

Exploring the invisible heart of home

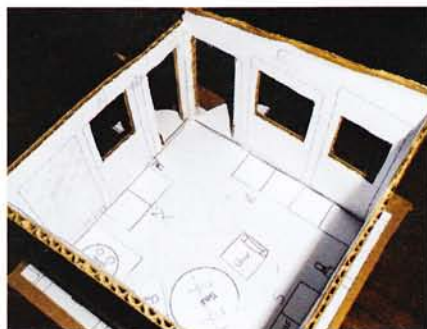
The human ability to create shelter emerges from our survival instincts. The activities associated with this sheltermaking puts us in touch with nature and exposes us in an active way to its processes, cycles, likes, dislikes, preferences and possibilities, thereby nurturing our sense of aliveness.

Industry overlook sheltermaking

The practice of sheltermaking, or as it is commonly called, *vernacular architecture*, largely died out with the advent of industrialisation. The industrial-era home was a utilitarian box within which people could partake of food, rest and procreation. Such 'homes' provided none of the natural connectivity that the traditional shelter offered.

In the industry-based world, instead of spending time producing one's own food and building one's own home, people used the proceeds from paid employment to provide for their needs on the open market. While domestic-scale food production did not entirely cease as a result of this new way of life, the practice of building one's own home largely did.

Because vernacular architecture traditions were oral and perpetuated by practical example, when such activity ceased vital sheltermaking knowledge was forgotten.



BY PETER COWMAN

Acquiring a home in the new industrial era also began to engage people in debt, locking them into a cycle of work and credit obligations in order to survive.

Be your own architect

Back in 1989, the piecing together of this sheltermaking story greatly assisted my understanding of what I was attempting to deliver in the *Be Your Own Architect* courses, which I was devising in response to a demand from people for information on how they could design and construct their own affordable homes.

I quickly discovered that my university education had neglected to teach me the rudiments of house design and I was completely stumped when it came to articulating even a basic approach to the subject! Research also revealed that while there were many books that detailed aspects of house design, instruction on how to utilise this wealth of information to create meaningful, practical and affordable buildings was non-existent.

Scale models allow us to 'see' the invisible space that is impossible to see in drawings, clarifying one's design ideas.



Neither could I find a dedicated school of house design or a body of experts dedicated to the subject. So, I set out to write a book on the subject, based on the experience of teaching my eager students.

It soon became clear that sheltermaking had never been part of the formal *architectural* tradition in which I had been trained but belonged to the earlier *vernacular* tradition. Because of the oral nature of that tradition, information on how to engage with it was nowhere to be found. The knowledge had simply died out when people had ceased to practice it.

Inner space

The fact that people are made up of inner and outer parts is clearly reflected in the sheltermaking process insofar as buildings too are made up of two essential parts – the building fabric and the inside space enclosed by this. It is this similarity between buildings and people that makes sheltermaking such a powerful tool in our quest to survive and to achieve a sustainable way of life.

The process of creating buildings involves the construction of walls, floors and roofs, which act to separate space into 'outside space' and 'inside space.' The bounding of a portion of space in the building construction process has the effect of reducing the world to a human



scale. As a result, the space enclosed within a building enables people to engage with the natural world without being overwhelmed in the process.

This invisible aspect of sheltermaking is often overlooked – largely because space is impossible to see. As a result undue emphasis is normally placed on the parts of buildings that are readily visible – the building body or fabric. This way of looking at buildings is so common that people believe that this is all that buildings consist of.

A clear link can be detected here between exploring one's 'inner world' and creating one's 'dream home.' At the heart of this idea is the notion of a space where one can truly be oneself. This allows us to think of sheltermaking as a nutrient for our self-development – a place into which we can literally plant ourselves so that we might grow into selfhood.

Space-time

As my original courses progressed and I laboured alongside my students to devise a viable design methodology, it was how to incorporate the vital yet invisible qualities of emotion, space and dream into the design process that offered the greatest challenge.

It was here that modern design practice differed from the vernacular traditions where such abstract qualities were instinctively incorporated into traditional shelters. It was such qualities that gave a particular 'feel' to traditional owner built shelters, a quality that was oftentimes discernable centuries after a building had been constructed.

So, the focus of my investigation turned to the task of making such abstract qualities visible to provide a solid foundation on which a design might be constructed. This involved a study of space itself, which led to some interesting discoveries.



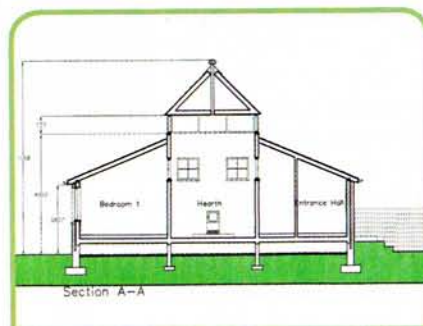
Space is invisible and consists of three dimensions – length, breadth and height. Normally we orient ourselves to the sun, which allows us to confer directions on space – up/down (height); front/back (breadth); left/right (length). This creates an awareness of a fourth dimension – time. Space is always accompanied by time and is referred to as 'space-time.' Because buildings are all about space they are also about time and therefore about space-time.

By including both visible and invisible elements in the house design and construction process, our innate sheltermaking faculties are activated. This stimulates both our rational as well as our intuitive abilities, allowing for the balancing of the head with the heart. This gives life to our dreams, fostering the opportunity to live harmoniously within the natural world, a goal encapsulated in the desire to live sustainably.

Designing from the inside out

Interestingly, when I began the process of integrating invisible elements into the design process, it was space and time that provided the 'platform' for this to proceed. With literally nothing to 'see,' one had to rely on feeling alone to guide one! The process consisted of articulating how one wanted to spend one's time and by describing the space or spaces one needed to host what one intended to do with this time! Apart from the obvious practical aspects of living – cooking, washing up, personal hygiene, food production, relaxation, sleeping, etc. – this process encouraged articulation of what might be best described as 'the dream of one's life.'

Frames, walls, roofs and the spaces they enclose are just a part of the bigger picture. The most important part of any home is the people who will live in it.



Next followed the process of ascribing sizes to these embryonic spaces and the calculation of the likely cost of constructing them. This rendezvous with reality, at such an early stage in the design process, allowed for design aspirations to be matched to finances, facilitating a decision as to whether one wished to 'sell their time' in order to shoulder a mortgage or wished to remain outside the conventional financing by owner building and making a small but versatile and adaptable building.

The topic of environment was then examined, allowing for the articulation of basic principles such as, 'I wish my house to be owner buildable, solar passive, natural, healthy, non-polluting, using low-energy materials from local sources.' Such principles allowed for the orientation of individual spaces to be set and provided a basis for the selection of building materials and an appropriate construction system to assemble these. It also influenced the nature of the plumbing, drainage and electrical services to be installed.

Finally, an examination of the relevant building and planning regulations allowed for these parameters to be entered into the design equation. Only then was the plan of the building assembled using these various 'pieces' of



the design puzzle. This planning exercise was carried out either in the abstract, thereby creating an 'ideal' layout allowing for an appropriate site to be sought, or relevant site information was added to the design mix where a particular site had already been chosen.

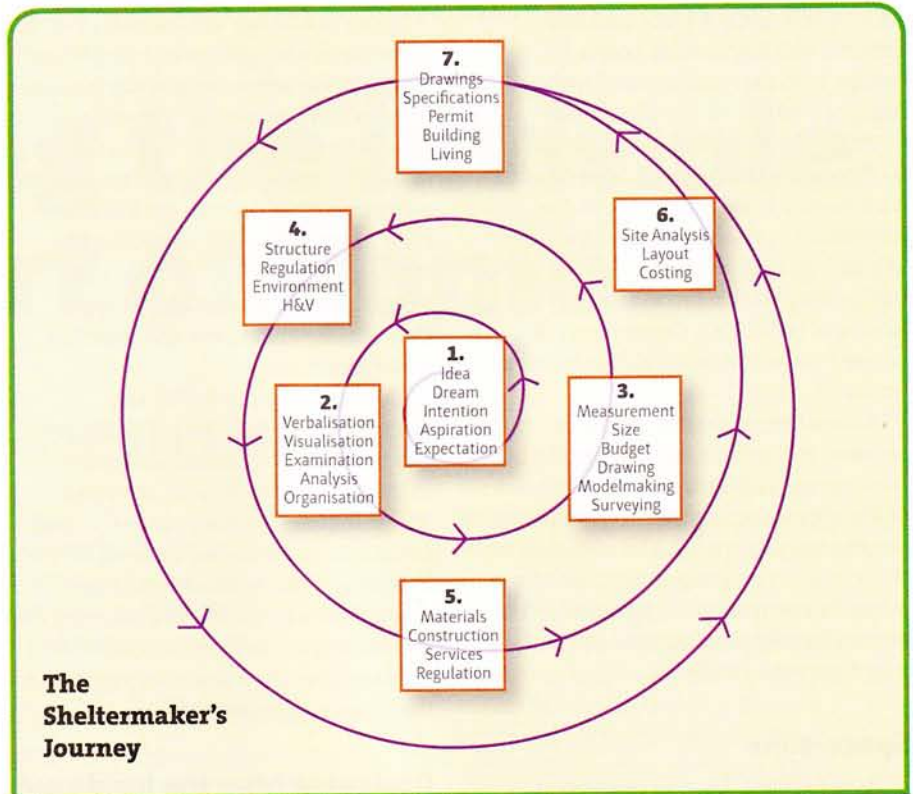
An enclosing fabric for the plan was then designed, much like a boundary or wrapping, with appropriate openings to allow people, furniture, light, air, etc. to get in and out of the building. A style for this fabric was then chosen to suit surroundings and circumstances, much as one might choose clothing to suit the circumstances one finds oneself in. A scale model was then made of the design, allowing it to be viewed in three dimensions. This allowed for proportions to be adjusted, for the external appearance to be refined and for the overall 'package of spaces' to be simplified and made easy to construct.

Complexity confined to design phase

The identification of the two distinct yet interconnected aspects of sheltermaking – interior space and building fabric – in practice allows for the complexity normally associated with home design and construction to be largely confined to the design phase. This is because such complexity is a reflection of the 'life issues' involved in creating a home. If these are clarified and resolved before construction begins, this latter stage of a project can run smoothly.

The effects of this approach to the sheltermaking exercise is to create designs that have a life of their own, rendering the construction and subsequent living phases simple, straightforward and relevant to the unfolding lives of the building's occupants. These invisible qualities became apparent as soon as the first owner built houses were inhabited and were reminiscent of the wonderful feeling experienced in traditional vernacular shelters.

My Be Your Own Architect Handbook, which documented this 'living' architecture process, first appeared in Ireland in 1992. This acted as the textbook for the many courses I delivered on the subject over the past 21 years in various parts of the world. However, it was only when I came



to Australia in 2007 and encountered the notion of a Dreamtime and introduced this into the design mix that I was satisfied that 'the sheltermaking story' could be said to be complete. A revised and updated edition has been published – now entitled *The Sheltermaker's Manual*, which incorporates all of the experiences and insights gleaned from real-life sheltermaking activity carried out over the past couple of decades.

The future

Where the home is critical to people's physical and emotional wellbeing, the move towards a sustainable life must be facilitated by buildings that nurture all aspects of human life.

Fresh, imaginative and cost-effective sheltermaking solutions will be required to achieve this. Clearly these must be created and financed on a scale, and in a manner, which allows a degree of independence from the global economy.

It is worth noting that it is possible to develop a design to a very advanced stage with almost no expenditure other than a person's own time. These benefit of such sheltermaking experiences can be enjoyed on the kitchen table and by building models or by constructing a small sustainable shelter in one's backyard.

A widening of discussions relating to house design and construction is urgently needed that includes the all important invisible aspects of the process. This will facilitate the articulation of demands for changes in the planning, financing and construction of sustainable shelter. Australia is uniquely placed in respect of such initiatives in that it is a pioneering culture, supports a strong community ethos, has relatively flexible building regulations and property laws, has many active groups and associations dedicated to eco-building and, most importantly perhaps, enjoys the invaluable service rendered by *The Owner Builder* magazine. These are unique and invaluable strengths as we labour together to build a truly sustainable and fulfilling future for all. ♦

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Editor's note: The Sheltermaker's Manual is reviewed in this issue, see Reviews.