

Professionalism and pattern books

Chapter 5 of The Prefabricated Home by Colin Davies

Architecture is a fertile field for the cultivation of metaphor. The word 'architecture' itself makes frequent appearances outside its dictionary definition ('the art or science of constructing edifices for human use'), being applied to almost any large and complex structure, whether concrete or abstract - a novel, say, or a computer system. And of course the word 'architect' has even wider currency. In politics, for example, we speak of the architect of a foreign policy or of a grand alliance. Sometimes metaphorical architects are unfortunate ('he was the architect of his own downfall') but mostly an architect is a good thing to be - creative, comprehending, skilful, reliable. Most famously and fundamentally, there is a long tradition of describing and depicting God as the architect of the universe.

Architecture commonly serves as a metaphor for thought itself. Descartes, in his 'Discourse on Method', writes about the philosophical system he is about to construct as if it were a project to rebuild his house.

'...it is not sufficient, before commencing to rebuild the house which we inhabit, to pull it down and provide materials and an architect (or to act in this capacity ourselves, and make a careful drawing of its design) unless we have also provided ourselves with some other house where we can be comfortably lodged during the time of rebuilding...I [therefore] formed for myself a code of morals for the time being...' (3)

Note that the house can be both a philosophical and a moral construction, and that it is not a mere structure, but a dwelling place. The more you think about thinking, the more architectural it becomes. Arguments are constructed dialectically, like beams on columns, storey upon storey, strengthening and buttressing one another. If the thought-structure is not well founded then it will totter and collapse into ruins. And philosophy, like architecture, is hierarchical. It has its essential and its inessential parts, its

axioms, its predicates and its rhetorical flourishes, its base, its superstructure and its ornament. But the architectural metaphor doesn't stand for just any kind of thought; it stands for organised, coherent, productive thought, the kind of thought that keeps a grip on reality and genuinely seeks truth.

Architectural metaphors almost always imply permanence and stability. Buildings are expected to endure and to stay put. In his essay 'Building, Dwelling, Thinking', Heidegger points out that the German word for building, *bauen*, comes from the Old German work *buan*, which means to dwell, to remain, to stay in one place (4). To build is to make a place in which to dwell. And the first act of building, according to Heidegger, is the making of a clearing in the forest in which building and dwelling alike will be 'revealed'. Clearing, building, dwelling, thinking - all are combined, inseparably, in the 'thrownness of being'. Heidegger's clearing will surely contain a permanent settlement, and permanence has enormous ethical implications which are also locked into the language. 'Solid', 'established', and 'long-standing' shade into 'steadfast', 'constant' and 'true'. Architecture is therefore associated with all that is dependable and morally upright. Even 'morally upright' has architectural overtones. By our edifices are we edified. (Edify: to instruct, improve; to profit spiritually or mentally.)

In view of this, it is not surprising that traditional architectural theory should have taken on a strong moral character. The moral colours of the architectural metaphor are reflected back onto architecture itself. On the face of it, there is nothing intrinsically moral about the design of a building, apart from the ordinary ethical considerations that might apply to any social undertaking, yet architectural theorists have consistently tended to apply moral criteria to the judgement of otherwise practical matters like the arrangement of plans, the use of materials and the disposition of structure. The tendency is particularly marked among the Gothicists of the nineteenth century. In 'The Lamp of Truth', the second of 'The Seven Lamps of Architecture', for example, John Ruskin forbids any kind of deceit, such as 'the suggestion of a mode of support other than the true one', 'the painting of surfaces to represent some other material' and, interestingly, 'the use of cast

or machine-made ornaments of any kind' (5). Everything in a building must be 'honest'. Machine-made ornament is dishonest because the craftsmanship it displays is an illusion.

For Ruskin truth to materials and the honest expression of structure or function were more notional than actual, part of architecture's wider responsibility to project a picture of a stable society. But the modernists of the twentieth century brought a new literal-mindedness to the moral structure of architecture. It was no longer enough just to keep ornament in its place; it had to be made a crime and banished completely, as it was from the exteriors of the proto-modernist houses of Adolf Loos. And it was no longer enough just to be conscious of the difference between structural and non-structural parts; the two had to be radically differentiated so that there could be no possible doubt about which was which. The steel frames and glass curtain walls of buildings by Mies van der Rohe come to mind.

Quite why an architectural theory associated with the nineteenth century Gothic Revival should have remained so influential throughout the twentieth century is something of a mystery, especially since there were perfectly respectable and more interesting alternatives available to follow. The German architect Gottfried Semper, for example, constructed his theory along quite different lines. Rejecting a value-laden, hierarchical system in which the parts of a building that bear load are more important than those that merely divide space, Semper thought of architecture in terms of four basic industries – ceramics, masonry, carpentry and weaving – which found their own levels of importance in any given building according to social and geographical circumstances. In Semper's system, ornament is more important than structure, since it represents the essential cosmogonic or 'world creating' function of architecture. And if a form developed in one material is (carved in wood, say) is reproduced in another (cast in iron, perhaps) then this is only the necessary deception that architecture has practised ever since a wooden temple was translated into stone in ancient Greece to inaugurate the whole classical tradition.

But it was the Ruskinian tradition that prevailed and set the moral tone for the twentieth century, a tone that to this day can be heard loud and clear wherever architects gather to discuss their craft. A morally good building is assumed to be: 1) permanent, 2) fixed in one place (built from the bottom up on firm foundations), 3) architect-designed, and 4) unique. If any item on this list remains unchecked, then the building in question will probably not qualify as 'proper' architecture. This prejudice is, as we have seen, locked into the language. But now let's consider the words that might be applied to the making of temporary, portable, anonymous or mass-produced buildings; words like 'fabricate', 'invent' and 'manufacture'. In Roget's Thesaurus, these three are followed, in the same paragraph, by: trump up, make up, get up, hatch, concoct, cook up, fudge up, fake up, hoke up, counterfeit and forge. Even a seemingly innocent word like 'assemble' has shady etymological connections with 'resemble', and thereby with 'dissemble' - to alter or disguise.

No wonder ordinary buildings like prefabricated houses have trouble being taken seriously by architects, historians and theorists. Take the balloon frame house, for example. To understand the theoretical significance of the balloon frame method of construction, it is necessary to understand what it superseded. The word 'frame' is commonly used to describe heavyweight structures in timber, steel or reinforced concrete that should more properly be called 'post-and-beam'. In post-and-beam structures, the original prototypes of which were the classical 'orders' of columns and entablatures, upright supports are widely spaced creating large openings. Where enclosure of space is required, non-load-bearing walls, usually relatively light and often divided into panels, are fixed into the openings. The Farnsworth House by Mies van der Rohe, with its steel frame and glass walls, is a good example. The hierarchical distinction between frame and infill is a common grammatical construction in the language of architecture. Traditionally, the alternative is to combine load-bearing and weather protecting functions in a solid stone or brick wall. Openings are bridged either by lintels or, more purely, by arches made of similar stones or bricks. This construction principle originated in

ancient Rome and reached its peak of development in the Medieval Gothic that was so much admired by nineteenth century theorists. Most western architecture can be fitted into one or other of these two traditions: post and beam, or arcuated; Classical or Gothic.

But the balloon frame fits neither. It is both a frame and a continuous wall. The vertical and horizontal members of the frame are too close together to be thought of as spatially open, too close even for a single door opening. To describe them as columns and beams would be absurd. And the 'siding' that keeps the weather out doesn't infill the frame but covers it like an overcoat, hiding it and therefore depriving it of any architectural, as opposed to structural, function. All you see is the linear texture of the clapboards, non-hierarchical, featureless, dumb. The balloon frame is an architectural contradiction in terms: light and thin but load-bearing, drawing its strength from the three-dimensional bracing effect of floors and roof. Each stud supports a joist, each joist braces a stud. As practical building construction it is brilliant; as traditional architecture, it is nowhere.

Moral ideas about truth to materials and honesty of expression are largely irrelevant to the balloon frame house. Structure is hidden and forms no part of the architecture, so it doesn't matter what the structure is made of or how it works. This doesn't mean, however, that the building's appearance is of no concern to its designers. On the contrary architecture, in the narrow sense of image and surface appearance, will often be an essential marketing tool and a fundamental basis of classification and consumer choice. But the architecture will be applied, not intrinsic. It will be a 'false facade' (note the ethical overtones of that phrase). Almost as soon as it was invented, the balloon frame was being used as an armature for an imitation architecture. Of all the styles that the early balloon framed buildings of Chicago could have chosen to dress themselves up in, the Greek Revival - solid and serious, the very essence of rectitude - seems the least appropriate. Yet little balloon-framed houses with pedimented porticos and big, showy cornices became almost universal in the mid-west of the 1840s and 50s. Later in the century, tastes changed and a riotous eclecticism ruled, combining Romanesque,

Gothic, Italianate and Queen Anne, sometimes in the same house. But always behind the scenes it was a simple balloon frame that did all the structural work. And it is still the same today.

Unique, site-specific buildings are favoured by architectural practice as well as architectural theory. There are many ways to practise architecture, but most of them are variations on a generally agreed norm. To practise architecture the normal way, an architect first has to find a client with money to spend and a site on which to build. Before any decisions can be made about the size and shape of the proposed new building it will be necessary to analyse the client's requirements and write them down in the form of a brief. A brief is supposed to be an objective, almost scientific document, free of 'preconceptions' such as what the new building might look like. The next task is to survey and analyse the site in a similarly objective way, measuring it in three dimensions and listing its qualities under headings such as aspect, prospect, orientation, bearing capacity of the soil and so on. When these tasks have been completed the architect goes away, usually for several weeks, and comes back with a sketch scheme in the form of a set of drawings: plans, sections, elevations and perhaps a perspective view. If the sketch scheme meets with the client's approval, then the architect goes away again and develops the design through various stages such as obtaining town planning approval, finalising the technical details and producing working drawings. Several builders are invited to tender for the job and a contract is signed between the client and lowest bidder. Construction then proceeds under the watchful eye of the architect who, in the case of any dispute, is supposed to act impartially between the client and the builder.

Normal practice in its pure form is becoming less common as new kinds of building contract are devised and new technologies such as computer aided design are introduced. Nevertheless, it still effectively defines architecture as a profession. It assumes that architecture is a service, not a product; that buildings are purpose-made for specific clients and specific sites; that the designer and the client are known to one another; and that the

architect is responsible for the technologies employed in the construction of the building as well as its overall form. Architectural education broadly supports these assumptions. An architect's training consists mainly of a sequence of design projects of increasing size and complexity which imitate normal practice. Teachers will often re-interpret normal practice in various ways in order to introduce certain philosophical ideas or emphasise certain skills. For example, it is common for the site analysis part of the process to be given prominence. Most college projects are designed for real sites and students will spend weeks observing, recording, analysing and 'mapping' whole tracts of the surrounding urban environment, developing a sensitivity to every nuance of its social and physical nature. Real clients are more difficult to obtain so they usually have to be invented, often complete with personal characteristics and life histories. Construction technology is typically given a lower priority than 'pure design', and money is almost never mentioned. All the same, if you examine the official course documents, you are sure to find a recognisable reflection of normal practice. In more progressive schools, the re-interpretations may be so radical that the reflection becomes grossly distorted. Technical design may be almost completely disregarded on the principle that knowledge of structures, construction and building services inhibits creativity. Sometimes even the very idea that architecture has something to do with the design of buildings may be called into question. Projects become rarefied and conceptual - installations, virtual environments, clothing, games - and there is much talk of 'art practice'. But when this happens, the profession usually intervenes through various course validation mechanisms and the school is advised to return to something closer to normal practice, with sites and clients and buildable buildings.

It is hard to make the assumptions of normal practice fit the design of prefabricated or serially produced buildings. In fact if we take popular housing as an example, the opposite assumptions would seem to be more appropriate. The idea of having to pay to have their requirements listed in a brief 'without preconceptions' is unlikely to be attractive to potential house

buyers. They want to see the product before they commit themselves. Architects often argue that the site-specific nature of architecture makes buildings unsuitable subjects for serial production. There are a number of possible objections to this argument, the most obvious being that most buildings are serially produced and have been for many years. They may not have been made on factory production lines like cars but most traditional English houses - the fourth rate Georgian cottages of Islington, the Victorian terraced houses of a Lancashire mill town, the Tudor-gabled semis of Metroland - were essentially standard products, serially produced without any significant adjustments to fit particular sites. And of course the serially produced house, whether as a design or an actual building, is of necessity a speculative venture, an attempt to meet the needs not of an individual but of a market sector. A customer for a house may well have special requirements, but these will be accommodated by adaptations to a standard type and the designer of that type will probably no longer be involved. Designer and client do not usually meet.

Finally, the assumption of normal architectural practice that the same designer should be responsible for the technology of the building as well as its formal and spatial characteristics is highly questionable as far as serial production is concerned. Spatial design and technical design are sometimes closely related (indeed a belief in the closeness of that relationship is one of the cornerstones of Modernist architectural theory) but they nevertheless require different skills. The efficient serial production of houses depends on commercial as well as technical factors. A change in the market price of certain materials might suggest a radical change in the design of the product, for example from load-bearing brickwork to timber frame, and this change might have little effect on the overall form of the building. The spatial designer is not necessarily the person best qualified to take such decisions. Neither is he or she in a good position to assess the technical design consequences of, say, the arrival of a new machine in the workshop, or of a new production manager with new ideas. The slow but sure industrialisation of the whole building industry, not just the housing industry, is making

architects' claims to be in charge of technical as well as spatial design less and less credible. It doesn't mean that architects couldn't be good factory-based technical designers, they could, but it would involve a shift in their self-image, in particular the image of themselves as independent, disinterested professionals, which is another of the doubtful assumptions of 'normal practice'.

So how might normal practice adapt to the demands of a new factory-based and market-orientated building industry? One way might be simply to change the order in which things are done by designing the building first and consulting the client later. This is anathema to most modern architects who become active only when someone brings them a problem to solve. Architectural practices with too little work to do will often keep busy by entering architectural competitions because this provides them with what they regard as the essential preconditions of architecture: a brief and a site. Their time might be better spent designing buildings for which they know there is a demand, like houses or schools or medical centres or retail outlets, and publishing the designs. But there seems to be a general resistance among architects to this rather obvious ploy. Partly it is hangover from the days when their professional code forbade all sorts of normal commercial activities like advertising. It might also have something to do with the question of authorship (see chapter 4) and the insistence that money should change hands before a design is made public. But mostly it is a reluctance to let go of that idea that a building must be designed for a particular site. Behind this idea lies that strange, largely unexamined, assumption that every building, certainly every architect-designed building, should ideally be unique, because every site is unique. The building becomes the expression of the uniqueness of the site. Through architecture, the site becomes more than a site; it becomes a 'place'. In other words architecture, in its fundamental nature, is site specific.

If this were really the case, then architecture and serial-production would never be reconciled. But history would seem to indicate that this insistence on uniqueness is an aberration rather than an essential quality of

architecture. Vernacular architecture, so much admired by modern architects for its purity and rightness in the landscape, always consists of a relatively small number of standard building types: the cottage, the manor house, the barn, the parish church. Every medieval English parish church is in a sense unique, but equally the great majority are composed from a limited repertoire of standard components - nave, chancel, tower, porch - and standard decorative schemes - Early English, Decorated, Perpendicular - developed over centuries to suit common conditions, not specific sites. The permutations may be infinite, creating an endlessly fascinating richness, but the basic components are standard. The history of architecture is the history of the adaptation and recombination of established types and styles. And if modernist architects insist on throwing out tradition, the results still only makes sense as rejections of tradition.

Architects' resistance to the idea of designing buildings speculatively and without reference to any specific site is all the more surprising when you realise that this was a perfectly normal part of architectural practice before the twentieth century. Collections of speculative designs were published in pattern books, which served as guides for clients and builders, and advertisements for architects. 'Pattern book' has now become short hand for all that is shoddy and careless in the design of buildings. Architects pour scorn on pattern books. But there was a time when the pattern book was, so to speak, where architecture resided.

In Elizabethan England the word 'architecture' was hardly ever used (you won't find it anywhere in the complete works of Shakespeare) and there were no professional architects in the modern sense. People who 'designed' buildings called themselves masons, carpenters or artificers. Designing a building was a collaborative process and it was almost unknown for a single author to be identified. Robert Smythson's epitaph in Wollaton church reads: 'Architecter and Survayor unto the most worthy house of Wollaton with divers others of great account' but according John Summerson this precise evidence of authorship is 'a case almost unique in Elizabethan architecture' (1). A client for a large scale building project like a country house might invite one mason

to draw the plan, another to draw the elevations and yet another to employ the workmen and supervise operations on site. Ornamental set pieces like porches, staircases and fireplaces would be commissioned from individual craftsmen who would often adapt designs published in books. It was through these books, directly or indirectly, that the new classical style of ornament, based on ancient Roman architecture, filtered into the country from Italy via France, Flanders and Germany. Whenever the word architecture was used, it was in reference to this new style. Architecture basically meant designs published in pattern books.

For 300 years the pattern book remained the chief medium by which respectable architecture was disseminated in England. Sixteenth century Italian originals like Sebastiano Serlio's 'L'Architettura' and Andrea Palladio's 'Quattro Libri dell'Architettura' inspired countless imitations, from John Shute's 'First and Chief Groundes of Architecture' of 1563 to the lavish publications of the eighteenth century, such as Colen Campbell's 'Vitruvius Britannicus' and James Gibbs' 'A Book of Architecture'. The builders of the elegant streets and squares of Georgian London took their correctly proportioned facades and Doric door-cases straight from smaller, cheaper pattern books such as William Halfpenny's 'The Art of Sound Building' and Batty Langley's 'The Builder's Jewel'. In the early nineteenth century dozens of architects produced pattern books to meet the demand from a growing middle class for suburban villas and country cottages. One of the pioneers of the so-called 'villa book' was Sir John Soane, architect of the Bank of England and often regarded as the first truly professional architect in the modern sense. His 'Sketches in Architecture' of 1793 is purely speculative, containing designs for modest, affordable dwellings pictured in imaginary rural settings.

By the mid nineteenth century in England the pattern book was being eclipsed by the rise of the architectural magazine. In the USA, however, it was spreading and beginning to mutate in interesting ways. Andrew Jackson Downing published 'Cottage Residences' in 1842 and 'The Architecture of Country Houses' in 1850. These enormously popular books contained designs for mainly Italianate and Gothic Revival houses, based the new 'balloon

frame' method of timber construction. Dozens of imitations appeared over the next twenty years. In 1876, George Palliser, an English immigrant who had worked as a carpenter and joinery manufacturer, published a 25 cent booklet called *Model Homes for the People*. It was the first of 21 pattern books to be produced by Palliser and his brother Charles over the next twenty years. The Pallisers marketed themselves as architects and used their pattern books not simply as advertisements for their practice but much more actively as lures to catch clients. The potential client would choose a design from one of the books, then write to the practice describing any alterations that might be required. The practice would send a sketch for approval before producing a full set of plans, elevations, sections, details and specifications to be used as tender documents by local carpenters. The Pallisers were not the first firm to offer blueprints by mail-order, by they were the first to turn the process into a kind of architectural consultancy based on the adaptation of standard designs.

There was an educational element in the American pattern book, though it was sometimes corrupted by underlying commercial motives. The eclectic Victorian designs, all turrets, gables and porches, encrusted with finials and flummery, would hardly be called tasteful now, and it has been argued that the designs were made deliberately complicated in order to convince customers of the need to buy the blueprints. Nevertheless the pattern book was seen as the means of bringing architecture to the masses and beauty to the cities and suburbs. Gustav Stickley, the editor of a monthly magazine called *The Craftsman* founded in 1903, set out to cleanse the American architectural palate by promoting a new, simple Arts and Crafts influenced style. Naturally, he published pattern books to make the new style accessible and usable by clients and builders. *'More Craftsman Homes'*, published in 1912, contains plans and views of 78 so called 'mission style' houses and bungalows, each accompanied by a long descriptive text written with a care and attention to detail quite unlike the usual advertising blurb. The plans are relaxed and open, designed as spatial sequences rather than clusters of boxes. Many of the views are interiors, sensitively drawn, focussing

on characteristic details - an inglenook fireplace, a window seat, the plain wooden beams of a living room ceiling. Stickley overstretched himself and his business collapsed in 1916 but the Craftsman style lived on to become one of the many disparate ingredients of the American suburban vernacular.

One of the ways pattern book publishers made their money was by including advertisements for building products like boilers, ironmongery and sanitary ware. The next logical step was to supply the actual products. In 1900 the Gordon van Tine Company of Davenport, Iowa began to supply components like doors, windows and staircases with their blueprints. Very soon, other companies like the Aladdin Company of Bay City Michigan and, most famously, Sears Roebuck of Newark, New Jersey, were supplying complete prefabricated houses by mail order (See Chapter 2).

The mail order house business did not survive the Wall Street crash of 1929, but the basic pattern book method pioneered by the Palliser brothers survives to this day. In Britain, where most new housing is provided by speculative developers, the pattern book is no longer a familiar medium, though demand is growing as the 'self build' market gains ground. This demand is met mainly by package build companies and by imports from America. In America, pattern books are as common as women's magazines. Whole shelves are filled with them in bookstores, supermarkets, motel receptions and airport lounges. Some are merely free brochures distributed by local builders with a credit 'pre-qualification' form to fill in on the back. Other are fat paperbacks, costing \$10 or so, often compilations from a variety of sources, published in association with home-making magazines. There are pattern books to suit all tastes (except perhaps 'good taste'), all pockets and all settings: 'The Craftsman Collection', '200 Budget-Smart Home Plans', 'European Dream Homes', 'Hillside Homes', '1001 All Time Best Selling Home Plans', and so on, and on - hundreds of books, thousands of designs. Domestic architecture in America is plentiful and cheap. Most pattern books follow the standard format: one house per page, with a plan, a view and a list of features including square footage. There are far too many house types to give them individual names, so they are designated by little descriptive

phrases such as 'Charming with Drama', 'Captivating Colonial' and 'Balcony Offers Sweeping Views'. Each has a code number so that you can look up the cost of the blueprints. Typically, for about \$700 you can get an eight sheet package for a two bed, two bath 'Cape Cod'. For about twice that price the drawings will be supplied in CAD form on a CD. As well as a full set of working drawings, the package will include a list of materials, often with prices, an outline specification and various extras like room planning kits or information sheets about plumbing and electrical installations so that the customer can keep an eye on the builder.

Designs for pattern books are occasionally produced by fully qualified architects but more often by 'architectural design' practices. Authorship is hardly ever a selling point, though designers are sometimes credited. Despite the enormous variety of plans available, customising is normal practice and pattern book companies are happy to cater for it. For an additional fee, in-house designers will carry out modifications based on the customer's sketches or, alternatively, drawings can be supplied in reproducible form for alteration by customers and their builders. Pattern book designs are always regarded as provisional. A customer finds the plan that come nearest to meeting his or her requirements and then refines it. The refinements might be either spatial or stylistic, but they are unlikely to involve any fundamental change to the method of construction because the vast majority of pattern book house designs take for granted the 'platform frame' method (a development of the balloon frame) that has been standard throughout the US for fifty years. Blueprints don't normally include full framing plans (though they can be supplied for an extra charge) because it is assumed that a competent builder will be able to make that kind of detailed design decision on site. In Britain, pattern books are most often produced by package build companies using prefabricated timber frame systems. But timber frame is not the standard method of domestic construction in Britain, where load-bearing brick predominates, so house designs tend to remain tied to specific building companies. In the US the pattern book is free of specific allegiances because building technology is, as it were, already taken care of.

The main function of the American pattern book is to make sure individual customers get exactly what they want. But the pattern book can also be a means of controlling development. For example, it is an important weapon in the armoury of the movement known as New Urbanism, which fights back against suburban sprawl by reviving traditional urban forms. Planned communities like Seaside on the Florida Panhandle coast and Celebration, built by the Disney Corporation near the main gate of Disneyworld in Orlando, present themselves as new and different precisely because they are not gated communities. Celebration tries to recapture the spirit of the traditional American small town by a slight increase in planning density and innovations such as sidewalks, on-street parking, and a small downtown area in which shops and cafes front onto ordinary streets. Residents are actually encouraged to walk from their houses to the shops, a concept some find hard to grasp. Public buildings by famous architects are an added attraction: a cinema by Cesar Pelli, a bank by Robert Venturi and Denise Scott Brown, a town hall by Philip Johnson, a post office by Michael Graves. The architects' signatures are more important than the actual functions of the buildings. Seaside, master-planned by committed New Urbanists Andres Duany and Elizabeth Plater-Zyberk, became famous in Britain when the Prince of Wales and his architectural advisor, Leon Krier, gave it their seal of approval. Here too 'architecture' might be said to be the theme of the development, but with an added sophistication. Houses are generally classical, with many an elegant portico and belvedere, more correct and better proportioned than the usual pattern book versions of the style. Walking is encouraged here too, though tricycles and golf carts are popular.

At both Celebration and Seaside the pattern book technique has been used not to widen choice but to limit it. Urban Design Associates' Celebration pattern book is a complex document combining architectural styles and house types in a permutation matrix. There are six basic styles: Classical, Victorian, Colonial Revival, Coastal, Mediterranean and French. Each is considered in detail under six headings: History and Character, Massing, Porches, Doors and Windows, and Materials and Possibilities. The styles are then applied to a

range of house types suitable for different neighbourhoods: Estate, Village, Cottage, Townhouse, Bungalow and Terrace. 'Landscape requirements', 'community patterns' and 'house placement criteria' complete the picture. According to its authors, the pattern book is a 'kit of parts that can be used by individual designers to create a wide range of houses while maintaining the character of traditional neighbourhood design.' To European eyes the result looks like standard suburbia with some bizarre touches, like the piped music that trickles constantly out of the undergrowth and the fact that dormer windows are always fake. But this doesn't invalidate the pattern book method, which avoids the tyranny of single authorship and makes use of the popular language of American domestic architecture to allow individual builders and house buyers a degree of choice (see Chapter 4).

It was historical accident - the Disney and Prince of Wales connections - that made Celebration and Seaside famous but there are many similar developments all over the state, both gated and ungated, each with its unique selling points. An hour's drive north of Celebration, off Interstate 4 near DeLand, lies Victoria Park, an 1859-acre 'mixed-use' community divided into separate zones for different markets. Victoria Gardens is gated, with a private club featuring sports facilities, a ballroom and a business resource centre; Victoria Commons is the 'social centrepiece' of the development, with shops, some 'professional' offices and a recreation centre; Victoria Hills is a kind of inhabited golf course, the streets weaving between the fairways; and Victoria Farms is centred on the Freedom Elementary School. When complete, Victoria Park will accommodate more than 4000 homes. The developers have employed an Art of Living Director to encourage social and cultural activities among the residents. The local newsletter is called The Picket Fence. 'There used to be places like this,' says one of the many glossy brochures, 'before the world got so busy and forgot the little things, like the necessity of a shady tree on a hot summer day, or the brilliance of a starry sky.' In reality it's just suburbia again, exclusive, secure and, like Celebration and Seaside, pattern book controlled.

But these communities are special applications of the pattern book principle. To see the pattern book in its natural habitat, wild and free, we must go hunting on the web. The internet is the perfect medium for the dissemination of domestic design. Many pattern book companies now have big web sites offering thousands of house plans stored on databases searchable by type, style, square footage, average cost, number of bedrooms and so on. On a typical site such as eplans.com a search for a Colonial style three bedroom house to cost between \$200,000 and \$250, 000 calls up 47 different designs. You can browse through them in summary form, enlarge the plans you like and save them to your hard drive, or alternatively fill out a registration form so that you can store them in a 'my plans' area. Photographic virtual tours are available for some designs, and there is often a customisation gimmick, such as an elevation drawing on which you can try out different colours and finishes.

But computers have made possible a more radical way to involve customers in the design of their houses. The more adventurous and creative among them might like to try one of the many easy to use consumer CAD programs. Professional computer aided design programs are too abstract and complex for ordinary house buyers to bother with, but the consumer versions, which restrict choice to a range of common forms, construction methods and materials, are manageable by any moderately computer-literate person. In 3D Home Architect, for example, you can start a design from scratch with a bubble diagram, roughly to scale. When you are happy with this, the program will convert it into to a real plan and then offer a variety of roof forms, window and door types, siding materials, and additional features like porches and garden walls. When the design is finished, the program will automatically generate a framing plan and a list of materials so that, in theory at least, tenders could be obtained from builders. And everything, including the framing, is viewable in three dimensions from every angle. It would be difficult to design a really innovative house on this software. Assumptions are made and choices are restricted, but no more so that in pattern books. And of course many sample designs are included in the package. Most users will

simply take one of these and adapt it, just as they would a pattern book design, leaving the bubble diagram method for purists and aspiring architects.

Pattern books can be used in many different ways. They can be mere sketchbooks to inspire potential customers or they can be mail order catalogues to sell full sets of working drawings. The designs they contain can be either speculative or already executed, offered either as standard products or as starting points for a customisation process. They can be tied to a specific method of construction such as a proprietary timber frame system, or they can be independent of any construction company, relying on local building traditions. They can be the product of a single author, and perhaps marketed as such, or they can be the result of a collaboration between a spatial designer and a factory-based technical designer. Pattern books can be published in bulk to be sold in newsagents, or in limited editions targeted at specific clients. Or they can simply be published on the internet. We think of pattern books mostly in connection with houses, but there is no reason why other common building types should not submit to the pattern book principle. George Palliser's first pattern book contained designs for a county bank, a library, a town hall, a masonic association building and several churches of different denominations.

Pattern books could be used to promote the sale of certain commercial products, but more importantly, they could also be used to promote good architecture and sound, sustainable building practices. There is no reason why the pattern book should be seen as a threat to 'real' architecture. It could be architecture's ally. As we have seen, it not only has a perfectly respectable history but in the past it has been an important medium for the growth and stabilisation of the discipline and profession of architecture itself. It seems completely feasible for architects to adopt, or re-adopt, the pattern-book principle. It may even be an essential precondition for the achievement of that century-old ambition to bring architecture to the masses. If architects are serious about this ambition, they should think again about their 'normal practice' and start publishing pattern books.

Footnotes

Chapter 5

1. René Descartes, *Discourse on Method*, in Margaret D Wilson, ed., *The Essential Descartes* (London 1969), p. 121.
2. Martin Heidegger, *Building, Dwelling , Thinking*, in David Farrell Krell, ed., *Basic Writings, Martin Heidegger* (London, 1993) p. 348.
3. John Ruskin, *The Seven Lamps of Architecture* (1880) Dover Edition (New York, 1989), p. 35.
4. Gottfried Semper, *The Four Elements of Architecture and Other Writings*, trans. Harry Francis Mallgrave and Wolfgang Herrmann (Cambridge, 1989).
5. John Summerson, *Architecture in Britain 1530-1830*, ninth edition (London, 1993), p. 63.