

# **HOUSE DESIGN**

**An Architect's Perspective**

**by Jim Comrie**

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## **Introduction**

It would appear that there are an infinite number of ways to design a house. However before the rise of self-build magazines and Grand Designs the only magazines on the newsagents' shelves were of the American log cabin variety and the occasional architectural trade journal that generally celebrated innovation in office building and arts centres. Of course there have always been interior design and decorating glossies, which have grown more and more sophisticated of recent times as ideas and inspiration have become global, but these tend to assume that you already have the perfect house that just requires a fashion upgrade. I have come across neither a textbook nor magazine that takes through the process of design decision-making.

Now I am not about to rewrite the history of house design from my perspective but I am keen to inject a bit of clarity into the process, as process is actually what it is. There is nothing particularly mysterious about design although to watch the antics of some of the "guinea pigs" on Grand Designs and similar programmes I sometimes wonder about the whimsical hand at work. Unfortunately, neither the programmes nor the magazines do anything to clarify the process. Sadly the media do not help by judging all building and architecture by what it looks like! Now I hope that makes you think! Isn't this what architecture is all about? Well no actually, it's only a part of it. Surely good design is about considering as many issues at an early stage and satisfying all the needs of the users. If it looks good, delightful, intriguing, beautiful, elegant (substitute your own description) as a result, then it's even more satisfying. Anyway I am not going to bang on about my prejudices, I merely want to exercise my design and teaching experience to arm you with the skills to design a house more responsive to your needs and, hopefully, a more valuable house.

You will note, as you read on, that there is very little technical stuff in here. There are at least three good British self-build magazines on the market with excellent technical features and costings. They have also spawned some very useful chat rooms for free advice to say nothing of the many trade exhibitions around the country. Please ignore their ready-made house-plans though; they will do you no good at all!

The springboard for these thoughts stems from the fact that as an Architect with 35 years of design and teaching experience, I am constantly disappointed to find, the case studies in the self build home magazines, littered with missed opportunities. There are some notable exceptions of course, but these are few and far between.

It is not my ambition to impose my stylistic judgement on other peoples' taste, or to criticise any lack of perceived architectural merit. I leave this to journalists, and the rising tide of self appointed design pundits. Indeed I really I am not a great apologist for the results of much of the output of even some of the applauded designers of our day. So that's that out of the way!

My thoughts, herein, arise almost entirely from a feeling that house designers have lost the art of asking the right questions, learning from precedent (what's gone before) and seeking out as many sources of inspiration as possible.

Now if that sounds too academic or too abstract I'll say now that I did teach in a school of Architecture and interior design (which despite the rise of the quick-fix TV programmes is not all cushions and MDF) and from day one we implored students to look at precedent and widen their experience by opening their minds to as many ideas

as possible. To some this meant ploughing through architectural journals and magazines, travel, looking at history or exploring what the automotive industry could offer or hopefully all of these things.

Others would flirt with the fine arts or nature for inspiration: some would become absorbed with zero energy, prefabrication or lightweight construction approaches. If diligent, the resulting, all-round student would have the ammunition to tackle, with ensuing experience, any building problem thrown at them! Believe me, there is no “right way” to design. There is no “body of knowledge” and certainly not across the thirty five plus schools of architecture in the country. (Mini secret no1)

That’s the theory and in many cases the practice. Some are more equipped than others (just like Doctors, Solicitors and Accountants no doubt). But because of the nature of the art of Architecture some Architects can get “hung up” on any one of the forgoing and if the client doesn’t ask the appropriate questions early on, he/she might end up with a steel and glass box or a flat-roofed concrete block bunker. Just bear in mind the epithet “Architect designed”!

As it happens most house designs these days have had no architectural input whatsoever. Plan drawers, chartered surveyors, engineers, draughtsmen, architectural technicians have not had true architectural training and therefore will not, cannot, think like an Architect. Good job, you may say, but what I am suggesting is that just because an individual can draw a plan and elevation it does not mean he can design. This is just the problem with computer-aided software. There is no design assistance included, just draughting. The design ideas, inspiration and resolution evolve from your head. (I use “head” here collectively, more of this later).

By approaching self-build and self-design you are embarking on a design course. You will find yourself exploring and questioning every part of your brief (programme, more later), exploring and analysing your garden, site or existing structure and surroundings. As you will discover as you dip in, you will want to look at and research all possibilities for construction method and, to put it simply, your house “style”: how you dress it up.

So, that’s the introduction. I have broken down these thoughts into four parts. The first two are the most important as you should be able to explore these in detail before you approach an Architect. Of course you may well be halfway there already and feel this is just Grandmother and egg sucking! (That’s early 17C apparently)

I append with a glossary of terms, definitions and attempts at demystification of architect speak and jargon. Within the text, I suggest hints, tips, secrets and real architectural devices to increase the value of your build or extension and hopefully you will create something you never believed possible.

Now you may note that earlier I have mentioned value. I believe that by using clues from the site, developing a thorough, interesting and responsive brief, and by creating a house with character, you will increase the value of your efforts. Just consider the houses advertised in Country Life or in the best Estate Agent’s window in town. They always emphasise character. OK some cost £2m but that’s not the point. I discuss this later.

As I mentioned, this approach is just as appropriate for extensions and garden remodelling.

I have split this set of notes into three manageable sections:

1 The Brief or programme

2 The Site

3 Analysis: Your response to the combination of brief and site

As I point out, house design is a three-dimensional exercise and as you get deeper into it, it becomes a holistic (all in one) exercise. However, a manageable and logical process is needed at the outset: hence the three categories. I was going to add several more sections on detailing, and how to decide what the thing looks like, but decided that it would all be rather wordy especially as sketches and images should prevail.

Instead I conclude with an A-Z of thoughts, ideas, prompts and clues. However these will spark up your own, perhaps, more appropriate thoughts. I feel the advantage of the A-Z is that the notes don't, hopefully, become a turgid diatribe of my prejudices. So you can leave the notes beside the loo! or kettle and just dip in and be inspired.

## **The Brief**

Brief this shouldn't be! The Americans call it "the programme", which is nearer the mark to my mind. Essentially the idea is to get down on paper as many thoughts, ideas, wants, needs and must-haves as possible. Your starting point, of course, may be a house in another village, from something seen on TV, or magazine or something that you have seen on holiday. They are all valid starting points, but it's important to test the images against all the other constraints and needs. As I say, I am not a fan of "plan books" as they set down too many constraints at an early stage.

It is true that a full brief cannot be developed in abstract, as you would end up searching for the perfect site that could accept your dream home. In many ways, of course, that's the beauty of design: striving to get the best from the brief and the site with all its inevitable constraints.

Before developing this further, I should point out that I make no mention of budget here as I have to assume that you have carried out some financial planning and recognise that you need £x for the plot, £y for the build and £z for service connections, fees, contingencies etc.

The approach that follows can work for a £10k extension to £500k villa just as easily; indeed as an architect I have used it for both. There are enough very useful magazines and books out there, not to mention the self-build chat rooms to assist you with budgeting issues. Strangely though, there is next to nothing on design approaches and the decision-making process. Frankly, if some of the beginners on Grand Designs are to be believed, no process ever existed!

Now I am a great believer in the use of words as well as images. They are invariably the starting point for architects believe it or not. I am sure some clever dick psychologist would shoot me down in flames for that but I have seen the results of students that were totally stuck with a design project until words are used as prompts. Indeed, were you to approach an architect tomorrow with a budget and a request for a four-bed house design in your back garden, both he and you would start off with words and descriptions to get a feel for how you want to live? At least I hope you both would, some less experienced designers might just reach for the plan drawer for "something I knocked up earlier"! All will be revealed as they say!

Indeed even when a corporate client commissions Lord Foster to design his building, the brief is likely to include adjectives such as important, monumental, green or imposing or the vague "modern". An interesting opening gambit, of course, is when the clients announces that they "want something different". It is essential, therefore, that you explore your first thoughts and get them down on paper, randomly or in lists.

Incidentally the list should include everyone in the family and might well include dislikes. There will be disagreements but here's some thoughts to whet the appetite! Should your home be busy or minimal, cosy and cottage like or imposing and grand, warm and colourful or cool and modern. Even the basics such as townhouse, farmhouse kitchen, open-plan or study conjure up images and start to define moods and aspirations. Now I know that none of these are necessarily mutually exclusive and will become back-up adjectives to images, but the important clue from this starting game is that you will start to be critical as you observe illustrations, articles, other peoples' houses, traditional pubs, modern café/bars, hotel foyers etc. Bear in mind

most people don't get anywhere near what they think they want mainly because they do not develop a critical eye and develop a visual language of what they like and dislike. Some, of course, just don't care!

Incidentally many practicing architects never achieve this for many reasons that are not relevant to these thoughts, but suffice to say that the best architects and designers have developed a philosophy and approach that means that they are armed with the best tools to realise, with you, the house of your dreams. Therefore by following this guide you will be in tune with your architect who in turn can go a long way to fulfilling your design dreams. I hope that that doesn't sound too ambitious. Here is a quote from the "Bricks and Mortar" section of the Times 12:11:04..."Having an architect-designed project will bring added value to your house, no doubt. But the best projects are those in which the client is proactively involved, such as having a good brief, or producing a book of images that they like"

We would encourage our students to do just that. We would ask them to assemble a scrap book of sketches, images, photocopies, references, samples of materials, brochures from suppliers and furniture makers and, of course, their own photographs from their travels. Holiday travel, home and abroad, is vital for interesting ideas on natural lighting, use of a tiny space, a particular type of window or entrance, use of surface materials or planting. Once you start looking you never stop and you may well become very critical of other people's missed or lost opportunities. Train travel is ideal for this, but you need to keep notes on where you have spotted something interesting when travelling at 2 miles a minute!

So encourage all the family members to start a scrapbook of their favourite and, perhaps, least favourite images. You may find it appropriate to keep a common file or dossier but get everyone to collect pictures of garden spaces, plants, windows, doors, porches, entrances, interior views of rooms, workshops, conservatories, kitchens, bathrooms...you name it.

Encourage everyone to question his or her likes or dislikes about an image. Is it too cold, too clumsy, too gloomy, too tidy, too untidy etc? Magazine images, in particular, are manipulated with daylight lamps, friendly dogs and happy babies, but the proportioning of a room, the shape or form of a window seat or an internal view to other rooms with other activities may well be the hook that grabbed you.

Pay particular attention to interesting doorways, types of windows, (inside and outside views) observing seating areas, sill heights, opening type etc. Look especially at the quality and source of natural light in interior views or how a kitchen works (or doesn't). Try to look beyond the glass worktops or four-oven Aga and the clutter of cats. These are all clues!

You should collect images of conversions and extensions to old buildings, often an instant inspiration for "character", taking note of variations in door and ceiling heights. This variety can be the result of differing ages of property but there is no reason why you cannot use such devices in your design.

So, collect images of anything intriguing or downright dull! If you don't want to rip up the sacred Interiors or Gardens Illustrated magazine, take photocopies or note the issue and page number at least. Your architect will love you for all this stuff as he or

she will gain a real insight into your collective character and “style”... there I’ve said it. Architects tend not to use the word “style” as it is only useful to convey buildings of a period, say Regency, Arts and Crafts or suburban semi. Even then it is rarely used amongst architects, but people can have style and possess a desire to convey, consciously or unconsciously a style. Then, of course, one can be stylish...right I’m going to stop digging and its not that relevant anyway, but you visit your architect and tell him or her that you like Arts and Craft or cottage style and they will be right with you.

Be aware that it’s a competitive market with twenty-five plus magazines in this country alone all jostling for your attention. Most are laden with sexy cottages or elegant townhouse-images with various elements of contrivance, but the essential qualities and features should be relatively easy to extract. Just consider what attracted you to the image, detail, or feature in the first place?

At this point I must make a plea for the garden. Do not start designing it, even though that’s probably the last thing on your mind, but again, start selecting good and bad images. The garden, and its relationship to the house, is just as important as the interior layout of the house. That may seem odd as most people appear to end up with their new house in a sea of mud and then start thinking of a lawn and some plants, but as we shall cover later it is far better to consider the house and garden all as one at the design stage. Designing a garden should be just like designing a house. It’s a three dimensional exercise full of needs, wants, desires and uses just as the house, but as you absorb the next few pages you will discover that the two influence each other. The site in particular informs the house, however. (That’s just architect-speak for influence!) Confused? I hope not but more will be revealed later. In the mean time just think of the garden as an extension of your brief making exercise. After all, in summer, you will probably use the garden more than the house so why not give it due consideration and get it right now?

A good way to experience good garden design is to visit local, private ones, that are open for a few days a year under the National Garden for charities scheme. A book is published every year to publicise the scheme (see appendix). At these open days, where, often, modest houses open up to the public, you might find a pleasant planting scheme or the biggest collection of old roses in East Yorkshire, but you may well stumble across a design with an imaginative use of space in a tiny garden or an inspiring use of hard, soft or maintenance-free landscaping. At worst you can consume the tea and cake often provided in the knowledge that it is going to charity!

You will soon start to be critical of others efforts, be they boring gardens, bland or downright ugly elevations, poorly considered entrances (a very common one) or the tarmac dominated front with the two foot high conifer heralding the front door!!

Look around and take photographs of houses, gardens, features and details that appeal to you. It may just be a garden feature, entrance porch or bay window or it may be that the whole approach to the main or side entrance has an appeal.

You will quickly start to build up a dossier of interesting features, facades or use of materials regardless of age of building. If you have identified or have acquired a site or have narrowed down your region, look at the local vernacular. Now, by that I mean the predominant “style” or approach of earlier generations. It is extremely difficult to generalise about this as a particular “language” of construction may have been

associated with a small geographical area and may appear to have no relevance to your project. If, though, you find that you like the some of the local forms, features and use of materials, take notes with photos and, perhaps, sketches, of the essential qualities of the place. I say all this not to perpetuate the past or revive lost crafts but merely as a result of observation that many builders and self-builders are apparently trying to imbue their baby with qualities of the past, perhaps to placate the Planners, but often just don't seem to get it right. I know this touches on very personal issues, in particular "its my money, I'll build what I like" attitude but I want to make a plea for a "let's get it right" campaign rather than the Disney approach! Remember value.

If you are considering a glass and concrete assemblage, then the local characteristics will not help much, at least not on the surface. However, the position of entrances, the wind blown shelterbelts and general state of construction will give clues to local climate and conditions. I have visited a very expensive self-build perched on the side of hill, effectively facing South West, where the owner could not understand why nothing would grow in, his totally unsheltered, garden. His main entrance also opened directly into the teeth of the prevailing wind! Beware the Planners view here, as you may not want your dream home to be in Cotswold style or like a York stone farmhouse which they may insist on, but you can still do what you like inside however.

The planning issue is a tricky one that may seem a whimsical nightmare. It is even more galling to come across some complete abominations in the very part of town or village in which you have been turned down. There is no easy answer to this other than to suggest that a good architect should have the sensibility to work with, rather than against planning guidelines. Unfortunately if you insist, against his advice, that you want a Mediterranean Villa in the heart of the Peak district, then you may experience disappointment.

Continuing on the theme of carrying out a critical appraisal of buildings, you often need to look no further than the local hostelry. Be it the basic public house, lounge, restaurant, hotel reception foyer there will often be some aspect of interest. I am not talking about what it looks like here but about the relationship of the rooms and spaces, particularly how often corridors are used for other purposes, seating arrangements, natural or artificial lighting or internal views and glimpses through internal windows.

Now I am not suggesting that you make your home like the local, though I can imagine some of you might see the attractions, but there is definitely mileage in exploring, in words, and images some of the characteristics of such places. There might be an ingle nook fire, a cosy corner or bay window seat, corner lighting, the view through rooms to the walled garden, varied ceiling heights or fitted furniture. It may be that whilst you have privacy and sufficient quiet to pursue your conversation or thoughts, you are aware of the presence of others. I touch on this later, as too often, it seems to me, the notion of "study" or "home office" is assumed to be a closed cell when, in fact, consideration should be given to some form of, at least, visual connection with home activities. These are all devices that architects from different periods have flirted with.

After all this cosy romantic stuff, you might wonder if there is a place for your minimalist glass and steel cube. Well apart from saying "don't do it, you'll never find

a buyer, it'll rust and cost a lot to heat" I believe that you need to go through exactly the same process of looking and being critical. All the functions of the house need to be addressed just the same, including seating places, lighting, views, surface material and texture, stairs, kitchens, storage and not least heating and privacy. It may not be the cosiest house in the world but then perhaps the words "sculptural" or "industrial" appeared at the top your list! I think that your architect would get even more excited if such descriptive words did top your list, but you would, however, need to visit Japan for inspiration I fear.

It is useful to get to know the actual sizes of the rooms, corridors, workshops and other spaces in which you live. While measuring, check door heights and widths, and window sizes including sill heights. If there is a stair, measure it. How many treads and risers are there? Is there a landing? Measure the headroom at its lowest point and the "footprint" occupied by the stair. "Budding" designers often underestimate the stair volume. Minimum headroom is 2metres.

When measuring, don't forget the corridors and kitchen and bathroom layouts, paying particular attention to storage and kitchen layout efficiency.

Now ask everyone in the family to list the pros and cons of the house or flat and even highlight good and bad points from previous houses. These can range from an inadequate shower, not enough storage, too gloomy in winter, nowhere to do homework, windswept garden, lovely sunny kitchen, and spacious entrance hall to nice view from the breakfast space.

I'm sure that you can think of hundreds of good, bad and indifferent points on a day-by-day, season-by-season basis. Remember also to list the good and bad points of the garden and grounds. I will develop this theme later because, as I have mentioned, a garden's relationship to the house is never given serious enough consideration at the early stages. If I appear to repeat myself I make no apologies as some of this is bound to hit the spot.

Now you should get an enterprising member of the household to build a card model of your current house and garden. This will encourage everyone to understand what a three feet wide corridor looks like, even though you have lived with it. It will assist the understanding of the impact of designing with models for your new house and provoke discussion on how simple changes might improve your present house and garden. Remember day-to-day, week-by-week, Season-by-Season.

You should be well placed to understand the direction and angle of the sun in differing seasons, (a real clue to understanding your new site and its impact on your new home). Ask yourself if the kitchen could be bigger or better planned, with perhaps less cross circulation? Could sill heights have been lower for greater visual connection with the garden or patio? Stand in one of the ground floor rooms and imagine a sill height at say twelve to eighteen inches above floor level, and visualise the change in character of the room. Architects and builders noticed this two hundred years ago but we seem to have lost the art of considering window to room relationships in favour of what industry offers.

On the same theme, consider what one single thing would dramatically improve your present house. (OK a bomb is not on the agenda) Of course as a family you might

collectively think of several do-able things, which might negate the need to move at all. Stranger things have happened.....

From The Independent Property 29:9:04...The story of two single parents and their kids getting together “We decided that, rather than move, we’d extend it to accommodate everybody...the main reason was cost...the children were very much involved with the project...we all sat around the kitchen table with the plans. They were very excited” Please don’t blame me if all your kids want to become architects after this!

I hope that you get a feel for the purpose of a brief now. As it happens no part of the design exercise is isolated from the whole, so further clues about the process will surface from other chapters. In reality, house-design is a whole, but follows a logical process to meet practicalities and needs, otherwise it would probably be nearer to functional sculpture. Ponder on that!

## The Site

To progress you need a site. I know this might appear obvious, but the development of the brief could produce a design, much like the seductive plan books and other “ready-mades” that you see published. I have to say I’m not quite sure who these plans and associated elevations are aimed at, as they appear to be remarkably random assemblages of wasted space and Disney images. Perhaps they are an example of what a computer might spit out in the world of cut and paste, but I’m afraid I cannot see the point. Essentially if you don’t start to ask how you intend to use the house how do you know what you want and what chance has a ready made plan of suiting you. Even less so, how can a ready made plan suit a site with differing views, overlooking and overshadowing and what of the seasonal variations of the sun. No, I’m afraid I just don’t understand. However, the purpose of this chapter is to set you on a logical route through understanding what your site has to offer in the way of benefits and constraints.

In many ways, as in floor planning, the starting point is to leave behind all preconceptions. I visited a site with a potential client a few years ago, and we had barely donned the wellies when he starts waving his arms around saying “oh the seller’s agent says the entrance should be here and the garage there”. Well hang on there, the seller’s agent and what does he know? So I suggested that we “survey” the site objectively, getting down as many facts and knowns as possible before thinking about garage locations. Incidentally, the proposed garage position turned out to be totally inappropriate.

To put this in perspective, a Swedish colleague, a landscape architect, always taught the students this logical process... Survey, analyse and propose. I always liked that and have often applied it to design problems. It does need discipline though as it is very easy to follow gut feelings, instincts and ready made plans, oh! and seller’s agents!

A site needs to be considered factually. That can be everything from existing buildings, structures and plants to proximity of motorways, pig farms and sugar beet factories.

The survey must include the following:

Ultimately a full measured survey of the existing buildings, structures, hard standings etc. is necessary. You would think that this would go without saying but it is too easy, especially on a derelict site, with many summer’s growth, to overlook salvageable brick or stonework. I have seen whole floors of York stone slab, tile work and cobbling shovelled up and skipped before anyone realised what was happening, all with a view to a start with a “clear” site.

It goes without saying that a level survey will be necessary if there is any hint of a slope. With any degree of gradient it will be important to have the information at an early design stage to use to your advantage for semi-basement accommodation etc.

Again this sounds obvious but sloping land can be deceptive and I have seen the results of “assumptions” where substantial sub-floor space was wasted. If for no other reason you will need the information for drainage purposes!

It is important to walk and survey the boundaries for ditches, possible alternative access points and features worthy of retention. The legal aspects of the boundaries do

not concern me here but it obviously worth surveying their qualities and condition, again to forestall the enthusiasms of the site clearance team, which may indeed be you! Although trickier to assess in winter mature hedges are invaluable for aesthetic reasons, to deter unwanted visitors, to provide food for birds, and indeed to provide you with a free boundary! As a rule of thumb it is possible to gauge the age of a hedge by number of species therein. Three of four native species of hedging and it is three or four hundred years old.

Remember that you are merely surveying at this stage, forming no opinions or making assumptions. Think of it as a jigsaw puzzle, rather meaningless until complete! Whilst touching on the subject of greenery it is most important to note and plot as much of the planting as possible. If you know nothing about plants try and enlist the help of someone who does. Winter is always difficult, as everything tends to look the same. Trees should be obvious, though it is amazing how they are overlooked.

I have worked with architecture students who, when presented with a site for a new project, have completely ignored the trees on their survey. This was a simple test of course. Present them with a site plan, send them off to do a survey and draw up the results. Simple you would think. Measure everything that is there and represent it on a plan, at say, 1:200. So the largest object (a mature tree) is completely ignored: It would often be represented by a circle drawn round a penny! Answer: we thought we were “doing” architecture not landscape design! Quite. They never did it again though! Aesthetics and beauty apart, the roots of mature tree will often extend further than the leaf canopy, which has a fairly big impact on the foundations of the new build. Further, the tree may be subject to a tree preservation order in which case you are unlikely to even be allowed to trim back the roots.

The planners take very seriously the advice of the TP officer, and quite rightly. A client of mine bought a small site, before I met him, with a view to building three or four cottage starter-homes. Unfortunately for him there was a one hundred year old oak tree to one end of the site. A thoughtful neighbour made sure it had a TPO. The starter homes became one modest bungalow!

So, without prejudice, measure all planting, height and spread, and try and identify the species. Indeed, if you are taking on a derelict house or demolishing a bland bungalow to make way for your project you may well be halfway to a ready made garden. So map everything before you send in the Caterpillar!

In many ways the physical conditions and activities beyond your site boundary have a greater impact on your proposals. Again, being objective, map all overlooking and overshadowing buildings and trees. It may seem obvious but if viewing the site in winter or spring there may a spectacular view or you believe you are buying a light open site. Come summer and autumn trees in full leaf can be very pleasant but have the potential to block out all the autumn sun. I hope that you do not think that I am listing all these conditions to be negative, although it may seem that way, but I again stress make no assumptions, note the facts. Neighbours trees are beyond your control but your house design is in your hands and awareness of all site conditions at an early stage is vital. Remember that such site constraints can really start to “inform” the house design.

Whilst viewing beyond the boundary take note also of other attacks on the senses. Plainly a pig farm makes its presence felt (or smelt!) and a motorway throws up a fairly continuous drone but some activities may be seasonal or intermittent. The direction of the prevailing wind is worth noting now. Take note of local conditions. In East Yorkshire for example, the prevailing wind comes from the southwest, that is warmer but rain bearing. However, the extremes of the north-easterlies, which bring snow and biting winds, have been ameliorated by the traditional planting of dense woodland shelterbelts to the north and east of farmsteads and cottages. Building in east Yorkshire? Ignore such simply observed facts at your peril!

Neighbours of longstanding, and the local worthies in the pub, should fill in some of your research particularly in respect of local flooding or man made activities. Incidentally it might be worth doing your own researches (rather than relying on solicitors) to assess whether you might be on the route of a proposed high-speed rail link, local rail reopening (a blessing I'd have thought) or a bypass. The Internet is probably the most useful tool for such speculative research!

A comment about services. I am assuming that you will have looked into the availability of all the services for your site before purchase, but at the time of the detailed survey it is important to observe and explore existing cables, pipes, poles and drains that may already be extant. Much like the students and the mature tree, such things can become invisible in the excitement of envisioning your dream home. So add all possible services to your checklist, visible and buried. When working for a builder in Scotland in my youth, a local site agent showed me "how" to water divine with bent fence wire. Now it genuinely worked for him so when I was informed that, on the next site there was a 2'6" diameter sewer, I was confident, nay convinced, that I'd plot that with the aid of my newly found technique. I know you're ahead of me here but suffice to say that the house sits on a "substantial" reinforced concrete slab on top of the ruddy sewer with special dispensation from the authorities! I shudder to think of the cost and the paperwork involved. If that had been in more recent times, I probably would be typing this in jail! So check for existing services with the relevant providers and double check on site where you can. Lesson over!

I have touched on seasonal influences a couple of times, both for house and garden thinking. I am surprised at the number of people who don't know that the sun rises in the east, sets in the west, and is due south at midday. Of course even that's not true as it only rises bang on east on March 22<sup>nd</sup> and Sept 22<sup>nd</sup> and sets bang on west on those dates. Highest point, due south at midday is also slightly compromised by the adjustment of the clocks for British summer time. In summer the sun rises between north and east and sets between west and north.

It is not commonly appreciated either that even in the comparatively short length of the British Isles, the rising and setting times at different latitudes vary. These can be found for strategic points in daily papers as well as the attached website. To crown it all, the further north you go the earlier the sun rises in summer with a correspondingly later setting time. Hence the 24-hour summer days in Northern Scandinavia. Oh! And at midday the sun is higher in the sky the nearer you are to the equator.

I mention all this because, to my mind, too little attention is paid to sun angles, whether for solar gain, overshadowing, spring sun on the breakfast area or for evening bar-b-cues.

I attach a couple of good websites in the appendix for both theoretical and practical predictions of sun angles. These can be used to assess sunrise and set times throughout the year for varying latitudes and for on-site assessment of impact of overshadowing trees, buildings or even hills (!) at differing times of the year.

I looked, with a friend, at a house fit for renovation, in Scotland, that appeared to be on a gentle slope, with a spectacular view to the north. He rented it for some time and had started to make plans when he discovered around mid November that the sun never rose above the hill behind for two months. Apparently the family found it cold and depressing (winter was dreich). That is now easy to predict. Sorry I don't mean winter in Scotland, I mean the fact that the sun would stay below the horizon.

To recap, remember, survey, analyse, and then make your proposals! Gather together as much information, everything that bombards the senses and physical information, and gather together on a large-scale plan or plans (at least 1:100). Practically if the "main" plan is going to show all physical features, including services and contours, it is going to get a bit busy. A separate plan indicating sun angles at different times of the year is preferable.

I feel that I cannot stress enough the importance of carrying out this exercise. It is true that if your site is on a large suburban back garden then some constraints and conditions may not prevail, but others such as access options, privacy or overshadowing may come to the fore. No matter where the site is, a model of the site and surroundings will be invaluable, especially with trees to scale, even in simple outline. This model, apart from helping everyone to visualise the scale of things, can even be useful to predict, albeit crudely, gloomy areas etc at different times of the year. Incidentally, corrugated card is good "throw away" material for models, great for contours if you choose a good scale.

OK enough of the survey; I hope you have caught the drift!

## **Analysis: Brief and Site**

The next consideration is the interpretation of all this information, the analysis. This is where people will start to differ in their priorities and prejudices. Remember you are still not designing anything nor necessarily making any decisions. All this may seem like common sense but believe me without at least some logical process; vital influences as outlined above can easily be overlooked. Remember my mate in Scotland!

Before I continue, it might just be worth taking on board what you have, hopefully collectively, found from your site survey so that as you analyse everything, degrees of priority will make themselves clear. Certain priorities and must-haves will be in your mind from the brief making exercise. Plainly if it is part of the grand plan to grow a certain range of plants or utilise solar energy, then a garden that gets as much sun as possible is important. In other words, beware that mature tree or the neighbour's extension. Of course, by design, your proposal can possibly still satisfy all your demands and still admit maximum light. (Steady, nearly started to design there).

Similarly, if your survey has thrown up some periodic extremes of noise...proximity of the pub car park, lorry-park, commuter rat run or saw mill you may wish to take note and consider design criteria accordingly. Your design can "turn its back" on such irritations. Interestingly everyone in this nimby country seems to get irritated by noise of some sort: church bells do it for some, kids playing on the village green or the local band practicing in the village hall for others. Certain noises are harder to deal with than others, the drone of the bypass or the local military airfield for example, but I am suggesting that you should be aware of all such impact and design accordingly wherever possible.

I touched on the issue of taking wind direction into account earlier. Notwithstanding the desirability of the installation of a wind turbine, the prevailing and the wettest (not always the same) should be observed. The example of shelter, sighted earlier, is an obvious indicator of the worst winds but detailed information for your area should be available from the met office, however local knowledge will be more useful. The effective analysis of such information is, though, largely to taste. The desirability of shelter for defined garden or land can affect the form of the house, if you want it to. You need to be aware that the wind constantly playing on the external walls will create greater heat loss, especially if the masonry is regularly wet. You can design your way out of this, to some degree, as long as you know the local conditions. I talk about this in the "propose" chapter: some thoughts on how to use all the information that you have gleaned.

Have I, at any point, said that this was easy?

Now your survey, hopefully without prejudice, should have highlighted all existing plants, features and structures on the site. You are now at the stage of deciding what, if anything, is worth retaining or reusing. Depending on your location, coastal, hilly, low lying and prone to flooding (local knowledge again, the vendor is unlikely to tell you that the garden is complete marsh in winter) or even very dry; local planting, both in and around your site, can inform future choice of planting. I don't want to get hung up on plants as some of you reading this may well just want gravel, but I always think it's criminal to rip out everything while the digger is on site only to plant more of the

same or completely inappropriate imports, which have a slim chance of survival. So please make sure you identify as much of the existing stuff as you can.

The same goes for on site structures and existing buildings. Many self-builders work hard to build character into their projects yet in some cases have flattened a three hundred year old wall or enjoyed a bonfire of perfectly decent windows. So survey and analyse!

If your survey highlighted a church spire, stand of mature trees, a nearby river or just a bigger view of the sky to the east, then you should capitalise on it. Indeed if there is a good vantage point, you should try and consider the change of vista from a future first or second floor window.

A sloping site inevitably throws down a challenge. It is (obviously!) important to fully understand the impact the slope will have on cost before much else. In this guide I make little comment on cost comparisons. Because of the wide range of influencing factors, which are amply covered in the self-build magazines, there is little point in me throwing in my two-penn'orth worth. However, suffice to say that a sloping site offers fantastic opportunities but will cost more. There's more on this in the design A-Z

I mentioned earlier the need to ignore others' views on garage location, position of house etc. This applies especially to access points. Inevitably this will have been shown on the outline planning approval but it should by no means be final. As long as sight lines, highway matters and proximity of poles and the like are considered you should be able to position your driveway where you wish as part of the overall plan. Remember the person who drew the plan for the outline planning application did not give a monkey's about your garden design, shelter, privacy, views or costs in hard landscaping. He certainly didn't go through the "survey, analyse, propose" logic.

Essentially you are looking for clues from the site and its surroundings. There is no such thing as a perfect site, well not in this country anyway, so there will always be clashes and compromise, both within the family and in consideration of site conditions and constraints. A good architect loves site constraints. It gives him or her some clear starting points, really as outlined above. In a school of architecture the tutors would select and encourage students to find sites that were only six feet wide or between a road and a railway or with some perverse need to be partially underground. This is not out of sheer devilment but to pose questions and create serious difficulties and challenges, both technically and aesthetically.

## **Design A-Z**

I cannot tell you how to design. So far I hope that I have armed you with a load of questions, hints, tips, clues and gentle reminders. Some will have been blindingly obvious but others, hopefully, have planted some seeds. At college, I feel we merely opened doors for students and instilled a questioning process. However I always felt that the school was a microcosm of society, some people relish a challenge while others like to be led! Enough theory.

I have put the design A-Z purely as a large prompt or check list, really to whet the appetite and to assist expansion of the brief (remember that bit?). I hope that you do revisit the brief as a result of the following notes and hopefully things will start to come together. At the end of the A-Z, I put together some further thoughts on “proposing” to keep to the theme. This will all be good ammunition to take to your architect.

## **ARCHITECT**

This is a good place to start. It is not surprising that people are confused by, not only what an architect does, but by the apparent wide range of professionals operating under the title. One cannot practise as an “architect”, in the UK, unless registered with the Architect’s Registration Board. To register, architects will have generally passed five years at a school of architecture and two examinable years in a practice. This has been the norm for many years, the exception being long part-time courses parallel with practise. This may change in the future as a result of EU expansion and differing levels of education. It is not mandatory that, once qualified, he or she join the Royal Institute of British Architects (RIBA) though most join the club.

As mentioned earlier, the course can be very self-determining, particularly in the latter years, students being encouraged to specialise. Five full-time years would seem to be a long time but it may come as a surprise that in that time, house design might never be on the menu.

However, that in itself may not matter as the course is designed to instil in a student the ability to explore, experiment and develop a process for dealing with any design issue. At least that’s the theory!

An architectural technician, contrary to common belief, has shared no design aspects of the architect’s course. The technician course is a four year part-time course dealing, as the name implies, with all things technical: construction, thermal and sound insulation, some structural considerations, materials etc., all very useful and a vital adjunct to the architectural team. They are now likely to be a whiz at computer aided drafting whereas some older architects are not. Incidentally, a new breed has joined the team under the title of architectural technologist. Sorry, he or she is still not an architect. The course is a three year full time one specialising in, er, technology and does not have a large design-thinking content.

An architectural assistant is generally an unqualified architect: someone who, for whatever reason, has not completed the post-graduate course.

Other professionals who offer design services are structural engineers and surveyors, chartered or otherwise and the yellow pages and free local papers usually carry adverts for plan drawing services and architectural services. These will not involve

architects or they would say so. They are more likely to be a part-qualified mix of the above, no doubt with oodles of experience, but without the benefit of those five years education.

Incidentally, I came through the technician route before studying architecture and I think I was a good techy, but I thought I knew it all. I believed I could design anything, but just because you know how buildings go together, it does not make you a designer.

### **ARTS AND CRAFTS**

In my view Arts and Crafts influences on design provide some of the best sources of inspiration around. The movement in the UK, from say the 1850s to early 20<sup>th</sup> century, influenced important German and American architects of the time as well as much of our suburban housing up to the second world war. Believe it or not, unknowingly, many of our current house developers still embrace elements of Arts and Crafts, albeit stripped down. If you get a chance, look at some of the books mentioned in the list at the end and make up your own minds. In particular the openness of the layouts is worth exploring, both for flexibility and the use of natural light. The response to the landscape and use of materials and devices is also worth a look. I am not suggesting of course that we should all rush off and build 1930s semis but it is rewarding for the reasons mentioned above to at least see the relatively short evolution.

### **BUBBLE DIAGRAM**

Designers work from many starting points and I've mentioned the use of words and descriptions as a means of beginning to describe and visualise a house, garden or any object. However, there comes a point when some decisions need to be made, and as I've mentioned elsewhere, the location of the main entrance is probably the most important place to start. Inevitably a location need only appear on a site drawing as a point or a cross but why not show a space as, surely, if you have followed other threads, the entrance will involve a decent size space which will, of course, relate to other spaces; hence a quick circular scribble appears as a bubble ultimately relating to other bubbles. Congratulations you are starting to dip your toe into the design.

Some people find the bubble concept difficult and misleading but it is only an organisational tool to graphically marshal your thoughts. Nothing is set in stone but as you should now be carrying lots of, possibly conflicting, information from brief to climate in your head, it frees things up to make some positive marks on paper.

If you enjoy it and discussions are provoked, then you will probably produce many; but throw nothing away. Often some early ideas contain the seeds of the appropriate or even ideal solution to some part of the project. Of course, this may be the point that you just want to list all your discoveries and hand it all over to your architect. No matter, you will still have covered a lot of ground.

### **CEILING HEIGHTS**

The character of an older house often is enhanced by the various ceiling heights, and resultant window and door heights, which have "happened" through time with extensions and alterations. However there is no reason why this quality cannot be designed. It can be a result of the hierarchy of spaces, small rooms and corridors to the main rooms or just the result of small annexes, porches and bay windows. I

suggest this as something to be aware of as your house design is a three dimensional exercise. Hence architects often play with double height spaces to create drama as well as a real feeling of space and light.

### **CHARACTER**

You'll have notice the word "character" creeps into a number of descriptions and as a theme for hints and tips. Tell your architect, at the outset, that you don't want the house or extension to have character! I bet you don't. It is a word used to describe much of our built environment. The village has character, that church has character, and, of course, their house has so much character, a true compliment of course and a guarantee of true value.

A car does not have character to my mind! Discuss in 3000 words and sketches!  
Buried in my dictionary definition is this..."the aggregate of peculiar qualities which constitutes personal or national individuality": "peculiar" in this context means specific to yourself, not weird! Mind you one person's weird is another is another person's delight!

### **CLASSICAL and NEO-CLASSICAL**

These terms loosely refer to buildings that are designed using design ideas borrowed from ancient Greece and Rome and all the many variants since. In the British Isles people built classical houses to show off their wealth, status and assumed knowledge. People still build such houses for the same reason. For some, a modern classical peace may provide the perfect solution, but for most the end result may have an imposing, well-proportioned façade with echoes of the eighteenth century, but with the remainder of the house (back) shoehorned in to suit the "face".

If I appear a little cynical it is because I believe that the opposite, responsive or organic, (c.f.) is by far the more appropriate way to design. If your scrapbook is full of classical facades, columns and pediments and I am your architect I will gently try and dissuade you.

Neo-classical merely refers to the fashion-led periods of revival in the UK, which largely lead to the likes of Edinburgh new town and the Spa towns: all very elegant but not appropriate now.

### **CORRIDORS and CIRCULATION**

"Keep passages short. Make them as much like rooms as possible, with furniture, bookshelves and beautiful windows." Chris Alexander, A pattern Language.  
Conjures up interesting images, doesn't it? It is possible to design a house without any circulation (corridors) at all whereby rooms flow into each other or across internal courtyards, but where corridors are desirable the above advice is worth taking on board.

Such spaces can double as your art or postcard gallery, CD or book/magazine library or, especially if naturally lit, a small homework or workspace. The window to such a corridor, especially if on the first floor, may be the first or last place to get the sun, and therefore be much sort after. You could even create a bay or oriel (floating first floor bay) window for just such a purpose. (The benefits of predicting where the sun rises and sets).

If natural side lighting is not possible, consider the possibility of creating a pool of natural light at one or both ends. The effect of these is to animate the corridor and its other activities.

## **DELIGHT**

Now here's a word that you don't often hear in relation to houses unless you are visiting the landscaped gardens of some stately home or Hall. Yet it could equally be applied to many of the modest gardens in the open garden scheme mentioned elsewhere. The clue really is to do with the setting and the relationship of a house with its surroundings. This is very much an Arts and Craft tenet. Incidentally, the editor of the *Architectural Review* contributes a page every month entitled "delight". Generally the subject matter is an intriguing piece of design with special attention to detail, use of materials or of special lighting quality. So all is not dead in the professional world. I consider that delight should top every page of your scribbles and notes: a noble ambition?

## **DETAILS**

I suppose there are two important aspects to details and detailing. The obvious one, in its simplest sense, is to make sure that all materials join in a way that keeps the heat in and the weather out. Sounds obvious, but it's just that basic area that gets builders, and architects, a bad name. You may be surprised to learn that virtually everyone in the industry learns on the job.

Basic construction is still taught, but who builds, these days, using basic construction? Any kind of innovation, or whatever its opposite is, is generally forced on a labour force that know what they know and then adapt with varying degrees of success. In the industry, layers of checking and on-site questioning, tends resolve most detailing problems. That is, client changes notwithstanding, precisely why building costs go through the roof; the contractor knows that every detail has not been thought through. Commercial architecture is a fashion led, innovative game.

So, as a self-builder, you are confronting just these problems. Therefore my advice is to design out (or have designed out) the problems as early as possible and, above all else, try and avoid changing your mind!

As mentioned before, building design, architecture if you wish, is a three-dimensional exercise, so you need to treat all constructional details as that. If you cannot think and sketch in 3D, buy someone that can. It will pay back ten fold in easing the construction, keeping the rain out, save you money and possibly create delight in the process.

Plainly, the more innovative your building, exposed steel, timber cladding, complex roofs, changes in level etc, the better the detailing must be.

I cannot over estimate this. The number of times I see bodged "joinings" and clumsy junctions is staggering, even on commercial buildings. I agree there are many good tradesmen out there but the big issue often is where one trade meets another; that's as much a good architect's bread and butter as resolving your complex brief and getting planning permission.

The other, equally important, aspect of detailing is, as hinted, the "joinings".

These details can often be overlooked as a result of client or site changes but sometimes purely as a result of insufficient consideration at the outset.

The best way to avoid the real clangers is to draw out all the internal elevations (and ceilings). That way you end up forcing yourself to think about internal corners, changes of plane and material, or how to disguise the pipe box. Sure as eggs are eggs, there will always be an awkwardly placed pipe-box.

Now, over and above true constructional details, there is the issue of design details.

This does demand its own chapter, but I believe it is such a complex area the subject is best left to debate with your architect. Essentially it is about “getting details right”. That is detailing your house in an appropriate manner to suit your chosen “style”. Suffice to say that this is an area of true potential value.

## **DOORS**

These should be considered both at the planning stage and detail stage. When planning, consider pairs of doors that can fold back 180 degrees to create an unobstructed opening or folding screens. Try and make doors as wide as possible and as high as possible. I know we are governed by the standard 6’6’’ x 2’6’’ that we are offered by the industry but I believe they are too important an element in a room or series of rooms to be left to B+Q. Taller and wider doors seriously change the character of a room. Just consider the room that you are in now with a door as high as the ceiling and three feet wide. Glazed doors inevitably make a difference to the feel of a room or corridor providing the opportunity for vistas to a distant courtyard, activity or sunny spot.

## **COURTYARD**

Architects in the Western world have explored the idea of courtyards since the early part of the twentieth century. However, they have never really caught the imagination. They were possibly seen as a waste of space and were often considered to be too small and dreary for the British climate! There is, of course, a long history of courtyard use in hotter climes, as a means of creating, in combination with running water, a cooling presence as well as a special indoor/outdoor evening space, rather as the way the English use conservatories. I believe, depending on site conditions, there is scope for a courtyard revival or at least consideration of an internal glazed space that can act as internal conservatory, play space, circulation as well as a climate modifier and growing space. On a small site, with limited scope for privacy, an internal courtyard could be created by building closer to the boundaries. This can make far better use of the limited plot by doing away with strips of useless land along the site boundary. This, of course, requires careful design, consideration for neighbours, planners’ views, buildability and maintenance etc. and you will not find such an idea in plan books! I believe that with Britain’s changing climate, courtyards and internal open spaces will make a positive contribution to use of the home, improve security and create interesting lighting and ventilation possibilities. Please refer to my thoughts on transparency for further considerations! Of course, it may be that your site dictates that the remaining outdoor space, as a result of extension to an existing building or conversion, leaves you with only scope for some form of courtyard. Capitalise on the opportunity, you can realise some really useful space.

## **DRAUGHT LOBBY**

When you consider all the activities and transactions that are involved at the main entrance-not necessarily the front however-it amazes me that builders and self-

builders don't put the minimum of a second door to create a draught-lobby to keep the heat in. After all, now that we have considerably stricter thermal insulation regulations, heat loss by ventilation and air change constitutes an ever-increasing percentage and creation of draughts. A quick check on plans published in the self-build magazines will reveal that this is yet another area that is given insufficient consideration. I don't know why this is, whether it's ignorance, lack of attention to detail, reluctance to give up space or based on the assumption that we still have cheap energy, but if you do the sums, as surely that is the only way to test it, the results prove that ventilation, though vital in some form, is the biggest waste of heat. The main entrance door, with its activities, rituals and habits is the villain.

So whilst considering my thoughts described in the entrance area section, consider how you might reduce draughts and heat loss at the same time. See Entrance room and circulation.

### **EDWARDIAN**

This is a relatively short period (1901-1910), compared with the Victorian era when much changed. It is impossible to generalise because of regional variations but innovations in glass making (bigger sheets) and a maturing of the Arts and Craft movement tends to make houses of this period stand out.

### **ELEVATION**

Great play is made, even by architects, of the characteristics (or not) of a house's elevation, particularly to the street. You'll notice, in the self build magazines, that a plan idea or range of solutions is accompanied by a, seemingly, random elevation. Similarly newspaper articles about houses or public architecture nearly always concentrate on the elevation. This is completely the wrong way to consider and appreciate architecture.

Buildings are three-dimensional and complex objects, and hollow to boot, so what is our obsession with the front? I pose this question not so much as a grouse but as a prompt to keep an open mind when gathering together your thoughts and ideas.

I agree that there are many fine houses out there that present a magnificently well-proportioned face to the street. I would suggest, however, that this is the result of the hand of a good architect and based on the resolution of a suitable plan. As I say house is a three dimensional issue.

### **ENFILADE**

I am not trying to be clever here. This is a dictionary definition for a row of rooms where the doors are in line, effectively creating a route through the rooms.

Although this is most likely to apply to public or family rooms, your site may well dictate just such a solution; perhaps the general living space through dining, kitchen then utility, hobby, workshop or home office. Don't necessarily think that cellular rooms are the only answer. Even if the site does not demand a thin narrow building, think of the possibilities: views to a garden or courtyard and beyond, variations of light, visual or sound contact with others, as desired, (you can always close the doors). Indeed, consider the fragrances drifting through from the evening courtyard flowers, in summer or the early preparations for scones, toast or coffee! Am I being too romantic here? I'm just conjuring a word-picture. Keep practising that for your brief making and scrapbook.

So that's enfilade. You won't find many in the glossies or examples to copy, so start from scratch, you never know a long narrow house might just suit.

### **ENTRANCE**

How often have you visited houses where the front door is never used? Our lifestyles have changed so much that the notion of a formal entrance is rather lost. By design the main entrance can double as the back door and form the working entrance. Consider at the brief-making stage all the hourly, daily and weekly activities and transactions that take place at the entrance. You will compile a long list of things and events to accommodate. Every family member will have different priorities, no doubt, but I believe that getting the working entrance area right based on brief and site conditions is a key starting point to your design. Consider, for example, storage (coats, hats, umbrellas, dog-leads, skateboards!), perhaps a convenient toilet, relationship to kitchen, observation, proximity to immediate garden activities like BBQ area, herb growing, kids play, car parking, bins and recycling, and visibility from the garden gate to name but a few points. As mentioned in the introduction, analyse your current and previous houses for good and bad aspects.

“Placing the main entrance is perhaps the single most important step you take during the evolution of the building plan” from A Pattern Language by Chris Alexander and others. But of course, as Naomi Cleaver says in the Telegraph property section 25:9:04 “There's nothing like making an entrance...it should say, “you have arrived””

See also Threshold, Transparency, The Car, Corridor/Circulation and Draught lobby.

### **EXISTING PLANTING**

This is just a reminder of a point I made elsewhere with a view to taking stock and a detailed survey of the qualities and characteristics of existing plants.

Apart from the obvious advantage of gaining a head start with groups or individual mature plants, shrubs and trees, the existing situation can give you, or a good horticulturalist, real clues to soil condition, prevailing climate, indigenous species etc.

### **FLEXIBILITY**

I know the statistics suggest that people move home approximately every seven years but it may not be on your agenda to ever leave your dream home, and I bet those statistics don't apply to self-builds anyway. The point here is that, at the brief-making stage, specifically consider, in work and family terms, how things might change. Consider the possibilities of a parent or elderly relation moving in long term or for life! That could involve wider doors and level thresholds or perhaps consideration for a future, self-contained annex.

Similarly, sons and daughters, with all their associated hobbies and mates, are tending to return after higher education if they ever leave at all. So that may indeed be the self-contained annex before granny needs it. I'm only planting seeds here again. It's cheaper to get it right in the first place, having considered it at an early stage, rather wheeling in the builders again two years after completion.

Working from home, whether full or part-time is very much on the increase; so maybe that's another annex! See notes on “home working and office space” later.

This notion might lead to deliberate phasing of the design for expansion of family or needs. To that end your brief for the architect might suggest that you want the end

result to look as though it was always intended, rather than a clutter of extensions and add-ons. The opposite may well prevail so that expansion may take the form of rather more temporary, removable structures. Undoubtedly there is much to consider but it is certain change will take place.

### **GARAGE AND THE CAR**

Look around at the newer suburban and rural villas, in plan books, and at the self-build magazines and count how many are proportionally, aesthetically and practically ruined by the impact of a double garage built into the house along with the associated tarmac and additional parking that completely dominates the front garden. I do not believe that the owners of such awkward structures really want that. I agree that if you are very tight for land and, of course, must have a tarmac front garden, then I will say no more. I just feel that with better consideration, a garage can be far more subservient to the house, more like the traditional coach house, for really that is all it is. And if you design the house properly, the garage will not need to full of “stuff” that should be in the utility room, workshop, hobby room or skip!

### **GEORGIAN**

Architecturally this is a period, the English Renaissance from 1550-1750, though the “Georges” ruled from the early 18<sup>th</sup> century to the early 19<sup>th</sup>. The whole period was a one of constant development and battles of the “styles”, Gothic v Classical. I put this into the A-Z really, along with the other relatively vague Royal periods, to caution you against using such general terms. They will undoubtedly conjure up different images between architects, builders, planners, neighbours etc even before you get down to the nitty-gritty of entrance porticos, glazing bars and quoins.

### **GIMMICKS**

We are surrounded by people trying to sell us more stuff, most of which we don't really need. (You are getting this free, so I can say that). In terms of self-build I am really referring to the need to beware of fashion statements. These can range from glass-topped worktops in the kitchen to the rash of recessed down-lighters peppering every ceiling. Apart from the quality of the light, which is more akin to BHS, they are often a pig to maintain. No, this is mere gimmickry. Glass blocks and exposed steel framing are also expensive gimmicks (the latter a recipe for rust) to say nothing of glass staircases and balustrades. And please beware of stairs without handrails. Architects love these; they look very clean and crisp in the photos, but I'd be interested in the statistics for accidents on such heroic sculptures. No, leave all that stuff to the commercial boys who can afford the high-cost fit-outs.

### **IN KEEPING**

This is very tricky. It is exclusively a planning expression that has rather fallen into sloppy realms of everyday speak. The planning officer will certainly use the expression. As an architect I find the expression meaningless and unhelpful, especially as there are many more accurate adjectives and terms that could be put to use. All I can really say is that if you go through the processes discussed here and employ a good architect then you should go a long way to avoiding the need for the expression.

### **INSPIRATION**

I put this into the A-Z because, although it might seem obvious, inspiration is the great motivator to build, improve or extend. OK you may need to move because of

work, schools, family change etc., but most people build because they are dissatisfied with their house. Frankly, we are bombarded with articles, magazines, TV programmes and adverts apparently all conspiring to make us unhappy with our lot, envious and “inspired” to change and “improve”. If you and your family can avoid all this media hype and gimmickry, then well done. You are either satisfied with your lot, have found your paradise or have no spare funds! (Even then there’s a lot you can do). However, hype or no hype, you are going to need as much inspiration as possible, hence this pack, associated reading and later imagery and examples. (That will take me far more time than available at present, but you can do a lot yourself). As I say, do the spade and leg work before the architect’s clock starts ticking!

### **INTERNAL WINDOWS**

This theme could well partner with other clues and hints, especially transparency. You see design really is all one! Generally, the only time you see these, is associated with substantial extensions, particularly remodelling of pubs. But I feel that, without the scope for room-to-room glimpses or shafts of afternoon sunlight, the character of a room is diminished.

I am not suggesting that you should think of your house plan like a colander with perforations to every wall, but just give consideration to light, views and contact with other parts of the house. A particularly good example would be between a stairwell and, say, dining room, kitchen, workspace etc. This simple device can really open up an apparently closed, cellular home.

### **KITCHEN**

I have included this in the A-Z because it can be the room, depending on your current and future lifestyles, which will act as the hub of the house. Bear in mind the isolated kitchen is a hangover of servant days! This should surface at the brief-making stage, but I include a few thoughts here as prompts.

If the kitchen is to be the hub, then be prepared to spend time making lists of activities and gathering together images from books and magazines. I would say that the magazines exploit kitchen image and design more than any other part of the house. The self-build magazines have published complete houses for the cost of some of the more ambitious and showy kitchen fit-outs that I have come across. At the end of the day the space that you are providing for the kitchen is the same cost as the rest of the house per square foot. It’s the sexy (and it has to be said, not very green) Aga and glass topped units that blow the budget.

As I mention elsewhere, and I make no apology for repetition, a family kitchen can be a 24-hour place. It should have a dedicated breakfast place, ideally in a naturally lit corner or bay, at least one workspace, out of the way but still visual contact and perhaps a safe toddler play space should that be appropriate  
Consider the following as you make lists

Avoid putting the sink under the main window, which should be French windows leading to an intimate patio. Few people stand at sinks these days and if you are washing up you cannot look out anyway.

Consider one full height wall of, say, 300mm deep cupboards instead of the dreadful clutter of wall units that always seem to prevail. Just consider at how clumsy even the

glossiest of kitchen ads looks with all manner of units filling in odd corners. Once you have made the decision to rid yourself of wall units the kitchen can come alive again as a living room.

Consider a dedicated utility for all the electronic bits and bobs that are only used a couple of times a year. Think how often you use the bread maker, ice cream maker, juicer, mixer, etc. I realise many of these gadgets are designed to look sexy but their presence does reduce your worktop space. Again by banishing such bits of kit, the real kitchen is visible.

Consider a window on more than one wall. Depending on priorities and how your plan unfolds, a window should ideally overlook the main entrance or play area.

As mentioned above and elsewhere, consider a dedicated breakfast area, perhaps with built in furniture, in a bay window that has a view of the garden and is warmed by the rising sun. This area might double as a homework or hobby area out of the way of the rest of the activities. Aging relatives can park themselves there, out of the way of the business of food preparation! I'm sure you can add loads to the list.

### **MEANNESS**

I don't intend this to be insulting, although on visits to people's houses I have almost certainly insulted them, but I do feel that many people, including self-builders, developers and volume house-builders suffer from a form of meanness. Almost exclusively this relates to windows, front doors, stairwells and storage. Now I know you are going to say, "well you cannot have everything", and indeed I cannot wave a magic wand, even as an architect, but the industry appears to be lead exclusively by the builders merchants and window makers!

Just look around at the latest, ill-proportioned estate that has landed in your area. Who, if anyone, decided that the windows should be so small and the front door utilises a paving slab as the step? For goodness sake, is this what we have come to? OK we are in an energy crisis, that can only get worse, but I'll bet none of these houses have draught lobbies at the main door or controlled ventilation or anything more than basic insulation, because of the English love affair with brick, and the control of suppliers and merchants.

Rant over! But remember, the choice is yours. If you want a lot of glass, your architect can make that stack up. If you want to save energy in the long term, your architect can make that work for you as well. At this stage I do not wish to get into payback periods, but remember you'll probably be ripping out those plastic windows in fifteen years time. You try and work out the payback for your replacements!

It is, very much, a question of deciding what you would like, what you desire, via you brief, and gaining value from your decisions. A good architect will prove invaluable.

### **OUTDOOR ROOMS**

Garden and courtyard thoughts, at such an early stage, might seem irrelevant while you are still considering the size of the kitchen. But, as I point out in the garden design section, the relationship of garden to house is as important as bedroom to ensuite.

A garden room, a term usually reserved for the Sunday supplement gardening articles, is really any space that contains a specific activity or two. I would qualify that by suggesting that if it is just a place to admire or on which to reflect, then so be it, it will fall into the “garden room” camp! Now, garden and landscape designers may disagree and sight examples from around the globe that don’t, in any way, conform to this. I am trying to simplify the process without getting all intellectual.

Think of the space surrounding your proposed house as a series of bubbles, just as the relationship of rooms starts off as bubbles. Your brief, if thorough, should throw up loads of potential uses and conflicts. Sure, after your house is built in its sea of mud and rubble, you can approach the garden, but I believe you will have missed a trick in not considering the garden as an extension to the living space, hence “garden rooms”.

If, apparently like many people, you fancy a sea of grass or fake cobbles, I will do my best to dissuade you and, as a last resort point out that, like using plastic windows, you are not building in value! Otherwise, why would we have all the gardening and makeover programmes and record attendances at the Chelsea flower show?

### **ORIENTATION**

I mention this in the opening sections mainly to remind you to ascertain south (sun at midday in Winter, 1pm in summer). The impact of seasonal rising and setting of the sun can then be established.

### **PROPORTION**

This is not a term that you will hear outside an architect’s office. It is a subject that is probably best left to the architect to surprise you. For most designers proportion is a feeling. Some classicists (see earlier) will vehemently suggest that windows are ill proportioned, particularly if you have decided to build a replica country house. In that case, build a replica country house, but get it right. Use a good classicist architect; they do exist. Most people (including house builders and poor architects) try to make it up. There is enough documentary evidence published to create something that only a true historian will see through.

As an aside, the Georgian classicists were never consistent about proportioning, continually re proportioning windows and glazing bar sizes. (See meanness, however).

I feel that the subject of proportioning is best left in the hands of a good architect, however I encourage you to exercise your own judgement (for no-one can argue with that) whilst building up your visual brief. If you think something is ugly, try and work out why, likewise what constitutes delight?

### **MODERNISM**

A term that will more likely crop up on the Grand Designs type of programme to describe a house that attempts to display modernist credentials such as having a free-flowing plan, lots of glass, a flat roof and which will probably be white! Not to be confused with “modern”, which by and large means anything that either (a) doesn’t look like anything that’s gone before (sometimes erroneously dubbed “futuristic”) or (b) is full of gimmicks.

## **REGENCY**

This is a period of around ten years, (1811-1820 when the Prince of Wales was Prince Regent) which was for many the high-point of late Georgian architecture. It is best not to concern us here other than to point out that you will hear it closely coupled with the word “elegant” because of the very fine detailing of features that had been perfected by then, such as glazing bars and canopies. I can no doubt recommend a book if you wish to explore elegant housing (I don’t expect the world to agree, of course)

## **REPOSE**

This is not a word that I, until recently, ever used to describe buildings, and yet, it seems a very appropriate word that sums up most peoples’ ambition. Yes yes, there are many examples in the architectural world, where the exact opposite seems to prevail; just as in the world of classical music there are composers who thrive on dissonance (rather the opposite of harmony).

I quote from Arthur Martin’s “The Small House, its architecture and surroundings” of 1909...” The first consideration in all house design is the site; and the architect who draws the plan should also have the garden “laying” out. Of course, if it is a case of an existing site and garden, the architect must accept the limitations thus imposed, for at all costs the house and garden must be one design, each incomplete without the other. There are instances where the setting spoils the general effect. (Just look in the estate agent’s window and have a laugh at other’s expense, that’s my interjection!). The house, perhaps, most often overpowers the rest by dint of self-assertion, but in many cases it is the garden, with its terraces and spreading lawns, that make a house appear both mean and ugly, which in another setting would look quite comfortably picturesque. The real essential therefore in designing house and garden is repose and peace between the building and the garden”.

My excellent Chambers dictionary defines repose as calm, ease of manner, restful feeling or effect, being at one...sort of cool in today’s parlance.

Of course, if you don’t want to be cool and at one with your surroundings, then join the dissonance set! You will win some friends. One man’s meat etc etc.

## **RESPONSIVE DESIGN**

Somewhat apropos of repose, responsive design is as the name implies a design the responds and is fed by the local situation. It is a design that does not fight against site, locale and climate and maintains a large slice of repose. It has been a strand of architectural thinking for more than one hundred years but has had little impact in the UK, tending to never be in fashion (as if that mattered). It is almost certainly beyond most builders and therefore more expensive. If you are at all interested in architectural theory, the term is interchangeable with the word “organic”. This, as we know, applies to food, cotton, chemicals etc but in terms of buildings the approach refers to an approach allowing the planning and form to respond to brief, site and location.

This, strangely enough, is what I am trying to convey.

Responsive/organic design is undoubtedly harder to do, there being no ready-made clichés or images that a designer can fall back on. It may be just right for you!

## **SCALE**

I think that a feeling for scale is something that comes to you, as you look more and more at what works for you in houses and buildings. It does come from developing a

critical eye. You may already have an innate feeling for the right scale, but it does mature through looking.

I recall visiting, for business purposes, a private country house, a seventeenth century hall, and the millionaire owner had employed an interior designer to “put it right”. Everything from lighting and fireplaces to furniture looked exactly right: some modern and some of the period. But then it dawned on me that the reason it did look right was because the scale of the fittings and furniture was bang on. She was a good interior designer. All became crystal clear when I looked at the previous agent’s sales blurb which showed photographs of the former owner’s furnishings; it was full of suburban house stuff and was just plain inappropriate and wrong. I’m always learning!

## **SEASONS**

If you are reading these notes back to front in bite-size bits, then this is reminder of the bit on seasons in site analysis. We take the seasons for granted and, apart from the comment that “the nights are drawing in”, I think that most people never consider the differing sunrise/set times and sun angle at midday. I can provide you with an excellent predictor programme, which will show where you are likely to get shadows, or no sun at all. Observation is the best method but you probably will not have the luxury of a year keeping a daily diary.

The site that looks open and sunny in spring may be rather sunless for much of a summer evening owing to next door’s copper beech. I have no wish to appear negative but it is very helpful to arm yourself with such observations and analysis and design your way out of it. There, apologies if you are reading from the beginning. No harm in repetition is there?

## **SILL HEIGHTS**

It really does depress me to see to see such miserable windows in modern housing. Sometimes that includes published self-builds sadly. Getting the windows right is an art. As a designer, I reckon that I have a feeling for the right proportion of a window, more for the room than the outside look. However, I respect anyone who says they feel it should be different, most importantly if its been considered. What bugs me is the apparent industry lead range of windows. I know this can be a cost driven thing but it vital for a house’s character to try to get it right.

To that end, I reiterate the simple experiment outlined earlier. Stand in your living room, bedroom or dining room and visualise the window with a sill twelve inches above the floor. Consider the feeling of connectedness with the garden. Similarly consider the same windows with the sill two feet higher. I hope you see what I’m getting at. Likewise in the kitchen, I would always recommend that you try a layout without the sink, or any worktop, under the window. I hope you agree that it’s an interesting experiment!

## **STAIRCASE**

Christopher Alexander in A Pattern Language suggests “ A staircase is not just a way of getting from one floor to another. The stair is itself, a volume, a part of the building; and unless this space is made to live, it will be a dead spot....”

It is true that beginners and novices do tend to underestimate the spatial needs of a stair, especially if the total rise is bigger than normal. But it is also true that the stair

should land in an important position, perhaps near or visible to the entrance area. This, it seems to me, helps to amplify my thoughts on transparency, as while it may not be convenient or desirable to start the stair in the entrance hall, at least visibility may be achievable. Architects, since the advent of Modernism, have played with stair construction and geometry, attempting ever more daring minimalism and spareness. However, I feel that, as Alexander suggests, it is rather more important to get the volume and starting points right.

## **STORAGE**

I have added this in the A-Z more as a reminder for design consideration. When you are designing your dream home it is worth getting it right. If you are embarking on self-build with a view to selling, I guarantee serious storage consideration will lift the value. I don't have statistics on this, if you were to believe them anyway, but I think that the design and provision of considered storage increases the value in the same way that a generous kitchen or sexy bathroom can.

This does refer to other threads. Consider all the kitchen paraphernalia that gets amassed and should be stored for its occasional use in a utility room or shelved cupboard. I know that this becomes a personal issue but my pet hate is the clutter of wall units that always seem to shrink a kitchen. To be honest I never find them very practical anyway. Consider also the revival of a walk in larder!

OK I am being provocative, but I suggest that kitchen storage should be considered at brief making stage.

I would like to champion the notion of built-in storage, for example, in corridors and circulation areas (c.f.). These can be used for display and can plumbing ducts or wiring for lighting as well as enliven what might otherwise be a mere corridor. So, get list making at brief creation stage.

## **STYLE**

I put this in as much to clarify how architects and professional designers might use the word. Style and stylish, to my mind, are words that do not really convey your thoughts to an architect or anyone else for that matter. You announce that you are going to build something with "style" and that will conjure up twenty different images with twenty different people. Georgian style, cottage style or modern style helps not one jot: mainly because the expressions cover such a vast time span. Similarly "modern" will mean something pretty different whomever you talk to; so hence my encouragement to gather images and descriptions. Of course, you could well end up in front of a planning officer who may announce that your proposal is not of a style that is "in keeping".

## **THERMAL MASS**

This falls slightly into the technical category that I vowed I would not touch, but as the energy saving lobby, rightly, prevails, it is worth being aware of the idea. In a nutshell, it is like comparing a house to an AGA cooker, which takes hours, because it weighs several hundredweight, to reach working temperature and likewise to cool down. Similarly traditional houses in sunny climes are built with thick walls (and small windows) to counteract the high air temperature and sun's rays. The walls take a long time to heat up and start to cool down, at the same rate, before the heat has reached the interior. Thus a caravan in the desert will quickly reach 50+ degrees but, importantly, not hold the heat for the cool of the night.

I mention all this because, by design, it is possible to use this principle, to advantage, in evening out the vagaries of the British climate. I am not suggesting you rush to build-in such thinking as it will add to build cost, and will only suit certain locations, but if your ambition is to reduce your heating season down to a perfectly possible 4-6 weeks, then thermal mass, along with good insulation, will be part of the equation.

### **TRANSPARENCY**

Transparency in a house is more about the subtlety of gaining glimpses of other spaces, activities and/or daylight by design. At the least it means the consideration of internal windows giving daylight and views to internal corridors, stairwells or rooms. Bear in mind that we have noted that the character of a room can be enlivened by the play of light from different directions with all the associated shafts of sunlight, dappling and reflections.

Particularly at an entrance, a house can be much more intriguing if you can glimpse say someone practicing a piano in another room or children playing in a sunny back garden. The unusual, though often successful, internal courtyard is a particularly successful example of the possibilities of transparency. The best house designers play with these ideas, as they are always thinking of the house as a three-dimensional object rather than an extruded plan.

### **THRESHOLD**

My trusty Chambers dictionary defines this as “the sill of a house door; the place or point of entering; the outset...”

I think that the key phrase there is “the place of entering” because from the garden gate to just inside the door is the threshold. This is the place of ritual: the welcomes and farewells along with all the other friends, neighbours and business transactions. So therefore I consider that much consideration should be paid, at the design stage, to the garden gate to door “place”.

The most important, unless you are a hermit, is that the entrance should be obvious, but that does not mean that it should be at the front. Indeed side entrances are often more practical. (See Entrance thread) This is where your scrapbook will come into its own as much, I suspect, to highlight to your architect what you don't want. Just look at some of the recent self-build magazines for some appalling efforts.

I favour an idea, observed by Christopher Alexander in *A pattern Language*, of creating an entrance room (touched on elsewhere), which might be half in and half out of the building, a sort of a usable porch. This, of course, gives something to aim for from the garden gate, as part of the threshold, but also gives a fantastic opportunity for a real celebration of the entrance, with associated level changes, storage and shelter. This does come back to the notion that, at planning stage, the whole entrance threshold placement is vital to the rest of the design.

Incidentally, I know that we are a lot less formal now than our parents and grandparents but just think of the rituals that are performed daily at our entrances. I leave you to ponder that one because we all have different experiences and expectations, but I would just emphasise that because of the importance to the rest of your design you might like to imagine the life of your home over 24 hours, 7 days and over the four seasons!

## **VALUE**

People take on self-design and self-build projects for many reasons: dissatisfaction with available new houses, control over features and finishes, expression of personal character etc. The over-riding reason, however, is the potential for gaining value. There, I have stated the obvious. But I feel that value can be achieved in several, sometimes conflicting, ways. The self-build magazines, in their Readers' homes articles, often give land cost, build cost, and then increase in value at market rates. I don't argue with this and plainly it helps to sell the magazines, but I often feel that there is a missing ingredient in the form of value gained from quality of design, rather than more space for your money.

This entirely comes back to the brief making and site analysis phases. Ask yourselves as many questions about wants, needs and desires as possible at the outset. I repeat that the more character you design in, the more satisfying and appropriate the solution and the wider your audience should you wish to sell.

## **WINDOWS**

Architects like to call this "fenestration". The one element of a design that has such an impact on character, both internally and externally. (See sills) As you gradually build up your dossier and scrapbook of likes, dislikes and influences, I guarantee that many images and descriptions will involve quality of daylight, opportunity for views and creation of interest in a room. Indeed, consider the pub analogy. People, given the choice, will always gravitate to the window for the view, the animation of each other's faces, the light for reading, colour and general good cheer. And yet we rarely seem to design such qualities into new housing. Incidentally the same is true of artificial lighting. The pub with lights that lack focus or interest will not be very popular except for a few diehards that go for cheap beer! Just analyse that the next time you visit the local.

I am thinking here, also, of the traditional bay window. This can either have built in seating or ideally a low sill for visual connection to the garden. Look out for such characteristics when assembling the scrapbook. I will add to these points in other sections of the A-Z.

However, just as importantly as internal character, windows add or detract from the essential character of a house. As a matter of fact that was really my starting point for this whole exercise: the utter blandness of many new builds often entirely from the wrong choice of window. Most new-builds these days seem to have such mean windows. Cynically I could say that builders find walling cheaper than glazing but to my mind the loss of amenity and character is just not worth the saving.

## **VERNACULAR**

This is a bit of a planning term really that can hinder as much as inform possibilities for building form and materials. Until the advent of the railways houses were constructed with local materials, which have left a legacy of wonderful diversity dependent on proximity of quarries, brick and tile works and clay pits etc. However, for the purpose of sources of inspiration and because towns and villages are a rich (Yes and sometimes poor) mix of houses from differing periods, I feel we should interpret "vernacular" as anything local that you might find interesting or appropriate to your project. As you look around more critically, of course, you will notice that, even in small villages, status played a big part in variety. The local rectory, library,

station, village hall or school, not to mention the houses of the more landed, were usually designed with status in mind. Some would appear to be bigger, better-proportioned cottages and others would borrow from townhouses or be scaled down versions of the local manor. This is not the place to start a history lesson and I can provide a list of some interesting books, should you be curious, but it seems to me that some important pointers and clues can be found.

Now I am not suggesting that you should attempt to recreate a row of cottages or open up a quarry for your project (though the local planners would probably welcome you) but you will always find an interesting feature, detail, window, material or even a good threshold sequence that you can put to good use. I always think there is something very exciting about reusing found ideas: architects do it all the time, of course.

## Contact Details

OK, That is just the start!

I know that I mentioned a reading list, but on reflection I feel that it could become rather long and, for many, mildly irrelevant. My suggestion is that after “ploughing” through this lot, if interested, you Email me with specific questions re sources of information, references and web sites.

I am also putting together a pack of sketches showing how I have attempted to put many of these ideas into my designs. That will take a bit of time to pull the various drawings into a manageable pack with notes however.

I am available for design-advise, from outline sketches, “crits” of your thoughts and planning drawings as required, but that is where you start to pay me!

For further information, Email me on [lofthousestudio@hotmail.com](mailto:lofthousestudio@hotmail.com)

Happy designing, Jim Comrie