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Contact: alannapmoore@gmail.com

The Sheltermaker's Manual (in 2 Volumes)*

by Peter Cowman

architect, eco-builder, writer, international teacher and director of the Living Architecture Centre

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Introduction to The Sheltermaker's Manual

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Our ability to create shelter emerges from our survival instincts and acts as a stimulus for the development of culture and identity. The activities associated with sheltermaking puts people in touch with nature and expose them in an active way to its processes, cycles, likes, dislikes, preferences and possibilities which nurtures peoples' sense of aliveness.

The practice of vernacular architecture largely died out with the advent of industrialisation. In this new world drudgery and uncertainty were to be replaced by surety. Instead of spending time producing ones own food and building ones own home, people used the proceeds from paid employment to provide for their needs on the open market. Fossil-fuels and technology replaced what heretofore people had provided for themselves either by their own energies or assisted by natural or animal power.

The industrial-era home was a utilitarian box within which people could partake of food, rest and procreation. Forged out of obeisance to the new gods of power and money, these 'homes' provided none of the natural connectivity which the traditional shelter offered

Those consigned to live in the new industry-based, job-focussed world would also witness the disintegration of 'the family' as a survival unit. Superceded by fossil fuels, a families' labour no longer needed to be co-ordinated and directly focussed on survival activities liberating people from the obligations and responsibilities inherent within the traditional survival structure of family+community.

While domestic-scale food production did not entirely cease as a result of this new way of life, the practice of building ones own home did. Because vernacular architecture traditions were oral and perpetuated by practical example when this activity ceased vital sheltermaking knowledge was forgotten. In this new world sheltermaking activity became the responsibility of a building 'industry' controlled by self-interested third parties motivated by profit. In this way the home was commodified and turned into yet another product of the machine age.



Apart from the disturbance to the continuity of the vernacular house design tradition another pernicious influence imposed itself on the housing market - debt. Acquiring a home now involved engagement with lending institutions locking people into a cycle of work and credit obligations in order to survive. As a consequence, culture and identity, which spontaneously emerge from the traditional food and sheltermaking cycles of activity, were replaced by idealisations exclusively available through the new matrix of survival activity - the market economy.

It is certain that the traditional family+community lifestyle was readily abandoned in exchange for the promises of the machine age. However, as has been amply demonstrated in the past two hundred years, the disconnection from the natural world which results can have the effect of starving people of the stimulus which a life lived closer to nature delivers. While it is perhaps understandable, even necessary, that the world changed in this way, no one realised that the conflagration of the past would consume a sense of who we were before we had quite figured out who we had become.

Back in 1989, the piecing together of this sheltermaking story greatly assisted my understanding of what I was embarking upon in my 'Be Your Own Architect' Course. I was attempting to revive a dormant tradition! Because of the oral nature of that tradition information on how to actually practice this sheltermaking activity was nowhere to be found! In a world awash with information on various types of building, knowledge of the sheltermaking process itself was completely absent. While there were many books which detailed aspects of house design, instruction on how to utilise this wealth of information to create meaningful, practical and affordable buildings was non-existent. Neither could I find a dedicated school of house design or a body of experts conversant with the house design process. So, I set out to write a book on the subject, based on the experience of teaching my eager students. This manual, and its associated material, is the result.

The creation of architecture is inexorably tied to the shift from a hunter-gatherer to a settled agriculture-based lifestyle with its demands for territory and security. The impulse to build arises directly from our survival instincts, driven by the desire to maintain our aliveness and perpetuate our genes. This requires air; water; light; food; social interaction and the security of a place to rest and reproduce - the home.

Essentially all human beings have the same basic needs which must be fulfilled in order to survive. Those who accumulate surpluses beyond their immediate needs increase the chances of maintaining their aliveness, thereby enhancing their status and their desirability as potential mates. This fosters competitiveness, inter-male aggression, territoriality, hierarchy and leads to the creation of large homes strategically placed to signal the high status of their occupants.

Apart from satisfying their physical needs humans also have a need for emotional nourishment. This feeding of the 'inner self' allows people to engage with the invisible aspects of their aliveness - with their imaginations and with their dreams which is essential to the development of a sense of identity and purpose in life.

The inside and outside of buildings consist of the same thing - space. The process of creating the walls, floors and roof of a building act to separate this space into distinct parts, for example 'outside space' is separated from 'inside space'. Space is not actually created in this process but is simply hived off from the pre-existing and infinite space of the Universe - space that existed before the building was made and space which will continue to exist after the building has disappeared. This mysterious aspect of architecture is often overlooked – largely because space is invisible and is therefore 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 what architecture is.



The bounding of a portion of infinite space in the construction process has the effect of scaling down the Universe to manageable proportions, that is, it reduces the vastness of infinity to a human scale. As a result, the space enclosed within a building enables people to engage with a portion of the Universe without being overwhelmed in the process. This allows the architecture to be experienced as the world in microcosm, a concept that is evident in all indigenous sheltermaking traditions.

The fact that architecture is made up of two essential parts - the building fabric and the inside space - makes buildings very much like people. People have physical bodies and an invisible interior world made up of their emotions, imaginations, dreams, their instincts, their unconscious, their ego, personality and sense of self. This interior world, or inner space, is invisible and just like its architectural counterpart it allows people to engage with a portion of infinite space without being overwhelmed in the process. It is the similarity between buildings and people that makes architecture such a powerful tool in our quest to survive.

Space is invisible and consists of 3 dimensions - length, breath 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). Orientation to the sun creates an awareness of a 4th dimension - time. We perceive time by virtue of the fact that the sun 'comes and goes' at predictable intervals as the earth rotates on its axis. This daily 'rhythm' allows for the calibration of cycles of change - days; months; seasons; years; decades; centuries; millenia; etc. In essence, time is a measure of the changes that naturally occur within space.

In effect, space and time are inseparable. Together they are referred to as 'space-time' which is another name for the Universe. This consists of energy and matter which are one and the same thing in different forms. Energy can be imagined as a vibration which, if it is vibrating very intensely, produces a sensation of solidity which is called 'matter'.

Because architecture is all about space it is also about time and therefore all about space-time, energy-matter and the Universe. The energy which animates matter, thereby creating 'aliveness' is referred to as the 'lifeforce'. In eastern cultures this is called 'chi' or 'prana'. As maintaining aliveness is the driving force behind sheltermaking a focus on spacetime is required in order to create shelter that fully connects to the Universe and to life.

Within the vernacular tradition attunement to these invisible aspects of space and time served to orient people within the world by fostering the development of ritual and myth celebrating the mysteries of life; by nurturing artistic expression through storytelling, poetry, music, dance and art. The loss of such traditional sheltermaking activities has resulted in a disconnection from the invisible but vital aspects of life. Such disconnection has now become a dominant characteristic of the modern world.

While shelters' role in providing for peoples' physical needs is well understood, its role in providing emotional sustenance is less obvious. The inner space of a shelter is where people live out their emotional lives protected physically and emotionally from the outer world by the physical fabric of the building.

By including both inner and outer worlds 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, thereby fostering the opportunity to live harmoniously within the natural world.



The modern world devalues the intangible realm of life and along with it the instincts and emotions which allow us to interpret it. The discreditation of the heart as an essential and innate design tool has emphasised material values over emotional satisfaction, defining shelter as a purely material phenomenon. This has led to a situation whereby any discussion of architecture or houses is limited to their physical aspects - what they are made from, how much floor area they enclose and the address of their location. The invisible or intangible aspects of buildings - the space they enclose, how they make people feel, whether or not they foster creativity and dream - never play a part in any architectural discussion. Generally, this has had the effect of deadening buildings, and, as a consequence the deadening of the people who inhabit them.

Sheltermaking is the modern practice of vernacular architecture. This keys people into the survival instinct itself, bringing people face to face with nature and with the unknown. This stimulates awareness, self-expression, ritual-making, , art, music, poetry, dance and inquiry into the intangible realms of life. This invisible realm is accessed mainly through dreams.

Dreaming impels us to pursue our own distinctiveness, which is a process of 'individuation'. This is a modern trend - an evolutionary development arising from the industrialisation process. The family as 'unit' is replaced by collections of individuals.

The liberation of the individual however was turned by the market into an indulgence fetish feeding on peoples' desires to maintain their aliveness at any cost. Ignoring the deeper psychological implications that individuality suggests, the market created illusions and mouthed promises that lured the unwary into a false sense of security. Harried to sell their time, cajoled to borrow as much as possible and encouraged to lard their grandiose homes with a surplus of belongings, property owners were ensnared in a complex web that resisted any struggle to escape.

This is the antithesis of the 'maternal womb' that, according to Karl Jung, the Swiss psychologist and psychiatrist, we discover when we surrender to the 'individuation process'. Jung believed that our lives could be understood as a 'process of becoming what was intended from the beginning' if we paid attention to our dreams. He himself used architecture as a means of accessing his inner world - by playing house and designing and constructing his own home.

A clear link can be detected here between exploring ones 'inner world' and creating one's 'dream home'. At the heart of this idea of 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 our selves so that we might grow into selfhood.

The disconnection from the immediacy of survival activity that a job-focussed industry-based culture creates removes one from the minutiae of day-to-day survival and from the rhythm of life.

Natural rhythm is calibrated in days, months, seasons and years. The sense of timelessness which this engenders accords with our body rhythms and allows us to harmonise with the pace of the natural world.

The rhythm of the clock is the rhythm of the machine - explosive and intense - a consequence of igniting the pent-up energy contained within fossil fuels. Formed over millions of years but released almost instantly, this explosive force lays down a beat to which everyone must march. It is the role of the clock to broadcast this rhythm which it does with robotic efficiency, policing our days and our nights.



Apart from the physical consequences of this, because machines are inanimate, soulless, tireless and without emotion, the prevalence of machines in human life has resulted in a dulling of the natural emotions which we all enjoy as human beings. This distancing from natural rhythms has further removed us from a sense of who we are and where we are going.

The deeper implications of the changes wrought by the shift from an agrarian economy to an industrialised one are now being felt on a vast scale within all developed countries. While the loss of emotional connectivity resulting from this can seemingly be endured, the present threats to physical survival are less easy to bear. This has prompted a search for deeper meaning, a process that stimulates strong emotions with the potential to reunite the separated strands of our inner and outer worlds.

Economics is the system whereby people gain access the necessities of life - air; water; light; food; social interaction and the security of a place to rest and reproduce - the home. Money is the medium which the economic system uses to facilitate the production and trade of the goods and services required to satisfy peoples' desire to maintain their aliveness.

Originally money, in the form of coinage and bank notes, were tokens representing tangible goods of a certain worth held securely in 'banks' for security and convenience. This early banking system developed to allow for the creation of more tokens than there were tangible goods to 'secure' them. These tokens were distributed as 'loans' to borrowers with interest accruing which steadily increased the amount to be repayed by the borrower. Such loans, in turn, had other loans issued against them on the strength of the promises of repayment made by the original borrowers.

With the onset of the Industrial Revolution time became convertible into money thereby ensuring a seemingly endless supply. Where time is eternal it was assumed that money was also eternal. This is the illusion which stimulates the demand for endless growth which drains the world of vitality.

The conversion of time into money is a seemingly simple affair. However, the reality is quite different! Because time is all that a person comes into the world with - their 'lifetime' - and because of the deep connections which time allows people to forge with the intangible realms of life, the commercial exploitation of peoples' time has been destructive to people and planet alike.

Because money is a human construct when it is said to 'grow' such growth is unlike the growth seen in nature. The growth of money is reliant on new money continuously being created. This is unlike natural growth which is fuelled by solar energy. Money growth is derived from people converting their time into money through paid employment and by creating debts to provide themselves with a place to live. This requires that the homes such loans are secured against continuously grow in value - while all other consumer goods continuously fall in value as soon as they are purchased. In order to maintain continuous growth economies rely not only on the creation of debt but also on the use of machines to optimism work activity and to maximise productivity.

The use of the home as 'security' for borrowings has tied people to the success and failure of the global economy and to strategies for economic growth. Where the home also provides emotional security for its occupants, people have become emotionally enmeshed in these strategies as well.

Market economies use the repayment commitments made by mortgagees, the notional values of the properties attached to them and projections of consumer spending as the basis of new loans, securities and other financial 'instruments'. The elaborate paper structure which results is supported by the commitments made by mortgagees and by people spending money to acquire the basics of life on the open market.



When this system falters the vast paper structure that is the world economy begins to collapse. This results in a decline in property values, a loss of consumer confidence, negative growth and the devaluation of the financial instruments constructed on the strength of mortgage debt repayment commitments.

The economic meltdown of 2008, triggered by the sub-prime mortgage crisis, has now proven beyond doubt that mortgage debt plays a vital role in fuelling economic growth and perpetuates the endless cycle of exploitation and destruction that bedevils the world.

The move towards a sustainable life is first and foremost a survival strategy. This is as much about awareness and consciousness-raising as it is about how we live physically. Firstly, one has to accept that sustainability is not something one can buy. This is it's greatest challenge as well as its greatest safeguard. A sustainable life must be lived, acknowledging our physical and emotional selves and celebrating our wholeness.

Where the home is critical to peoples' physical and emotional wellbeing the move towards a sustainable life must by facilitated by buildings that nurture all aspects of human life. Such buildings will largely determine how well we will survive in a post-Oil Peak, climate-changed world. Such designs will emerge from the lives people have to live, a process of merging 'inner' qualities with those of the 'outer' world to form a 'living' architecture which will contribute to and compliment a 'sustainable' culture founded on a deep commitment to life.

Fresh, imaginative and cost-effective sheltermaking solutions will be required to achieve a truly sustainably way of life. Clearly these must be created and financed on a scale and in a manner which allows a degree of independence from the global economy. Where this is hardly going to promote economic growth those drawn to live sustainably will find themselves open to challenge and even ridicule as a consequence of their choices.

Understanding the puzzle of our selves and of modern life is an integral part of repossessing the sheltermaking process - identifying who we are, where we are going and how we plan to get there. This begins by acknowledging the intangibles qualities of life that are so critical to the process of harmonisation with nature. These are invisible and mysterious, residing within our deeper selves.

When we articulate our desires about how we wish to live it stimulates these parts of ourselves that long for a deeper connection to life. This signals the beginning of a painful but necessary evaluation of our values, beliefs, ideals, aspirations and dreams. Such a perspective invites us to reclaim our time and our space, to alter our consciousness and our entire way of life. The dynamics of such a consciousness shift are as much cultural as they are personal allowing us to embark on a process of renewal, the forging of a new cultural paradigm. From here we can begin to recapture the sheltermaking imperative, re-occupying our time and our space, reforming our homes and our selves.

Because a sustainable life is an emotional as well as a physical one, it is vital that buildings designed for sustainable living take this into account from the outset. While such an approach might appear to be overwhelming, this is merely a consequence of including an 'inner' dimension in the design. This tracks right to the heart of our deepest fears concerning our survival. The potential onslaught from such encounters are indeed challenging, however, the strength derived from facing such fears will comfortably carry one through such ordeals. This is due to the response of one's sheltermaking 'gene' which, if it's call is honoured, will prove to be a steadfast ally. It is from this vantage that one 'lives one's architecture', in the process reclaiming identity and contributing vitally to a culture of sustainability. It must be understood that the power to initiate such change lies within us - it can never belong to governments nor their agencies despite their claims to be arbiters of 'sustainability'.



Volume 1 of The Sheltermaker's Manual deals primarily with the formulation of a clear and all-encompassing Brief, the learning of measurement, drawing and modelmaking techniques, the familiarisation with basic structural principles, the importance of setting a clear direction in respect of environmental considerations, and, the formulation of a practical approach to building location and orientation and, the composition of a suitable building fabric. Volume 2 builds on that foundation.

Continuing the established methodology of tackling each relevant topic in turn, *Volume 2* allows the sheltermaker to steadily approach the goal of creating a plan! This contrasts to the usual design methodology of creating a plan first - which, as we are all aware of, can cause insurmountable problems in respect of designing as well as living.

Volume 2 begins with the examination and selection of materials and products that might possibly be used in the construction process. A decision on a suitable construction methodology follows that. Building services - plumbing, drainage and electrical - are then examined, along with issues of planning and building regulation. Next, the topic of location and site analysis are dealt with leaving the way open for a plan to be formulated. This approach is based on common sense and has proven itself, in practice, to produce first rate results. Sheltermakers are well advised to closely adhere to this course of action.

As will have been discovered from work carried out in respect of *Volume 1*, there are many hidden aspects to the process of sheltermaking. I think of these as the 'invisible architecture'. Unseen yet powerful in the effect they exert, one will ignore such aspects of the design process at one's peril.

What is invisible architecture and what activates it? Well, to answer the second question first - the sheltermaking process itself activates it! The articulation of one's dreams; the making of drawings and models; the careful examination of existing buildings; the articulation of one's bottom line in respect of harmonisation with the natural world; the realisation that the sun is at the heart of all sheltermaking ambitions; etc. etc. All of these engagements activate, awaken and embolden our natural sheltermaking instincts! This awakening inevitably challenges much of one's conditioning and oftentimes, one's sense of security. Because these effects are invisible - but nonetheless keenly felt - it can be hard to discern exactly what is going on. This is normal and hints at the nature of invisible architecture itself. We might think of this as an aspect of the Universe, which, as was described in the *Introduction* to *Volume 1*, is composed of space-time.

The inside and outside of buildings not only comprise space-time but the inside and outside of people too! This is the source of our dreams and the reason why buildings, particularly our homes, play such an important part in us living our lives fully. So, we might think of invisible architecture not only in terms of physical buildings but also in terms of our dream world and the lives we have to live. This allows us to appreciate the vitality of creating shelters that reflect who we are inside. In effect what happens is that sheltermakers make their inner world visible and habitable by conscious engagement with their inner selves. Invisible architecture therefore is who we are!

This is the great secret of architecture evidenced in the *Sacred Geometry, Feng Shui* and *Vastu Shastra* traditions. While such secrets continue to inform eastern traditions, in the west, the prevalence of rational thinking has assured the suppression of such intangibles in the methodologies of the architectural profession and of other building designers.

When awareness of the power of 'living one's architecture' is appreciated we are presented with a dynamic tool for change. Change is characteristic of life and a vital component of the sustainable agenda, which at it's heart, is all about sustaining life.



The current official interpretation of sustainability however is quite the opposite - it's all about non-change and sustaining the *status quo*! As can be clearly seen this threatens people and planet alike! The reason why such an absurd agenda can prevail is largely because we have lost touch with who we are and our purpose in life. Material considerations rank highest and science disputes the existence of anything immaterial. We are invited to inhabit a soulless world in which love, compassion, joy, intuition and their invisible companions are consigned to the wastebasket.

Sheltermaking offers an unrivalled opportunity to those seeking to escape such a deadening world in the search for a fuller and more meaningful life. This is not to suggest that it is simply a matter of ordering such a life online or of engaging someone to create it on one's behalf. Rather, this approach suggests a complete revision of how one lives ones life, obtains ones food, disposes of ones waste, sets ones values, relates to their fellow humans, moves from place to place and so on. Interestingly, this is not all that difficult to achieve. It is the reactions to such alternative living that pose the biggest threats to the realisation of such dreams. If such reactions are not taken into account or underestimated, the sheltermaker will find him or herself threatened by the full force of what has become an outmoded way of life.

While the focus of *The Sheltermaker's Manual* is on the design and construction of buildings suited to a new way of life the invisible aspects of such engagement are vital to appreciate. The simplest way to think of this is to give careful consideration to how one spends one's time. Because space and time are inseparable and because space and time are the essence of the invisible parts of ourselves and of buildings, consideration of how we spend our time tells us much about how we currently live and about how we might spend our time in a new world of our dreaming.

Inevitably, time needs to be given over to such consideration! Further, we need to connect with others in our search for meaningful answers. Using living architecture as a foundation for such discussion will prove to be most enlightening! To do this successfully we first have to inform ourselves of, and become conversant with, the abstract and invisible aspects of our lives - who we are, where we are going and how we plan to get there! Sharing such insights with others inevitably leads to the possibility of shared sheltermaking activity. With our sheltermaker genes activated in this way we suddenly find ourselves in a new world full of possibility, love, hope and excitement. In this way we change our lives, our relationships and our way of sheltering ourselves, shaping our world according to our dreams.

The Sheltermaker's Journey

