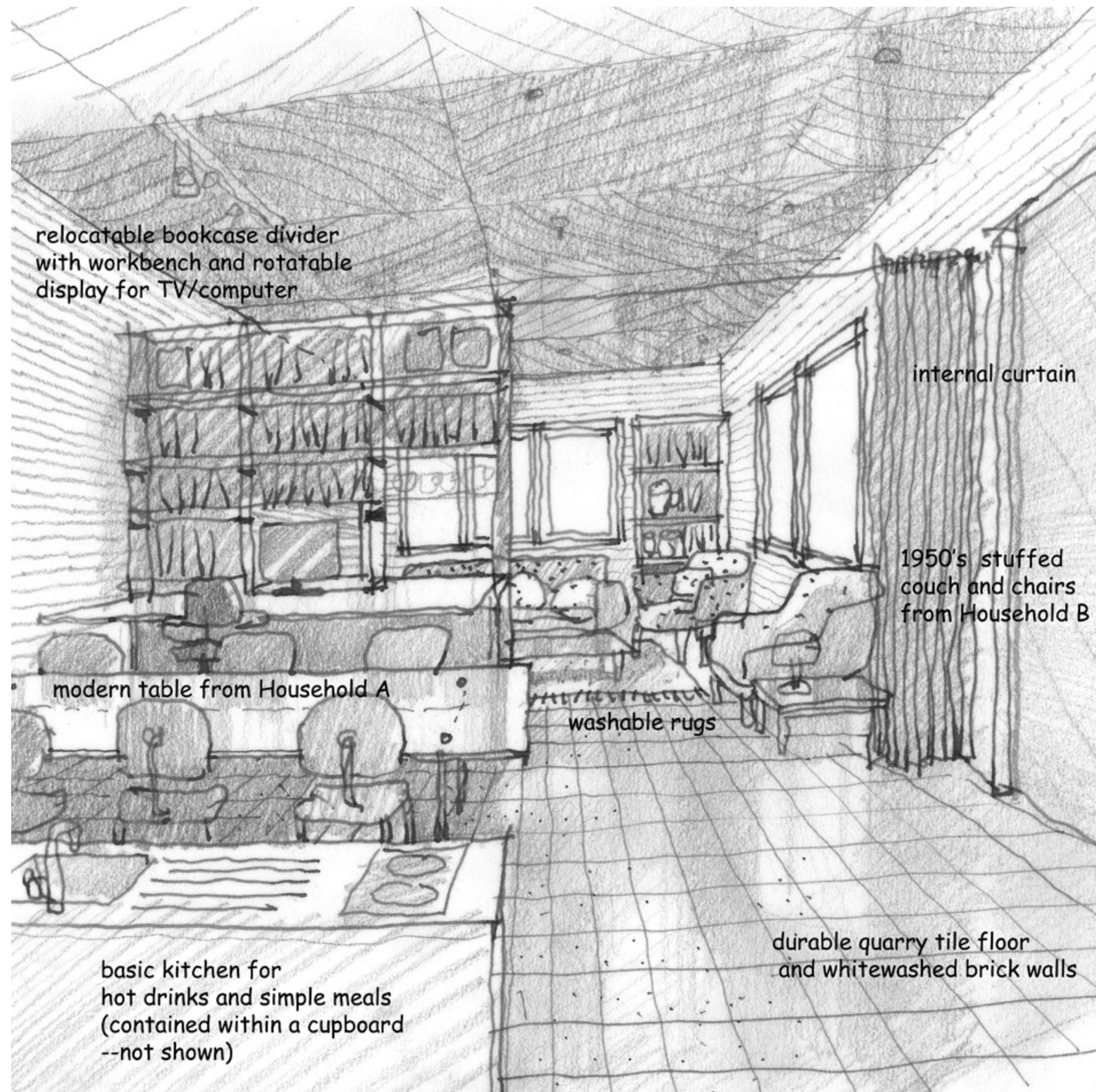
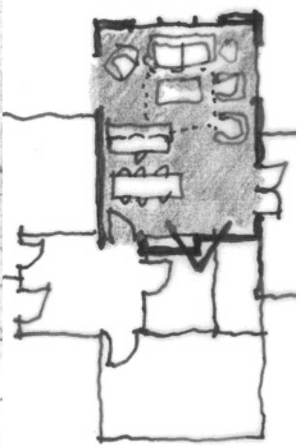
Figure 4: Plan of a rural conjoined house in Victoria, Australia





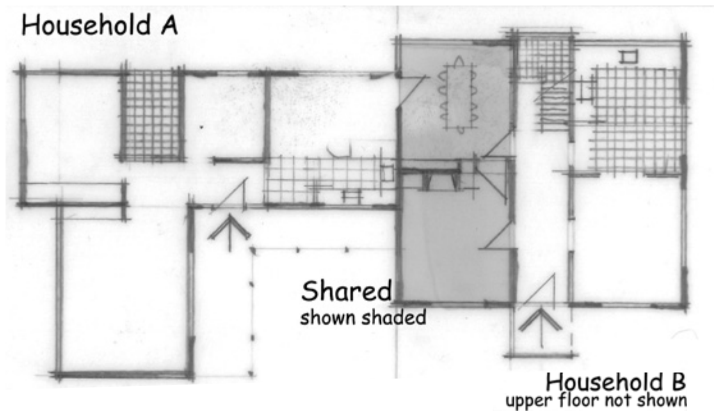
everyday. Rather than being a stand-alone building, the shared space is regularly used much like an individual extension to either house.

The interior design strategies for this type of sharing include the creation of three self-contained units to varying degrees of finish and service. The shared space is treated much like a second home and is significantly more basic in both finishes and furnishings than the other two homes. Each unit has its own entranceway and can operate independently of the others. Spaces are sized to accommodate left-over furnishing as well as custom elements. Finishing materials such as the floor are particularly robust and easy to maintain as uses are varied and the area has to accommodate both domestic use and use by working farm hands.

The design of this house is interesting in that it provides the luxury of additional spaces that may only be required temporarily but are well within the economic means of middle-income earners. It addresses its specific context but also provides flexibility for other uses, in that it permits ease of access to aged parents as well as enhanced utility for long-staying guests. But where this example is unique is that it is designed to also accommodate 'third party' farm workers who are not really household guests and are not members of the family. Attention to the interior permits economies and efficiencies through the flexible use of traditional spaces.

EXAMPLE 3: CONJOINED URBAN HOUSE IN WELLINGTON, NEW ZEALAND

A conjoined house can also be formed from two or more detached dwellings that have been joined together. In this third example, two married sisters jointly purchased an inner city property in an affluent neighbourhood in order to house their respective families. Each family had young children, (one child in one household and three in the other) ranging in age from newborn to eight years old at the time of design. The extended house (Figure 6) had been purchased by the two families jointly through a family trust in which they held shares. While wanting the 'nice to have' spaces commonplace in the homes of their peers, they were conscious of both cost and the social imperative for living more sustainably.



The property had originally comprised a large two storey Victorian villa (Household B) to which a subsequent owner had attached a single storey 'cottage' extension (Household A). As an economical means of adding additional accommodation, it had already been configured as two linked (via a party wall) but self-contained dwellings, each with widely different levels of grandeur and spaciousness. To create a more equitable balance of utility and desirability, the families requested that a shared area be created between the two privately occupied areas and that each have restricted access to the other's house. The use of the conjoined space was to be individually time shared, meaning that except during special occasions when both houses would be opened to each other, the families would not occupy the conjoined area together.

Figure 6 shows how the original 2-storey villa is joined to a single storey cottage by a party wall. To facilitate sharing, the adjoining wall in the cottage was redesigned to be opened with a sliding, acoustically treated door and wall system allowing access to the shared portion of the villa. Through manipulation of entranceways, each household can privately occupy one of the two shared rooms for everyday usage. For individual formal entertaining, each family negotiates the exclusive use of the formal spaces. On special family occasions such as Christmas or other celebrations, both houses can be opened up to each other. In this manner both households are able to achieve an equitable use of the total dwelling without the additional construction of new but periodically used spaces.

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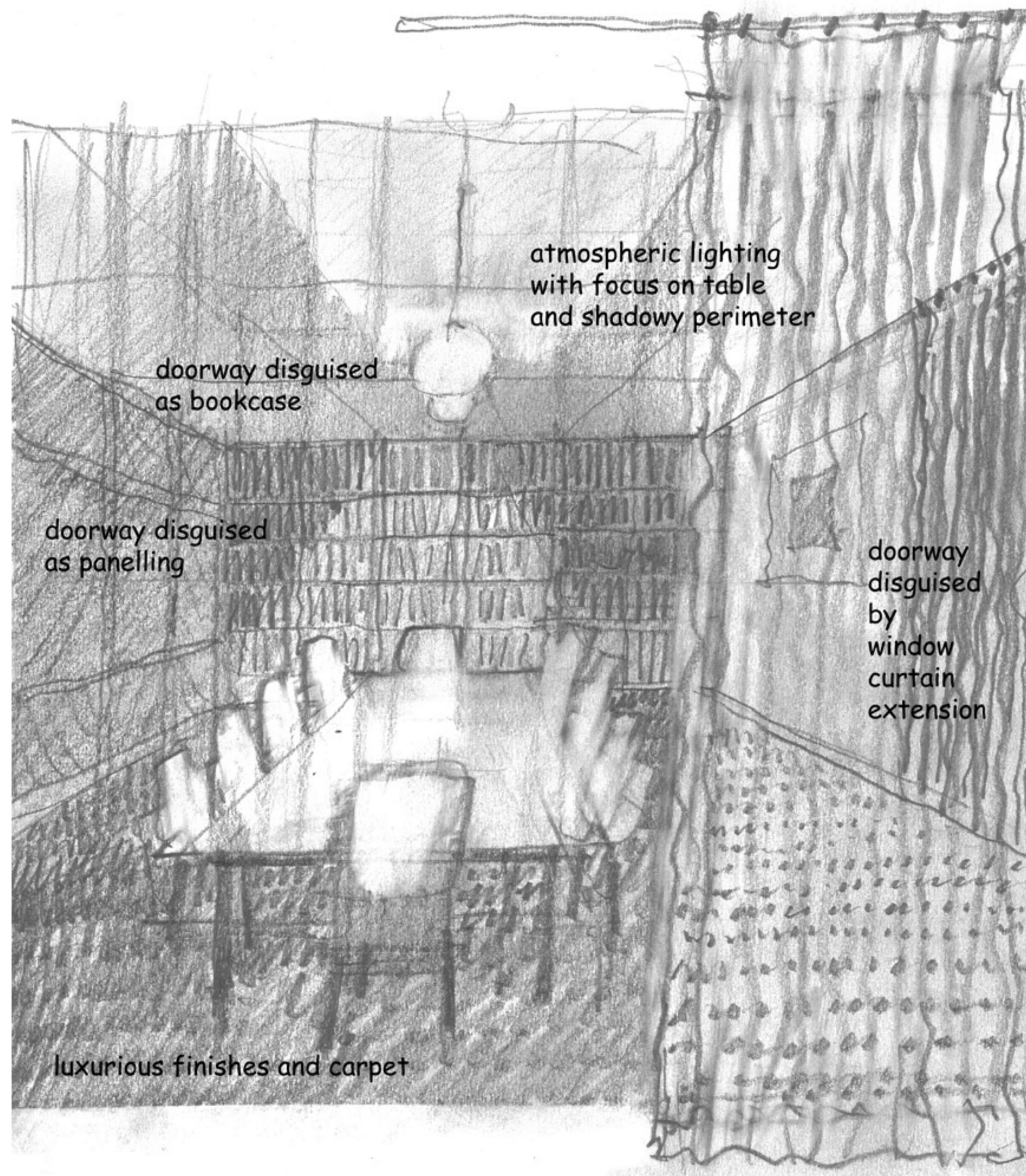
Figure 5: Sketch of shared living and work space

Above
Figure 6: Plan of conjoined house in New Zealand



The interior design strategies used in this case related largely to the mechanisms for controlling space usage to provide for the appearance of exclusivity: shared space had to look and feel as though it belonged to the person or household currently using it. To make a seamless relationship to adjacent spaces and functions on each side, the functions and design of contiguous spaces had to be modified. To create the appearance that the shared space 'belongs' to the household that is currently using it, two interior design devices were used (see Figure 7). First, attention was paid to removing or avoiding perceptual clues and cues to the existence of the other household. For example, one door was disguised by using the classic device of a secret compartment in a bookcase, while the other doors were panelled in the same materials as the wall. These treatments achieved the benefit of improved acoustic separation on a daily basis. Second, the fit-out of shared rooms was designed to enable personalisation by the current user, analogous to staging. For example, a generous and rather luxurious sideboard had the capacity to store different 'props' for dressing the dining table.

The main economy of this example is the reduction in luxury spaces that are only occasionally used, but are deemed a social requirement for many professional families. In practice, these 'swing' spaces were made more flexible through the attention to furnishings. No spaces were ever unused while awaiting 'special' occupation. For example, the formal dining room could be used a study or working area by household A and the formal living space used on a regular basis by household B as an adult retreat from a crowded and noisy family room. In this way each family had an additional room for daily living, but could temporarily expand their private territory, through negotiation, to utilise one or both conjoined spaces for more formal entertaining.

CONCLUSION

Economy or economising arguably has multiple layers of meaning: to live efficiently, to minimise waste, to be frugal, or to exercise choices in exchange. But these meanings do not necessarily extend to the loss of utility, access or desirability. It is not about scrimping and doing without, rather it is about balancing health, wellbeing and life in a manner which, we maintain, can be sustained. As a strategy for economising, sharing has much to offer through the collective opportunity to access space and functionality that would otherwise be out of reach individually. The challenge is to ensure that design is good enough to satisfactorily address demands for privacy, access and the freedom to express individuality.

Reflecting on the three designs reveals similarities and differences in household sharing behaviours, as well as related similarities and differences in design strategies designed to enable sharing. In each of the houses, the interior was contextually developed with a mixture of physical and behavioural design strategies. The first strategy was to share all of the core functions of the entire house. All members of the household shared all aspects of the home and every space was open to negotiation, the nature of which was culturally specified. The second strategy was to share through a broadening of the scope of what is typically thought of as a traditional domestic house through, for example, a blurring of the home and work relationship. In the third case, each household remained entirely independent, each retaining all core functions. The economic strategy involved the sharing of 'luxury' space only; areas that were enhancements, only used occasionally for the exclusive use of either household, analogous to a time share. In all cases, the practice of sharing was uniquely resolved by the specific occupants, but each case illustrates a menu of generic design strategies for the type of sharing taking place. In every case, the floor area per person was decreased from that which would have been required by separate occupancy, without the loss of utility or functionality and without extensive additional construction.

What we have learned from this study is that to successfully meet objectives of economy we must pay close attention to the efficiency and intensification of the use of interior space. The obvious economy is to simply reduce space in total, but the risk is that people do not have enough personal space and suffer loss of privacy and utility. If we are to reduce the amount of space per person, we must pay close attention to the interior dimensions of interior spaces, to the position and size of openings and, to access and circulation routes to and within the interior. Crucial to this

Opposite Bottom

Figure 7: Sketch of shared dining room and library

is the checking of the range of possible uses of space through different furnishing arrangements, consistent with different users and different activities. Sharing offers the opportunity to solve the problem of insufficient space. Without these micro levels of attention within the macro overall plan, the scheme will not be malleable, will not meet cultural objectives, and ultimately will not be sustainable. Design strategies that work best for shared domestic accommodation are dependent on the type of sharing relationship. These include increasing the size of the core elements while economising through a reduced total area per person; enhancing the functional ambiguity of a space to allow for improved utility of a space, and improving the ability of the occupants to manipulate interior arrangements through the use of furnishings and fittings. Privacy needs require close attention through careful use of acoustic treatments, surveillance opportunities and access and egress.

The main point we wish to make in this paper is that sharing should be seen as a viable economic and sustainable method for mainstream housing.[28] Single-family houses can be renovated (or purpose-built) and modified to accommodate flexible living and sharing practices. The barriers to this, which we have identified as primarily cultural, are not impregnable or impervious to change. What is needed is, first, the recognition of the potential of sharing, and then the inclusion of it in the sustainable interior debate. Taking this as a starting point, regulations that would inhibit the realisation of mainstream shared houses need to be challenged, and explorations of better utilisation of oversized and under-occupied homes should be encouraged. Sharing as a concept and practice does not equate to poverty or mean living in 1960s-like communes with very little private space or control. Rather, sharing is about acknowledging that humans are complex social beings and require culturally calibrated optimisation of both private and public interior spaces within their immediate domestic environment.

NOTES

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