

A Discourse on Method : The Segal System

John McKean

Published as 'Einfaches Bauen', *Architese*, January 1987
(Commissioned by Anthony Tischhauser, it has never been published in English)

In this essay I shall first introduce the 'common-sense' architecture of Walter Segal, focussing closely on his most outrageously original everyday details. To find where this came from, I shall then look at his early biography (in Switzerland and Germany). This will let us, finally, have an idea of his world-view, his *Weltanschauung*, and make a comment on his achievement.

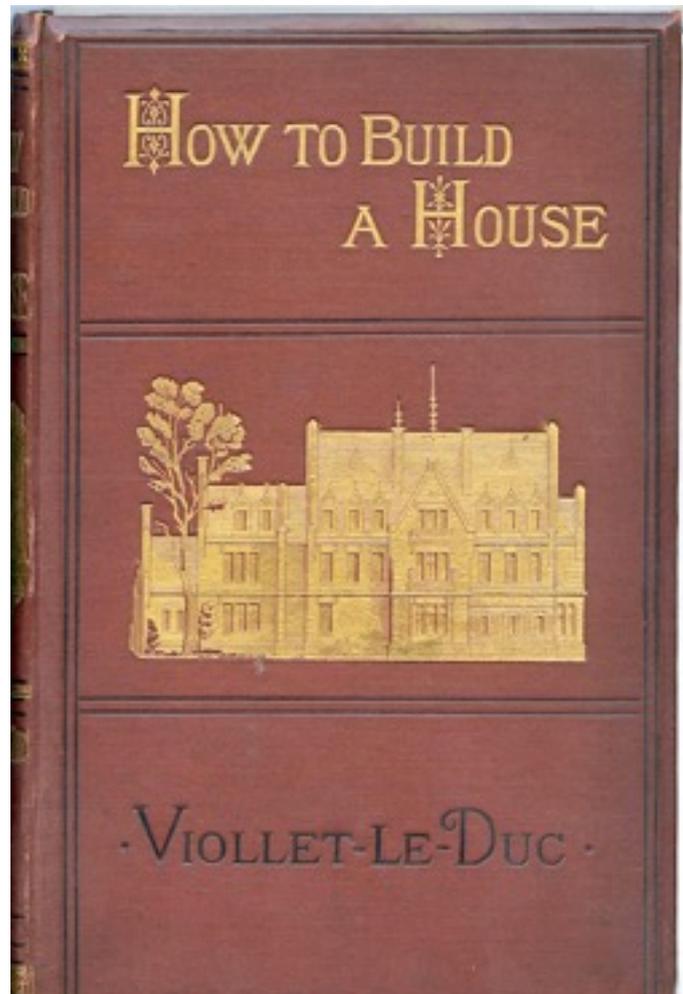
Simple architecture? There is no such thing! Is concentration on the real issues of the provision or the enabling of appropriate architecture (those issues which outlast intellectual posing and competitions of connoisseurship) simple?

It is, of course, not simple. But it is one goal; and one which makes for a more integrated, a less alienated architecture. It also makes for less alienated participants involved, be they architects or inhabitants, builders and craftsmen.

Surely, says the aspiring young architect, there are then some rules, some definite prescriptions for this honest architecture?

There are practical rules of procedure suitable to construction, replies the architect; but of course materials and means of building vary, so even these rules must be modified with such variation. However, "in architecture there is a method to be followed in all cases that present themselves, but there are no definite prescriptions or rules to be followed. This method is none other than the application of your reasoning faculty to all particular cases."

The speaker here is uncle Eugene, the architect in E.E. Viollet-Le-Duc's late 19th century essay *How To Build A House (L'Histoire d'une Maison)*. This speech of his offers the key to reading that fascinating book as a discourse on method: the method of common-sense, rooted in everyday reality. Here we are shown a man fully conversant with all aspects and stages of construction: material, technical, aesthetic, legal and economic. His power is exercised through direct knowledge and contact. He is a man of the site, its material possibilities and processes. He is only a draughtsman to explain ideas which he has already worked out.



Walter Segal (1907-1986), our subject here and an architect who had very little time for architectural theory or conventional practice around him over many years, would recognise a fellow professional in Eugene here.

Viollet's book of 1875, ostensibly for teenagers, was described in the *Gazette des Beaux Arts* in 1880 as "the best book anyone could put in the hands of a young man thinking of a career in architecture." Jean Jacques Aillagon, in *Architectural Design* exactly 100 years later, called it "one of the most moving pleas ever made for the profession of architect."

The career of Walter Segal, whose method is so close to the Eugene of Viollet's tale, spanned the last half century, initially in Switzerland but largely in England. Segal's career might equally be seen as a most moving plea for the possibility of the professional architect today.

'In architecture there is a method to be followed in all cases that present themselves, but there are no definite prescriptions or rules to be followed. This method is none other than the application of your reasoning faculty to all particular cases.'

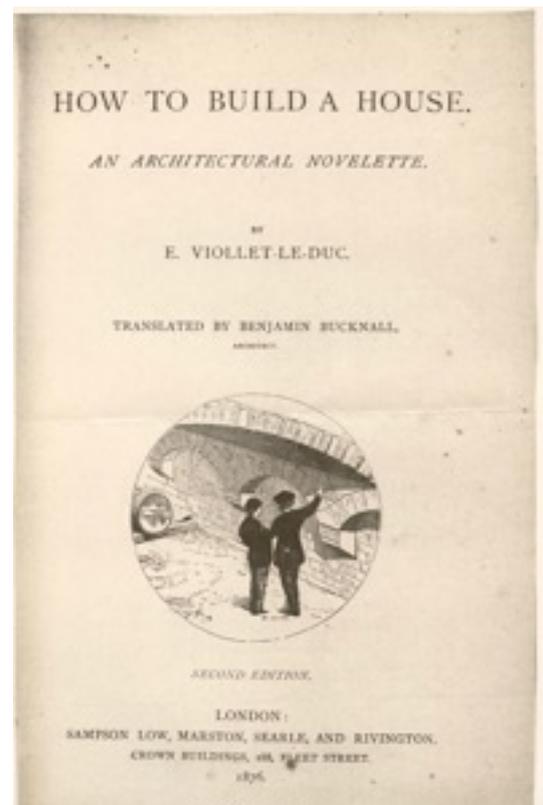
The Rule of Common Sense

Viollet's Eugene - exactly as Segal - is impressively erudite, with wide historical and cultural knowledge; but with a learning always rooted in reality. He - just as Segal - is full of common-sense ingenuity. In the story of this house, he even devises his own way of slating, using copper hooks to hold the leading edge and resting the slates on chevron-shaped battens. The brief discussion - arguing against traditional nailing, problems of movement and difficulties of repair; and arguing for his system, more firm in high winds, more rain-proof, and as cheap and simple as the traditional technique - is an epitome of his empirical method, and of his concept of 'appropriate technology.'

Segal's method is identical. Eugene's slate hanging is paralleled exactly by many tiny Segal 'inventions' based on returning to first principles.

The essential word is common sense. Segal's architectural project in this sense is based on a logical step-by-step common sense very like that of Paxton and Fox at Crystal Palace (1850) or even closer to I.K. Brunel's, when he designed the timber-frame Crimean War hospital (1855), shipped out to Renkioi and erected so fast - and where Brunel's thoroughness, very like Segal's, even extended to designing details of transportation, unloading and construction by a few chosen carpenters.

Segal's construction details, systematised about 20 years ago, are usually based on things which touch and are not fixed: the timber posts sitting on lead caps on founds; the uncut wall panels held by pressure only; the roofing felt bottom layers free to move... all based on sensible and obvious criteria, in the case of these examples the issues are humidity, expansion and so on.



The Segal method of building is based on precision high technology: total calculation, and precise optimisation of resources. The point is not 'hi-tech', of course; but a system which becomes humanised into 'appropriate technology.' He uses finest quality, high-cost, stress-graded timber members of minimum section; he avoids 'second shaping' by careful scouring of the market, and by using uncut, easily available manufactured sheets and panels. His bills of quantities are complete lists of material required on site, with each building element listed separately (not aggregated). Thus the whole forms an accurate and detailed shopping list. Moreover, because the list is in order of erection, the materials, inevitably but intentionally, can be sorted before delivery. Loaded in this order on the lorry and unloaded in reverse, the materials are stacked on site so that required items are always those nearest to hand, avoiding 'second handling.' With each element detailed and located diagrammatically, the carpenters can use the Bill of Quantities as a working detail. The completed Bill is priced by a builders' merchant and an extremely accurate estimate given to the client.

These are each little examples of the 'method', and most of them only apply to little buildings. There are a thousand such radically "simple things" which Segal has developed over the years, into a folk wisdom of architecture very similar to that of Eugene. But he has gone much further than Viollet-Le-Duc. For Segal's is not just a system of architectural knowledge, but is integrated into a world-view, exemplified in his understanding of the place of housing, the enabling role of designers, the creative potential of anyone to construct their own dwelling; and it is demonstrated in his own career.

For his clients, Segal's dwellings are full of little details which make everyday life easy. The client for one of his earlier brick houses noticed how:

"the boiler room had been provided with a small inward opening window of odd size (necessitating cut bricks) and placed on the inner face of the wall. Externally the cill was formed of a flat piece of zinc sheet which appeared adjacent to the front door and about 1.5 metres above the door step. We soon discovered the cill could accommodate four milk bottles exactly out of reach of children...

"All light switches were placed at the same height as the door handles so that one never had to search for the switch when entering a darkened room...

"The staircases had no risers, being composed solely of strings and treads. Each tread was fitted with a square hardwood batten at its leading and rear edges. The battens were secured with brass cups and screws. The width of treads between strings was exactly 27". This arrangement allowed us to buy a shorter than usual length of standard width stair carpet, cut it into separate pads and secure it with the battens. After approximately five years, when the carpet had worn away along the nosing, I unscrewed the battens and reversed the pads. After a further five years when the carpet nosing had worn again, I cut off the worn part and exposed the clean hardwood nosing. Thus our original stair carpet lasted 20 years!...

"And so one could continue..."

'But Segal has gone much further than Viollet-Le-Duc. For his is not just a system of architectural knowledge, but is integrated into a world-view, exemplified in his understanding of the place of housing, the enabling role of designers, the creative potential of anyone to construct their own dwelling; and it is demonstrated in his own career.'

In his own house in Highgate, London, the last brick and wet-trades building Segal designed ("the end of the thirty years' war" as he described it), similar touches abounded. I instance one example: for acoustic privacy between dining and living room, which are divided by a single-skin brick wall (fair-face both sides), there are two doors, one opening into each room. Moreover, displaying also the Segal ability to make common sense of found products, they close remarkably successfully on door-stops made of square-section bitumenised polyurethane joint filler.

With a constant feeling that the simplest solution to a problem was likely to be the most appropriate, Segal rationalised all the details of the timber and panel building system which he had been developing since 1966 until his death at the end of 1985. Again just one example: the windows are simply sheets of glass with polished edges and small glass nibs stuck on for handles. With a judicious use of polish, usually a rub with a candle before fixing, they glide in a channel made up of two aluminium angles held apart to allow rain-water to escape.

An almost Zen ability to minimise wasted energy is exemplified in how Segal radically rationalised his paperwork. All his drawings are freehand (no longer even needing to be over squared paper) on A4 (easily photocopied) sheets. Calculations, quantities and specification, on similar A4 sheets, together with the job file (essentially the site minutes file) constitute the total documentation.

Segal's system uses sub-contract labour only. The client is *de jure* the contractor and responsible for insuring the site and letting the sub-contracts. Thereby the client saves immediately an estimated 10% in preliminaries and 20% in profit and insurance covers.

Segal discouraged letters and evaded (at least for business) the phone where possible. He had no professional indemnity insurance as there was no space for error - although I remember him telling me a decade ago that one of his client bodies at that time had insured their architect's life for the duration of the contract!

Segal's world view

But where Segal's name has become best known over the last ten years, there has been no hired labour at all. Single-handedly, Segal invented the impossible idea of ordinary, non-skilled working-class men and women from the waiting list for public authority housing, building their own homes. His self-builders have ranged from retired men in their 60s to single mothers; many are families with young children who can constructively join in creating their own home.

This brings us to a wider view of Segal. We must see beyond just the 'common-sense designer' in the footsteps of my examples of (non-architects) of a century ago, or of Eugene, the paradigm of Viollet-Le-Duc. Segal's world view stretches further than that.

Where did this come from? "Understandable excitement; that is what I want from architecture," Walter Segal once said to me. What marked him as extraordinary is that

'Single-handedly, Segal invented the impossible idea of ordinary, non-skilled working-class men and women from the waiting list for public authority housing, building their own homes. His self-builders have ranged from retired men in their 60s to single mothers; many are families with young children who can constructively join in creating their own home.'

simple, personal need to understand what he was doing. He would not be fooled by other people's bluffing, and he would not bluff himself.

This led him to a practice of architectural design which was comprehensible - and not just to himself; as one of his self-builders recently put it, "His concept is that if he makes you sit down and think...you will understand what to do." And it led him to a form of building which was under the control of his reason; which he had calculated. (He neither relied on engineers nor on quantity surveyors.) This was a very quiet and unassuming single-mindedness, but no less absolute for that.

From a remarkably early age, Segal had shown a mature ability which would not be bowled over by fashionable notions or popular creeds. Such a course, which might seem aggressive and unyielding when read in cold print, was steered with seeming diffidence by a tiny, bubbling, shy man with sparkling eye and charming giggle; a man who could be the steadiest friend, as he also knew how to keep himself apart.

Just a few examples:

- On asking Walter Gropius, in the 1920s, for a reference for a scholarship to study architecture, he then turned down an offered place at the Bauhaus.
- Years later, when invited to dinner by Eric Mendelsohn who intended to ask him to join his practice in Palestine, he kept the discussion so charmingly far from the subject that the necessity to refuse the eminent man's offer was never reached.
- Later, he also turned down offers of working with Bruno Taut, whom he much liked, and with Gropius when the latter first came to England.

"I am married to my wife, not to architecture; I love my friends, and the world - but I love my privacy," he has said to me.

Yet his street door is not the defensive brick wall or intimidating iron gates of some lovers of privacy. Instead, it is just a low, bland garage front. There is a small side door but no bell to ring nor nameplate. The visitor must open the door, go through the covered storage porch, then cross a small courtyard to reach the doors to house and studio. If Segal wanted privacy, the street door could just be bolted. Typically it displays an unaggressive but firm and uncompromising understanding both of social boundaries and of physical site planning.

‘Understandable excitement; that is what I want from architecture,’ Walter Segal said. What marked him as extraordinary is that simple, personal need to understand what he was doing. He would not be fooled by other people's bluffing, and he would not bluff himself.

Having the good sense to be born into an unusual and artistic menage, Walter Segal nevertheless from childhood had the even better sense to view the artistic fashions and bewildering theorising around him with caustic juvenile realism.

His first twelve years were spent at Ascona, on the edge of Lago Maggiore, and on the edge of the remarkable community at Monte Verità. His father, Arthur Segal, was an expressionist painter whose family lived in abject poverty until patronised by Bernard Meyer, (fanatical anarchist and guilt-ridden millionaire, friend of Kropotkin and later of Silone, founder of an anarchist community at Rapperswyl on the Zurichsee).

Meyer was a family friend (and later to be Walter Segal's first client). Monte Verità was his childhood neighbour. Here, the remarkable community of vegetarian nudist anarchist

communist catholics, was a magnet which attracted all sorts including, at various times, Isadora Duncan and Lenin; Freud was a central influence; ART was the central idea.

As Walter Segal later said. " I took it for granted and questioned it with what feeble powers I possessed. Later I understood that I could better exist in the no-man's land between Boheme and Bourgeoisie than in either of these worlds..." Whatever its influence, I always heard him talk of Monte Verità and its personalities as an outsider; proud to have been a penniless, shoe-less, village boy playing truant. "I was happy to speak the native dialetto Ticenese and to play at the Caffè Verbano. It was the haven of ordinariness."

Of all the family friends at this time, the one Segal spoke of most affectionately was Hans (later Jean) Arp who often came from Zurich to stay with his parents, who played with Walter and carved him toys.



Arthur Segal, 1919, when about to return to Berlin with his family

Arthur Segal achieved note as he moved from Expressionism to exhibit at Dada's Cabaret Voltaire in Zurich. But by the start of the 1920s, their close friends were gone from Switzerland - Otto van Rees to Paris, Arp to Meudon and then Tristram Tzara to Paris where Loos was designing his house. The Segals moved to Berlin where, after the social-democratic revolution, much was hoped for.

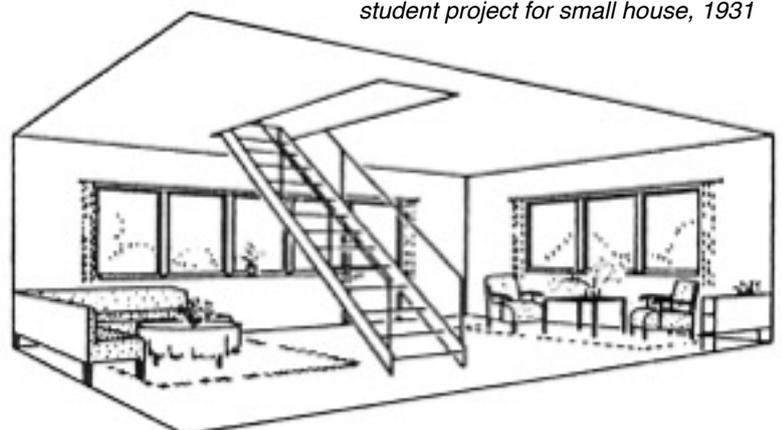
Arthur Segal became a central figure in the November Group, and family friends now included Gropius, Moholy-Nagy, Kandinsky, Klee, Mendelsohn, Meyer, Hilbesheimer, Mies van der Rohe, Häring, Taut and Feininger. While his mother's monthly soirées also attracted Schwitters, Raoul Hausmann and, on a memorable occasion, Malevich. For Walter Segal, now in his late teens, "this was purest Ascona, Germanic version, and consequently without a trace of humour.."

Turning down the Bauhaus, since he "wanted to learn to build first, and perhaps do architecture later if I was able to.." Segal went to study in Amsterdam. He watched the battles between Amsterdam and Rotterdam and the isolation of Dudok at Hilversum; his colleagues found romantic Amsterdam "screechingly funny", Segal found Rietveld's Schroeder-Schrader house incomprehensible, but he admired Bijvoet, Duiker and especially Mart Stam.

"After Holland, I tried Berlin. This was just as bad educationally..." There Segal's one consolation was Hans Poelzig's seminar, since Poelzig never forced direction, allowed individuals their own paths and introduced group criticism. Finally, Segal completed his training, with little more satisfaction, in Zürich under Karl Moser.

The ideas around him were all the new smooth white architecture; all International Styles, from de Stijl, to chrome and glass, to banal cardboard-like

Walter Segal, competition-winning student project for small house, 1931



forms (Segal had found it ludicrously easy to crib Hilbesheimer as a student).

But then, immediately on qualifying, he designed a house which could scarcely have been further from his Germanic tutors. Back in his beloved Ascona, built for his father's patron Bernard Meyer, Casa Piccola from the outside is hidden on a timbered hillside. "It was innocuous; yes, that is what houses should be", he said. Today it is unmistakably a Segal house: dark timber cladding, the rhythm of frame and panel, the virtually flat roof, the verandah and slim balusters. The direct typology of two single-facing dwelling spaces, separated by a narrow service strip, kitchen at front and washing at back. Inside, it is lined with Oregon pine plywood wall and ceiling panels, paper lantern, rush seats, warm wood and sunshine.



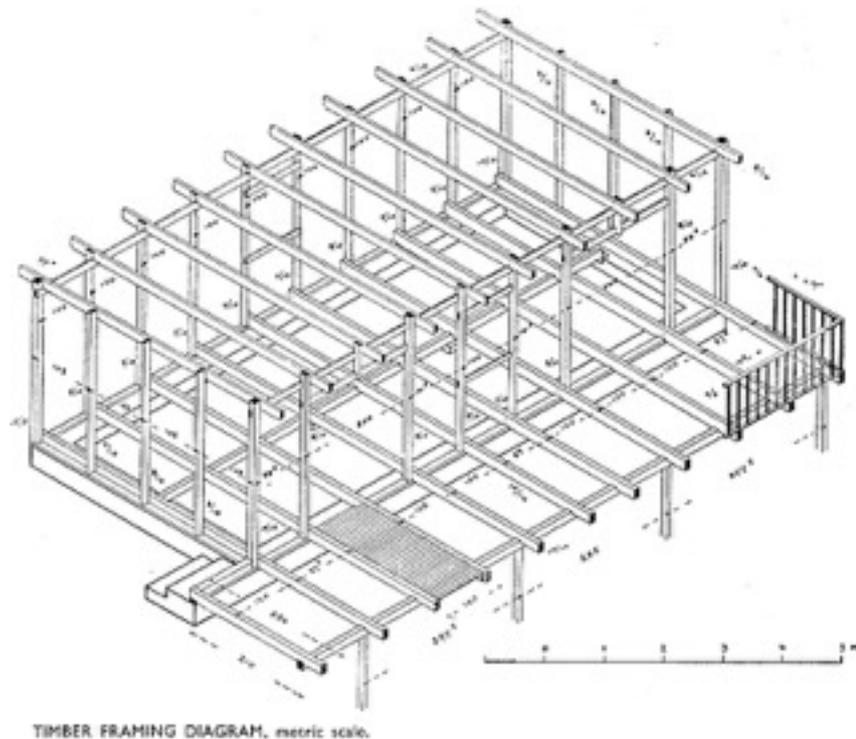
"I was in a state of rebellion," he said many years later. "I was determined to make this little building as insignificant as possible - and I passionately wanted it to be liked (which it was). From this plenty can be deduced."

Indeed it can. Segal designed the furniture, taking particular pride in a set of rush seated chairs. "It was 1932," he reminded me. "Remember the Bauhaus? This was very different from the interiors I had known; it was warmer and, as you say, richer without any doubt... These were instinctive reactions. Needless to say, it was immediately liked by the clients and their friends.."

Where had this quiet revolution come from?

"Though I drew things like that," Segal pointed to a boring International Style perspective, "and every student drew them, I was not happy with this modern architecture."

Though entranced as a teenager by Corbusier's drawings of houses, understandable in scale and intention, even then Segal had "felt vexed. How does it work? How is the slab cantilevered, I asked, and there was no answer." Through his student days this frustration only increased. "I learned about reinforcement, of course, but it was not the same... And the walls with windows going round the corners; I was vexed, unsure about them. I could not understand concrete. Steel I could understand; I could calculate steel. But with concrete...it was only the shapes...



TIMBER FRAMING DIAGRAM, metric scale.

"Gradually, I came to believe that others didn't understand it either. People of the older generation couldn't answer my questions. So I gave up asking. I kept to steel and timber."

And particularly timber, which Segal stumbled on almost surreptitiously as a student. "Secretly" (as he said), he learned how to handle timber from a little book by Konrad Wachsmann, who had been Poelzig's star pupil in Berlin six years before Segal.

This book (*Holzbau*) explained American balloon framing. Here at last was something which Segal, amidst a confusion of stylistic masters, could learn to handle directly. In his third year, Segal gained mention in an international competition for a small house, with the design (which was published) of a two-storey balloon frame. "I was into a medium I could understand. This was a rescue, and also a delight." Here at last was the potential for the understandable excitement he sought from his work.

Within four days of Meyer's commission for Casa Piccola, Segal had prepared the design and all working drawings. "There is no complexity in comprehensible joinery. In the whole of my building there is no complexity." He was confident. He was in control.

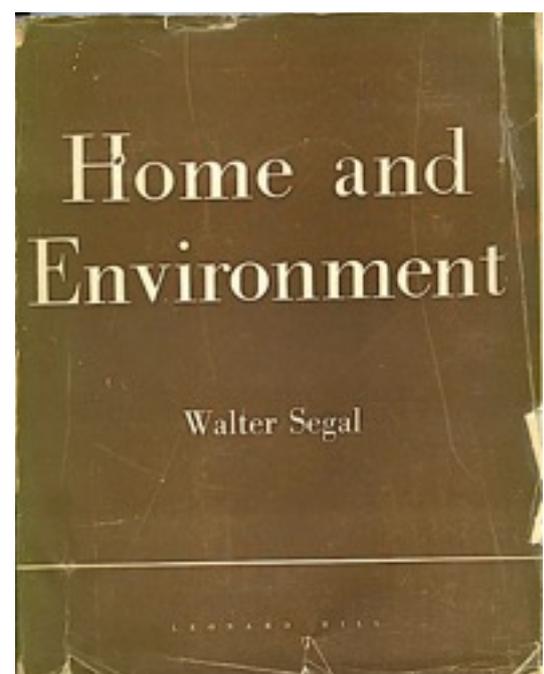
The difference between his design and the US balloon framing, is that Segal's was calculated. Already, he was widening the spacing of the studs, standardising the timber sections. It was clean, simple, pleasant to build and - Segal adds with some pride it became the smallest house published in FRS Yorke's *The Modern House* (right).



Walter Segal's career subsequently took him to a lotus-eating existence in Majorca from which he shook himself off to become an Egyptologist. Researching ancient Egyptian chairs for the Cairo Museum took him on a trail round Europe, finally, shortly before the Second World War, to the British Museum collection, and in London he stayed.

He sold his own chair designs to Heals and Gordon Russell, began modest architectural practice and, after the Second World War, added writing. *Home and Environment*, a most fascinating book, was published in 1947, packed with plans and layouts largely worked out during the war years. As a quietly revolutionary document it is magnificent; and utterly down-to-earth, literally. For it demonstrated conclusively, and in marked contrast to almost all its contemporaries, that humane low-rise high-density residential areas are sensible and achievable goals. For the next 30 years Segal kept refining these themes, proposing to anyone who would listen varied new layouts for home and environment.

It is a most unconventional ordinariness that asserts itself in this contrast. Just as one of my abiding memories of him is sitting having dinner in the garden of the Segals' house, next to his gently ageing prototype timber-frame house, literally in the shadow of Lubetkin's great, white and famous Highpoint next door.



That timber-framed house was built in 1966. Having to make a temporary home for his family, concentrated Segal's mind to simplify the whole building process with a startling rigour. The house was completed in two weeks for a cost of £600.00 (about £6,500.00 today), and from that prototype all his subsequent building developed.

He used widely available material, put together uncut in an open-ended way. "For me," he said, "there is no intermediate stage, no components. I don't change a given shape into another; I use it in the shape given." Treating himself "just as a consumer", Segal exploited the already standardised bits available around him, reaping the benefits of speed and economy promised by an open system building, while avoiding the monotony and inflexibility associated with a closed system.

In every situation, his line of thought was based on a radically original use of 'readymades', and on precise calculation of all structural timbers.

The building is off the ground, requiring only in situ pads under the posts; it is hung from the frames, the erection of which is almost the only part of the job which cannot be done by one person. Wall panels are held in place by friction and pressure; the roofing layers are unfixed and similarly held by pressure (in the case of this first temporary house 5 cm of water on the flat roof holds it solid and provides insulation).

Ceiling boards are uncut sheets of plasterboard, lying loosely on battens between joists; all services fit in the air space between these and the insulated roof, in the modular vertical spaces between wall panels, or under the suspended floors. There are no wet trades.

+++++

Not just "common-sense", but Segal's intuitive concern for personal freedoms and responsibility inform a system which produces an architecture totally under control, quick and pleasant to erect (being dry and with a shell up in a few days), economic in material and labour: enjoyable to design, build and pay for.

Just as power hand tools have made his technical revolution possible, using what might be fairly termed 'intermediate technology' to release the creative activity of the individual, so other apparatus can relieve the architect in the office.

16 years ago, Segal commissioned a study which showed that all the documentation for a typical project could be prepared by a correctly programmed computer within two days of receiving the layout line drawings. It would surely be even simpler today. The use of such aids allow a freedom from the individual structural calculation and taking of quantities by hand, which Segal was still doing until recently, and admitted to be "hellishly dull and repetitive."

But "a time will come," he said in 1970, "when the single-highly geared architect, powered by modern methods of documentation and administration provided by apparatus, will be in a convenient position to tackle the workload of the present-day

'As a quietly revolutionary document *Home and Environment* is magnificent; and utterly down-to-earth, literally. For it demonstrated conclusively, and in marked contrast to almost all its contemporaries, that humane low-rise high-density residential areas are sensible and achievable goals.'



mammoth office. "Then the re-individualised architect with power at his disposal and tools for his work, will be able to devote himself again to the job of designing in freedom..."

"Some will be attracted by a future which will allow them to practice as individuals within an atmosphere of their own making, conducive to their professional well-being. For them, I believe, the doors are open."

Segal's approach allowed him to free himself from one "tyranny" (his word) after another. I have already outlined his freeing himself from wet trades, quantity surveyors and engineers, building contractors, drawing boards, assistants... He also was free from neckties, coats, humbug, and styles... Styles? What about the appearance of his buildings?

"Architecture is not sculpture. I like to determine shapes, of course, but I don't believe that this is what it really is about. Buildings should not be too assertive..." he told me. Having stated his aim for optimum performance, he went on: "coupled with this, I am in very many ways a romantic. I prefer casual relations when built, which do not show the conscious effort... For aesthetic values are fleeting, are they not, depending on our mood or the sunshine?.."

"I don't know if it's a wrong idea to try to unite these two, the striving for the typical and the romantic...that's what I want, typical romantic..."

Segal never managed to achieve freedom from other tyrannies, including the impertinence of planning aesthetic control, and the bureaucratic state generally, and building regulations specifications. ("You must have a flat roof failure if you use the Building Regs specification," he once said to me; a client could reasonably sue an architect following the Building Regs..")

His spleen was vented on such subjects in print over many years and at any opportunity, often with telling irony and never allowing pessimism to overwhelm it.

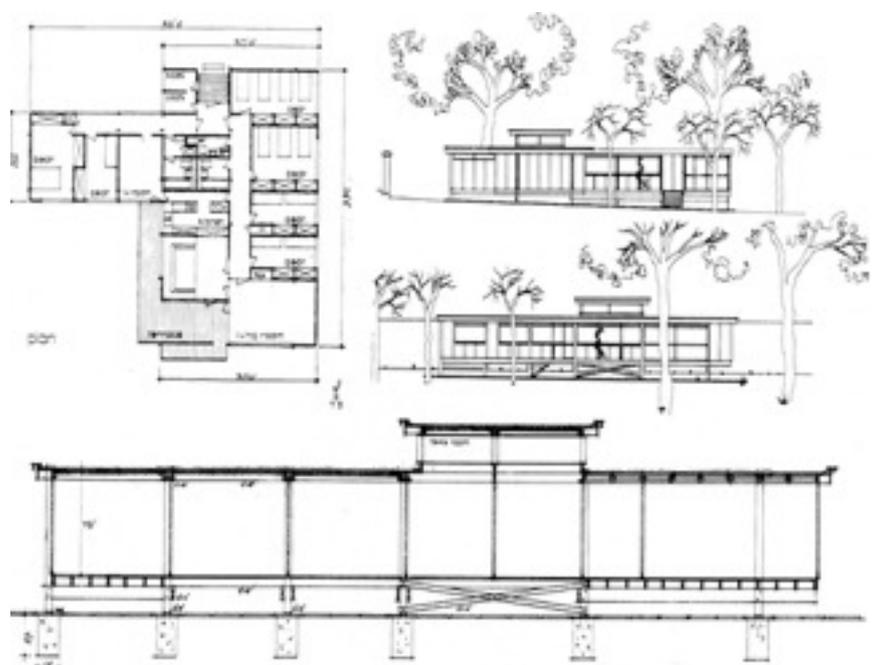
While he believed so strongly in using the available material market, in making a comprehensible architecture, in the role of the craftsman carpenter, in the glory of Norwegian stave churches, and so on, he was no traditionalist. Blanket conservation

appalled him as it nourishes an antagonism to the new. ("Old buildings spruced up...it's a miserable thing; I think the dead hand of the past should be completely content to remain just that: dead. I've got quite a craving for new stimuli and impressions - one gets stale so easily...")

Architecture must be "understandable excitement", as he said; and he argued for small scale and comprehensible developments, but with the maximum possible scope for experimentation (without interfering with the similar rights of others).

His hard fought freedoms bought

John McKean December 1986



Walter Segal a greater share of the time for designing. All his rationalisations in the office were "conditioned by the need to have more time to think things out. In former years I could not tell a client that I had not yet exhausted the possibilities, that I didn't have a plan. I was pressed for decisions too early, but now I don't let that happen."

Segal scoffed the common architectural pride in the first generating doodle, a Beaux-Arts esquisse mentality - for example, currently seen in Jim Stirling's framed first biro sketches of Stuttgart, hanging in a mock-up element of the Staatsgalerie inside London's Royal Academy. Segal gradually developed designs, step by step; he might produce 28 plans for a house before he was convinced he'd covered the possibilities.

"I do not settle on the first idea, even if it's an insight, even if it seems convincing...The period of letting things simmer is a very useful one...Then, once you know you've exhausted the design potential, it's a very calm atmosphere..."

Remarkably, imitation, that surest form of flattery has never really developed. The few British architects who have displayed their understanding of Segal's example include Tony Cooper, with a Rudolph Steiner school, and particularly David Lea, with a vicarage and parish hall at Melling and a lovely collection of sheltered cottages at Quinnettes, Churt, all now over a decade old. More recently, the self-built possibilities, inspired by Segal, have developed under Peter Hubner and Peter Sulzer into widely varied student housing in Stuttgart; while other self-built homes have been built in Ireland and as far away as Australia.

The Segal Achievement

Segal's work has touched a deeper chord than those encompassed by ideas of "simple honest building" or of "decent housing provision", admirable though both are. It makes the heart leap, as at the great scene in the recent film Witness, where an Amish community in the United States jointly rebuilt a two-storey timber-framed house as a celebration of creative communality. In many other times, with less specialised roles and with that ancient communality, the whole village would 'make' the new house required.

'The inhabitants are involved in place making, not in sharing a made place. His interest is the process of housing and inhabitation, not the product of architecture.'

Segal's achievement is to make it easy, to facilitate that again for our fragmented private worlds. Yet his designs are always for separate buildings, which never seem (in photographs) to build into a whole; there is no block, terrace or street greater than the sum of their parts. Perhaps the strongest criticism of Segal's position is this lack of space for the collective, for the social realm. His buildings do not become part of the city, do not assist in its visual re-integration. There is no acceptance of what, for example, a Krier might see as the root position, which could be stated as : the least an architect can do is make a street! That is not Segal's ordinary common sense.

His position, though, (parallel to his lack of interest in "capital A Architecture") is to say that communality is not embodied in the image of connected urban spaces, but in collaborative action. The separate houses on the hillside in Bromley, south London, have a stronger cohesive agent than building line or cornice level: they are the homes of friends, of friendships made through shared activity. The houses, the "architecture" if you

like, embodies the shared values as they act as the catalyst of this social cohesion. The inhabitants are involved in place making, not in sharing a made place.

His interest is the process of housing and inhabitation, not the product of architecture.

All Segal's activity has implicitly followed William Morris's motto: I want to design things that people get pleasure in making, and I want to make things that people get pleasure in using. Inevitably, his clients are neither benevolently patronised nor are they stuck into an acquisitive tedium (as the current exchange value of UK and especially London housing might inevitably promote).

'With no previous constructive skills at all, once having self-built they say: "now there's nothing we won't try!"'

It is fascinating to see how the Segal system encourages personal growth. The first of Segal's clients who built their own house were a couple of schoolteachers. In his typical dry manner, the husband told me:

"There were gains and losses. We lost a lot of sleep. It was often very tiring. We worked, I think, every evening from 5.9.1971 - 5.12.1971 except for a week's holiday and Sunday evenings. We were both working at a full-time job during this period. It can become quite depressing when things don't go as fast as one would like or someone drops a pane of glass, etcetera. There are a lot of things to think of and finding a plumbing fitting, for example, can become a major search.

We gained more than we lost. We gained personally in satisfaction and confidence in our own abilities. There is a certain basic satisfaction in building a "shelter for oneself." I'm sure that we will remember the experience forever. We gained in the rapid construction time. We gained a house of our choosing, of our own design in many respects. This was at a price that we wanted to afford, and so we gained a low mortgage."

In two different but intertwined activities, this personal development is partly in the doing with one's own hands, creatively constructing; and partly in the making of one's own nest. They are not just feathering it, but forming its very armature. Segal's more recent self-builders have been chosen by lottery from the large number on the waiting list for public housing who applied. With no previous constructive skills at all, they have said: "now there's nothing we won't try!"

Eupalinos, or The Architect, Paul Valéry's great poem dedicated to the power of *homo faber*, and the essence of humanity being in doing rather than theorising, takes the form of a Socratic dialogue with Phaedrus. Phaedrus uses the story of his friend Eupalinos, an architect, to convince Socrates of the importance of material form. Eupalinos had once explained to Phaedrus how, the more he practiced, suffered and rejoiced as an architect, the more he felt his own being more surely.

'PHAEDRUS: "By dint of constructing," he put it with a smile, "I truly believe that I have constructed myself."

SOCRATES: To construct oneself, to know oneself - are these two distinct acts or not?'

While Valéry weaves a symphony of images for another 75 pages on this issue, for the Eugene of Viollet-Le-Duc's fable of house building, it is the essential, common-sense conclusion. Thus (as each writer makes clear) for Valéry or for Viollet, the architect is the epitome of the creative man.

What Segal allows, on the other hand, is for this 'natural', archetypal power of building ourselves by dint of building our edifices, to be returned from the professional domain of the architect to us all.

+++++

Yet there must still be an important, enabling role for architects. "I do not think there is going to be a turn in our economic fortunes for a long time to come," Walter Segal said in 1982. "By then, the building industry will have dwindled to less than half of its present size; it has always been a receptacle for people with numerous skills. But the need for structures, particularly for people to live in, is growing all the time and, fortunately, there are ways to meet the demand. With such a small labour force, I believe quite simply that the principle of self-help will have to be introduced on a much more general scale.



"Architects are utterly unequipped to help people who want to build with their own hands. Architects will have to be trained to be enablers. This is not taught, but such skills are dearly needed. The course of architectural education must be completely changed. There is a future for architects - but they must learn very different skills, and can no longer hide behind those so-called 'architectural values.' Not one of my self-builders is interested in discussing the design of facades nor the skilful proportioning of solids and voids. On the other hand, a reasonably trained person can assist a layman builder who has only a very rudimentary idea of space. It is a skill that can be taught.

"It should fire the imagination, provided narrow solutions can be avoided. It will put an end to the esoteric debate raging on architecture at the moment - which is only the result of under-employment. But, what is to be done with, shall we say, at least one generation of architects who are utterly ill-equipped for this new kind of role?"

Segal was talking, as ever, with optimistic common-sense.

+++++

Last week I told a mutual friend, the retired managing director of Architectural Press, Colin Boyne, that I was writing this article for Architese. Immediately he replied: "Ah! The most influential Swiss in the history of British architecture....It's true; isn't it."

Was it chance that he overlooked mentioning the master from La Chaux-de-Fonds? I remember Segal telling me of the impact when still in his teens of first coming across drawings by Le Corbusier. "Corbusier made me wild with delight and blinded me to his shortcomings," he reminisced later. In 1929 he visited Studio Le Corbusier in the Rue De Sevres; climbing the stairs, knocking and asking the way to the Square du Dr Blanche (where the maisons La Roche and Jeanneret had recently been built). "Monsieur Le Corbusier is here now, would you like to see him?" "Oh, no," replies Segal inventing an

excuse; "unfortunately I have to go, I have an appointment..." And he backs out. "What could I say to such a man?" he asked me.

"He was a great, wonderful artist of space - ever since I saw that exhibition of his drawings when I was 18 I'd been under his spell; but no...it was not the world for me."

"In 1932 came my first client and I went back to Ascona to build. The 1920s sank back for me into the past, and I am still grateful for my decision then to be and stay average, in the no-man's land between Boheme and Bourgeoisie...It became clear to me that one can have a small path and tread it alone."

As the writer Colin Ward said, "when Segal died at the age of 78, his friends felt that he had, quietly as ever, slipped out of life in a blaze of glory."

The world of architecture today is struggling to relocate the issues of dwelling, of place-making, at its centre. The act of dwelling, housing seen as a verb, and architects as enablers... all working to facilitate this primordial human need of home-coming, of making a place our own. These are goals which the architectural activity of Walter Segal over half a century quietly furthered.

The image of the colonisation of land by ordinary people amidst the decayed late-20th-Century-welfare-state-capitalism, and then seeing their self-evident skilling and confident maturing through the making of their homes, is remarkable. It allows the imagination of a new conviviality in dwelling.

+++++



*Vorschlag für eine typische Segal-Siedlung, wo alle Fenster und Wandelemente innerhalb von ein paar Stunden vom Bewohner auswechselbar sind.
Proposition d'un habitat typique de Segal où toutes les fenêtres et tous les éléments de paroi peuvent être échangés par l'habitant en quelques heures.*

A basic bibliography

On Segal's life

The Architectural Review, January 1974, p31-8 (early autobiography);
Building Design 20.2.1976 and 27.2.1976 (profile by John McKean);
RIBA Journal July 1977 (autobiographical lecture);
The Architects' Journal 7.4.1982 (by Charlotte Ellis);
Spazio e Societa No 34, June 1986 ("Semi Preziosi di Buon Senso" by John McKean)

On Segal's timber frame housing

"The Segal System" (by John McKean) in *Architectural Design* issue on 'systems', May 1976 (before Segal's self-build had taken off);
"The Segal Method" (full explanation of the system as used for self-build, by Jon Broome), *The Architects' Journal* 5.11.1986.

Numerous articles, especially in *The Architects' Journal* on individual projects.
A full bibliography up to 1977 is in *Contemporary Architects*, MacMillan 1978.

Editorial note

This essay was written for a Swiss magazine (German language) in 1986.

It has not been updated or corrected but left to stand as published then.

My monograph on Segal was published in 1989

