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Maison de Verre: sections through an in-vitro conception

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This paper proposes a revised interpretation of the Maison de Verre suggested by the program for the building, which incorporates both a house and a gynaecological practice. The argument makes a gendered reading of the house, building an analogy between the body of the woman who seeks to be cured by the gynaecologist and the 'organism' of the city which requires 'purging' by the actions of the architect. In the role of scientist eradicating 19th century decay, dirt and congestion from the city, the architect replaces the 'contaminated' urban tissue with clean, white, bright space. The essay takes a new look at the meaning of technology in modern architecture. It also raises questions about our assumptions concerning the authorship of buildings and how they are produced. The conclusion is not unique to this house, but sheds light on the way in which the practices of the architect in the era of early modernism were regarded as redemptive.

Introduction

The Maison de Verre has become a powerful icon in the history of modern architecture. Famous for its planar walls of glass blocks and its open-plan interior furnished with purpose-designed fittings and inventive household gadgetry, it was intended to be the prototype for an industrially produced dwelling, a literal evocation of the house as a 'machine for living in' (Fig. 1). Those who have written about the house, of whom the best known is perhaps Kenneth Frampton, have described the building as a paradigm of the aims of modernism since it uses the most advanced technical means and spatial composition to create an avant-garde home. The house has also been celebrated as an exemplar of a 'total work of art' because every part of it, including its interior, furniture and fittings, was, it has been assumed, designed by one man. While some commentators have extended the discussion of the house into different areas, the enduring message of the Maison de Verre is of modernism's alliance with technology as a redeemer of cultural relations. It is perhaps no surprise that a generation of future hi-tech architects in Britain who 'rediscovered' it in the 1960s regarded it as the primary source of their future aesthetic.[1]

In the essay that follows I should like to propose an alternative interpretation, one suggested by the programme for the building itself. What remains frequently underinvestigated is that the Maison de Verre entails a programme for a house and also a gynaecology suite. My thesis draws on the connection between the human body and architecture, teasing out the way in which buildings act as objects onto which people project fantasies about the body, and at the same time make buildings a defence against thoughts about their own, or other

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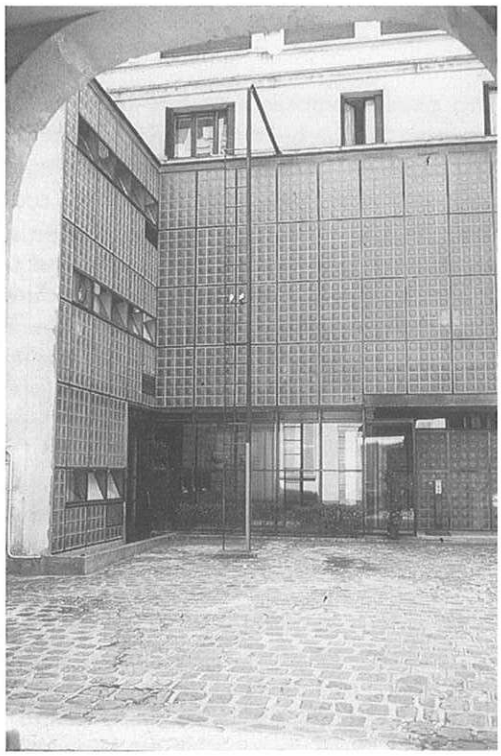

Figure 1. Maison de Verre (Maison Dalsace), Paris, 1929. Exterior view from cour d'honneur. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library)

people's bodies.[2] In this essay I shall be making a gendered reading of the house to make two slightly different explorations. The first will draw on the building's connection with gynaecology to show that both the functional programme and the cultural construction of the house are concerned with the body as a site of reproduction. In the second reading I shall demonstrate how the house itself reproduces the cultural understanding of the female body as the site of (hetero)sexual relations and seduction, and show how the house and the body enact reciprocal roles to bring this about. The essay will make an analogy between the work of Dr Dalsace, who reorders the female body through the application of science, and the work of the architect Pierre Chareau, who becomes a 'gynaecologist' to the building by appealing to science to legitimate the mastery of the modern architect. In reinventing the modern home, the architect appropriates the domestic, female, space and brings it under masculine control, explicitly through mechanisation, industrial imagery and surveillance. However, although it appears to be radical in formal terms, the house actually remains conventional in respect of bourgeois standards of social life and privacy, cultural determinants that are routinely reproduced revealing the limitations of formal manipulation in controlling human behaviour. The analysis shows that the power of architecture to delimit social change is one of the follies of the modernist project.

While this work relies on Frampton's *Perspecta* essay of 1969,[3] the analysis I shall make is anticipated by more recent scholarship concerning the Maison de Verre. Amongst such work, the connection between architecture and gynaecology is suggested by Paolo Mellis in his article in *Domus* (1983).[4] Here, the author makes use of the idea of the house as a body, and he specifically mentions the work of the architect as being like a surgical operation. Further, Duchamp and surrealism (and in particular his work *The Large Glass*) are mentioned in association with the notion that the house is a repository for ideas about sexuality.

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Finally, in his 1992 essay in *Connaissance des Arts,*[5] Brian Brace Taylor claims that the house is 'dedicated to the perception and observation of the woman'. In this context, themes of theatricality and the gaze are raised in association with the programme for the gynaecology suite. However, these issues have remained for the most part highly speculative and unelaborated. This essay attempts to address them in more detail.

Client relationship and architectural production

In most references to the design of the house, Chareau is cited as its architect, an account that reproduces the myth of the individual author-hero. In fact, Chareau was not an architect; he was a furniture and interior designer.[6] The assigning of authorship frequently relies on patriarchal attitudes that link artistic with sexual creativity.[7] In these myths sexual creativity was believed to lie exclusively with the male, while the female was simply the 'empty vessel' nurturing the baby until its birth. By implication, intellectual and imaginative creativity came to be seen as gifts of the male. Carried in one (male) person are the attributes of a dual sexuality, both male and female: male, as a provider of the seed of conception, and female, as she who brings forth the idea.[8] As the myth relates to architecture, the male architect conceives of a design, then nurtures and gestates it. By setting it down on paper he 'gives birth' to it, and it emerges fully fledged from his own, individual, creative genius.

Le Corbusier drew on this analogy with reference to his own work, uniting these notions with modernist ideology.[9] By casting the architect as the sole originator, he was expressing a common – and still pervasive – myth that presents clients as awkward impediments who handicap the clarity of the designer's thinking and compromise the 'purity' of his conception.[10] Though a client provides the finance, the site and the brief, and frequently contributes critical insights to the design work, she and/or he has normally been seen as a footnote in a story that lionises the integrity of one man's creativity.[11] Thus it is that in the official biography of the Maison de Verre, the clients, Dr and Mme Dalsace, though providing a fascinating catalyst for the architect's talents, are nonetheless treated as a sideshow to the main protagonist, Pierre Chareau.

Closer examination of the partnership between Dr and Mme Dalsace and Pierre Chareau suggests this is not the whole story. Both Mme Dalsace was a highly cultured woman from a family of art connoisseurs.[12] As a bourgeoise wife with leisure time and servants to relieve her of the domestic chores, Mme Dalsace played a conventional role as 'home-maker', negotiating with Chareau on the requirements of the house. The detailed design of the interior proceeded after construction had begun, suggesting that its details were developed only when its spatial arrangement could be experienced. The furniture and fittings were fabricated by Louis Dalbet, a metalworker who had collaborated with Chareau on previous projects. Commonly, Dalbet would make models or full-size mock-ups of items of equipment, which were then presented to Mme Dalsace for approval.[13] The mock-ups would form the focus of discussions, after which the adjusted design would be executed. The use of full-scale three-dimensional prototypes

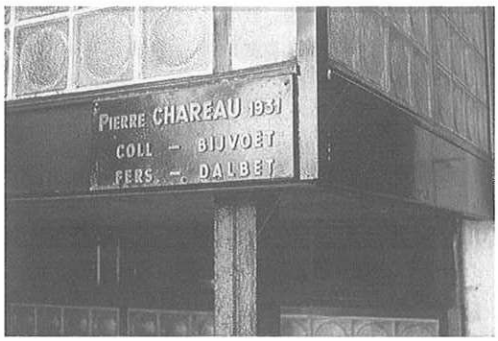

Figure 2. Plaque of steel letters over entrance doorway attributing authorship to Chareau, his collaborator Bijvoet, and the ironworker Dalbet. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

suggests that Mme Dalsace played an important part in the development of the design of the interior, since a trained designer would normally work through drawings; it is more than anecdotally accepted that architectural conventions are an alien language for those who have not been educated in its codes. Building full-size mock-ups is a time-consuming and expensive way of designing, and indicates a more complex authorship in which a triangular relationship between Chareau, Mme Dalsace and Dalbet brought the design process to fruition (Fig. 2).

In his own account of the house, Frampton finds it difficult to categorise the precise nature of these collaborations,[14] and he has problems reconciling the Maison de Verre both with other work undertaken by the Chareau–Bijvoet partnership and with later work by Chareau as an independent practitioner.[15] He is forced to connect the house with Chareau's other work by reclassifying it as 'a large furnishing element'.[16] Frampton explains that Chareau was, 'by temperament and training [nature and nurture?], more concerned with interiors than with exteriors'.[17] For an interior designer this is hardly surprising, but the design of interiors was one area in which women played a more prominent role,[18] and Frampton seems to suggest that Chareau's close association with the work normally done by women taints his genius and throws into question not only the status of his work (Chareau is doing women's work) but also, perhaps, his sexuality. Yet Frampton is determined to claim the building for architecture since his essay aims to construct a narrative that signifies the building's importance in the genealogy of modern architecture. He redeems the genre/gender of the designer of this 'grossly enlarged piece of furniture'[19] by stressing its associations with the mechanistic, rational, technically progressive and, using a phrase that has more masculine overtones, concerned not with the soft furnishings of the (female) interior designer but with a 'poetry of equipment'.[20] Chareau is rescued from the status of sensualist and rehabilitated as a technician, who with the help of his collaborators can redesign the bourgeois interior as a laboratory for a new industrial prototype dwelling.

In this house, issues of production (both cultural and genealogical) are implied by the imagery of the machine, but also perhaps by the life that was to go on within it. The Doctor was the economic generator, using its spaces for production – that is, to carry out his work as a gynaecologist. Meanwhile, Madame Dalsace was the guardian of home and children, and represents another site of production. Her 'work' is the labour of *re*production, and this role connects her body with the home that nurtures her offspring. It is significant that the

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house in rue Saint Guillaume, a nineteenth-century *hôtel particulier*, was a dowry present given to the couple by Mme Dalsace's father, since in the patriarchal economy of marriage a woman is a commodity of exchange whose value is connected with her reproductive capability, and the house provides the setting in which this role is secured. In establishing the Maison de Verre as a future family home, the building site and the female body become the twin foci of the creative programme.

The clients' reproductive ages are important to the idea of the house. Dr Dalsace's own description of the sitting tenant, 'an old lady . . . who would live to be a hundred' whom the couple had induced to move but 'who did not wish to leave her sordid apartment on the second floor'[21] indicates their revulsion for a woman who was an initial impediment to their early plan to demolish the entire building. In this description, the body of the old woman, infertility, tradition and dirt are skilfully alloyed, and by corollary the youthful, fertile woman (Mme Dalsace) is united with the modern and the clean. In the new design, the old building, associated in the quoted passage with sterility, is regenerated through the operation(s) on site performed by Chareau.

The new house is an 'insertion'[22] into the existing tissue of the city whose fabric is excised and propped open to allow the designer's new erection to be inserted into the cavity (Fig. 3). Just as Dr Dalsace himself regulates women's fertility to ensure a healthy conception, Chareau, like a surgeon, uses rational principles and technical mastery to transform the body of the building and bring forth the new, clean, light edifice. Patient, housewife, client and the building itself are all conjoined in the icon of the fertile female body, which becomes a key motif in a revised understanding of the house, and Chareau assumes the mantle of the gynaecologist, manipulating the internal organs of the building to secure a new life therein.

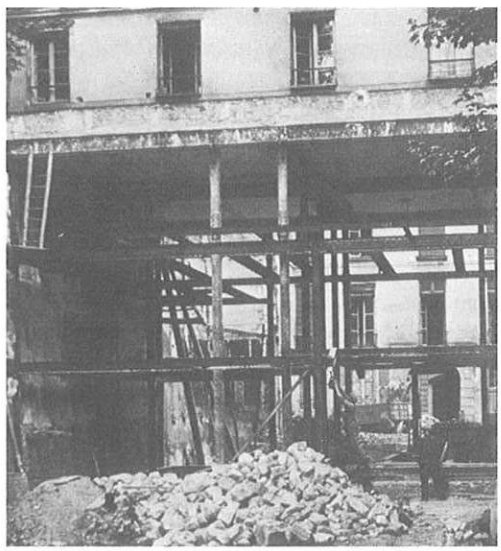

Figure 3. Maison de Verre during construction. The existing hôtel particulier propped revealing the void below. (Courtesy of the Association des Amis de la Maison de Verre.)

The architect as gynaecologist

The idea of Chareau as gynaecologist makes use of a metaphor powerfully postulated by Le Corbusier, another modernist architect working in Paris in the early part of the century, whose radical ideas on urbanism published in the 1920s may be said to express something of the thinking of their era.[23] The metaphor draws on medicine and science as

legitimation for the actions of the architect. In the early twentieth century he argued that the city was 'sick' – dirty, congested, worn out – and in need of purging, using rational, geometrical design methods and an aesthetic of simplicity drawn from the machine, signifying the securing of the future through the products of scientific progress.[24] In Le Corbusier's analogy the city was regarded as an organism, and the architect acted like a doctor, 'curing' it of its ills.[25] In a chain of connections that linked the individual dwelling with the larger city, changes on the scale of the city were to go hand in hand with a reinvention of the domestic interior.[26] For the first time, the domestic setting, which had previously been one place where women were permitted to exercise a (limited) creative impulse,[27] was regarded as a legitimate target for the modern architect. Indeed, it was considered as a crucial site to secure a revolution in social life. If Le Corbusier's theories depict a common conception, then in line with other modernists.[28] Chareau's work in the Maison de Verre demonstrates how the 'theatre of operations' of the epoch is moved into the domain of the female. In this context the architect-doctor becomes specifically a gynaecologist, whose task is to purge the home of its feminine overtones, reinventing it in a modern aesthetic.

In the field of medicine, surgical intervention largely accounts for the development of gynaecology as a separate speciality distinct from obstetrics. The first major advances in surgery during the nineteenth century were made in response to gynaecological and obstetrical problems that brought about the need to intervene *inside* the female body.[29] In the era of increasing professionalisation that dominated medicine at that time, the metaphor and logic of the discipline shifted from a position in which the body was considered a mystery of the Aristotelian order towards a technical-scientific view that conceptualised the body as a machine. The body-machine was capable of rational interpretation and intervention by the doctor who adjusted it when it malfunctioned.[30] The machine analogy connected the body with production, both economic and genealogical. In this regard, it is interesting to note that the earliest surgical experiments were carried out on the bodies of American female slaves, with the aim of prolonging a productive life curtailed as a result of complications during childbirth. As a general rule, during the early modern era women were regarded as slaves to their sexual organs – in particular the uterus, which was thought to be the source of numerous female maladies.[31] Increasing success in surgery heralded a litany of 'cures', and well into the beginning of the twentieth century ovariotomy was regularly carried out to cure hysteria and masturbation in women across all social classes.[32]

In inventing the Dalsace's new home, Chareau adopts the role of scientist – technician testing his hypothesis of a new 'breed' of building, the mass production house.[33] Dr and Mme Dalsace become surrogate parents in Chareau's experiment to bring forth an 'in vitro' conception – a conception in glass. Dr Dalsace's own words hint at the fecund conjugation between the couple and their close personal friend when he confessed, 'The whole house was created under the influence

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of friendship, in complete affectionate understanding.'[34]

It was on the interior that Chareau as gynaecologist/interior designer lavished most of his attention. Rather than address the interior as a comfortable domestic design such as he had produced in his previous commissions for the Dalsaces,[35] Chareau decided this was an opportunity to evolve a technically advanced environment. Metaphorically, the building is subjected to a rationalised reinterpretation and cured of its nineteenth-century clutter, decorativeness and excess – in short, its 'femininity'. The cellular spaces of the nineteenth century home are opened up into one gigantic void, and its furniture and fittings are functionally recoded and technicised. Ornament is controlled by erasing excess, the inessential and the frivolous, and the mobility of occupants is manipulated by reworking elements of the interior as 'mechanisms' with specific, predictable functionality: walls become screens, ventilation grilles become substitutes for windows, and a gantry replaces the maid for serving at table. In addition, images of rationality and technicisation are represented in the modular grid of the repetitive façade; in the simple structural frame and the technical tricks that seem to act as tropes for human action; and in the rationalised services and the so-called functional and flexible components. Chareau's mastery over the design is demonstrated through the harmonious control over every detail of this 'total work of art'. In this process the interior is reinvented as a setting that is apparently free and flexible. In corollary to this, however, the apparent freedoms bestowed in reality demand the enslavement of those who live there to the precise and predictable workings of these devices.

Despite the appearance that all is efficiency and technical perfection, other aspects of the design seem to contradict this. The plan of the building is far from functional, and the language of mass production belies the reality of the building's making. Each element in the house is in fact a bespoke, hand-made exemplar, and all the techniques used were craft based. Similarly, in its methodology, the house also strayed from rationalised design trajectories indicated by mainstream modernism. In the methodology of modernism, design moves from site plan to general arrangement to working drawings to detail in a series of progressive refinements and increases in scale. In the Maison de Verre, however, it is understood that a broad 'concept' set down the rules for the organisation of the house, which followed a conventional pattern,[36] but the details of its layout were actually decided only after the building was on site, as I have previously described. Though several sets of floor plans exist to document the changes in the strategic design,[37] according to Frampton no working drawings were done, and a few simple perspectives are the only known drawings to have been made that show the interior of the Maison. Thus the designer could be regarded as a hands-on technician akin to his builders and metalworker, an architect in the craft tradition of designing-as-you-make. In this sense Chareau could be said to have abandoned the rational-theoretical position of the architect in favour of a more responsive approach to contingent conditions as they unfold on site. Our reading of his role as

gynaecologist is reinforced by the knowledge of this working method. In response to the specific circumstances presented by each case, it is through a tactile laying-on of hands and a visual inspection that a doctor examines his patient. In this sense the production of space, as with the production of health, relies on a physical and visual scrutiny of a given situation.

Vision, physicality and light

In addition to the medical resonances, the connection between the female body and the building is constructed using the modernist metaphors of transparency and light. Dr Dalsace's description of the house provides us with a eulogy to the use of light in the Maison de Verre:

'. . . Pierre Chareau realised a structural *tour de force* of three luminous floors, within the ground floor and the first floor of this small town house. These two floors had been so dark that the servants of the lady [he is referring to the old lady on the third floor] . . . were obliged to work throughout the day by artificial light. Light permeates freely around this block . . .'[38]

The doctor describes how natural light enters the building's cavernous interior and is contrasted with the artificiality of the light required to illuminate the spaces of work in the previous building. His description indicates the importance of light in shaping a design that led to the striking novelty of a city dwelling whose walls are made entirely out of glass. The new house orders, structures and frames the natural light moving 'freely' around it. The designer is equated with artifice (ordering), associating the woman's body (also implicated in nature) with that which is ordered, both by the architect and the gynaecologist. Both daylight and artificial light make these conditions visible. In conjuring a fantasy of the radiant logic of the building we are presented with an image of an educated client in tune with the cultural preoccupations of the early modern era.

Dr Dalsace draws a distinction between the lighting conditions on the ground and the first floor, suggesting they have a different character. This is no surprise, since the ground floor was functionally discrete from the first floor and principally provided space for the gynaecology practice, while the house was contained in the first and second floors of the building above it. In the gynaecology suite daylight is used selectively to emphasise specific parts of what is essentially a dark space, just as the doctor uses light to focus his view on the woman's body. Meanwhile, the light in the first floor salon is a vast and diffused one, luminous as in the Doctor's description. In this reading of the building, light becomes a key metaphor in creating a setting for encountering the female body, first as a patient in the gynaecology suite, and second as an occupant in the spaces of the house.

To reach the doctor's medical practice, the patient is taken through the ground floor of the house from front to rear and back again in an elaborate *promenade architecturale*. In this part of the house, light seems to be used as a guide and a metaphor of the gynaecological examination since it is used to penetrate the dark ground floor spaces, guiding the

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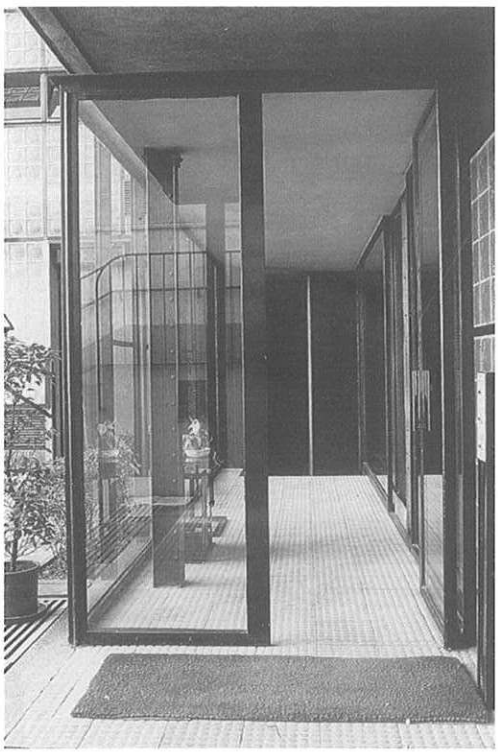


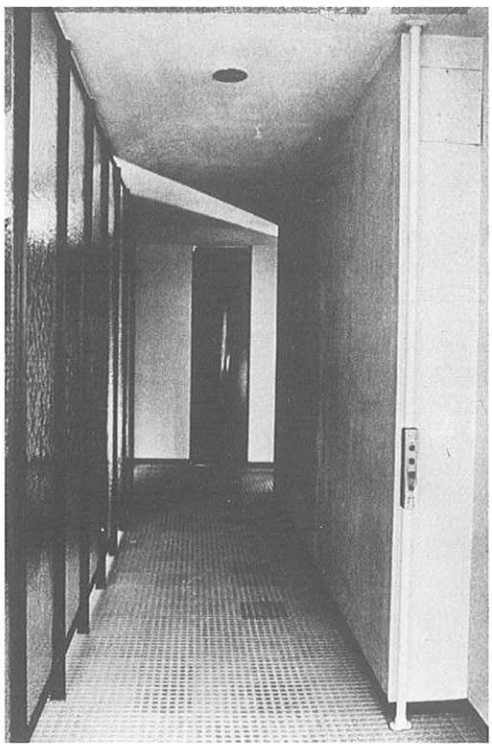


Figure 4. Main entrance from cour d'honneur. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

Figure 5. Passage through the ground floor interior towards the medical reception room at the rear. The main staircase is on the left, behind the glass screen. (Courtesy Michael Carapetian.)

patient to the place of health. On arrival, the client enters discretely into the building along the planes of glass that form the front façade, slipping through the glass skin along the grain (Fig. 4). A turn to the right towards the doctor's reception, which is configured as an island room towards the rear of the house, moves the patient from light, associated with the exterior, to the instant obscurity of the interior. The corridor at the end cuts the space dead, and the darkness emphasises the confinement of the passage. A shaft of light at the end of the hall, coming from the doctor's suite to the right, slices the gloom like a precision instrument, hostile and invasive (Fig. 5). As if warned away, the patient moves to the left into subdued, then bright light, partly reflected off the clinically white walls of the reception booth. The rear façade that addresses her, made of glass blocks with carefully placed clear glass windows, is

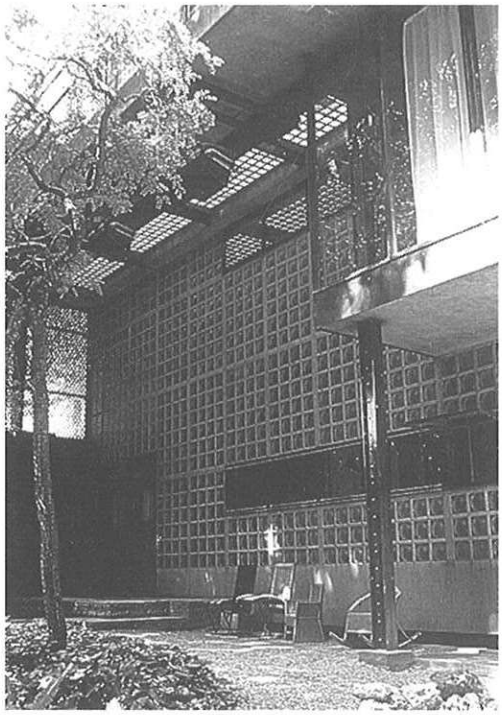


Figure 6. Exterior view of the Maison de Verre from the garden. Note the eye-level clear glazed windows following the route from the reception to the doctor's consulting room (double doors at far left), and Mme Dalsace's winter garden at first floor, suspended partially over the garden (right). (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

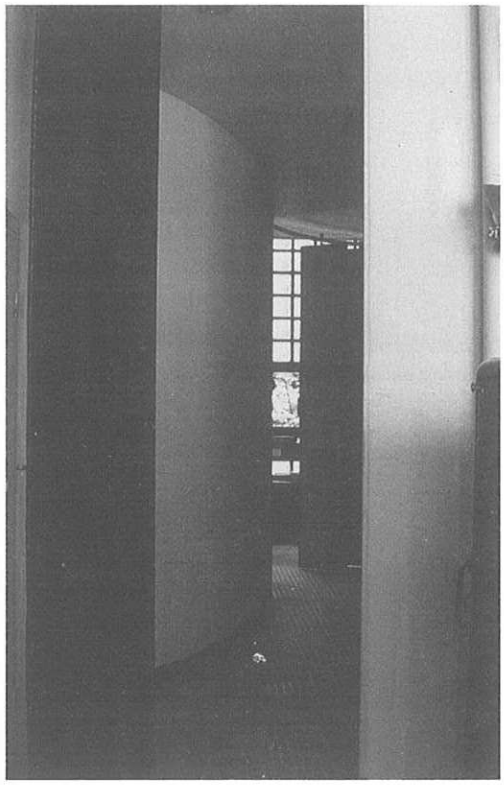
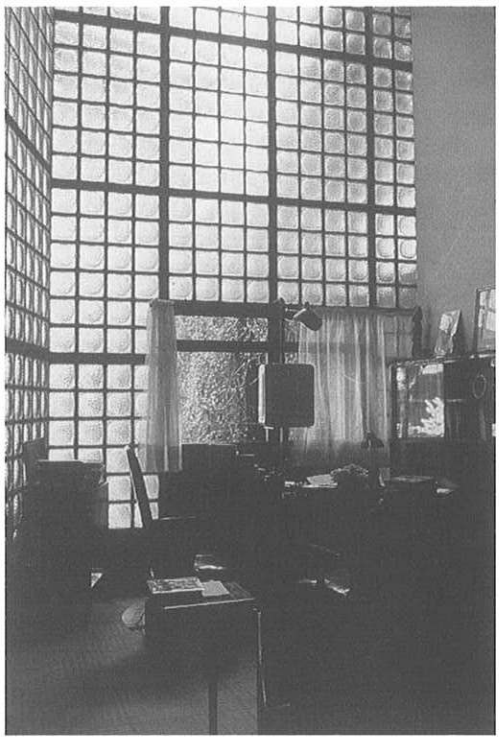


Figure 7. The exit from the doctor's consulting room, discreetly dark. The curved wall of the reception is to the left and the moving screen operated by the doctor is shown half open, revealing the view of the garden beyond. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

designed to maintain anonymity. In the waiting room the windows are at eye level, permitting views of the garden as a horizon. However, as the patient moves towards the consulting suite, rising three steps on the way, her head is now above the level of the window (which remains at a constant height), and her gaze is guided downwards, as if to direct her attention to (mother) earth. From the garden side (Fig. 6), only the body – not the face – of the patient is revealed, as a fragmented whole without an identity. At the end of this sequence lies the doctor's suite. The doctor himself controls entry into the consultation room. A sliding screen operated by a lever divides the waiting room from the exit past the doctor's private staircase and allows the departing patient to leave discreetly. When she is safely in the obscurity afforded by the dark corridor, he opens the screen to admit the next patient (Fig. 7). The male with his tools seems to control access to the female's fertility.



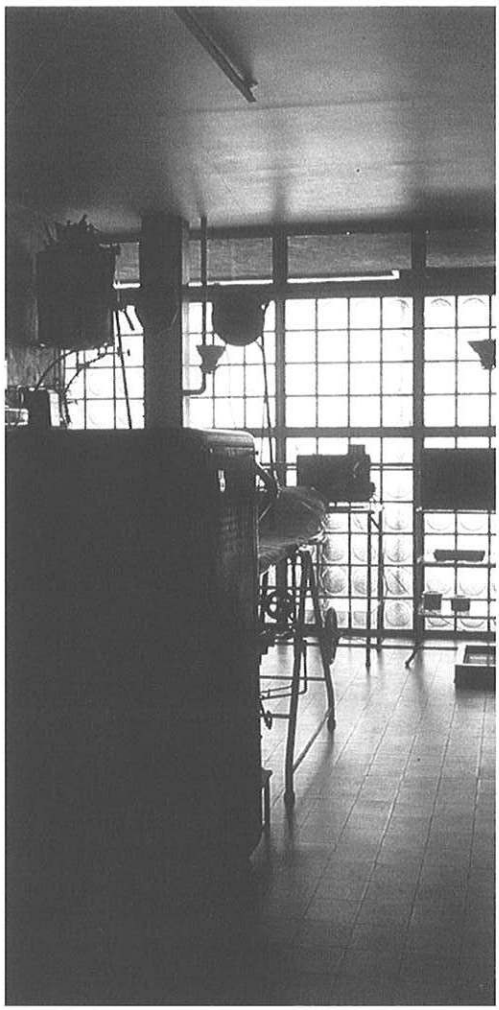


Figure 8. The doctor's consultation room, built of glass lenses to its full (double) height. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

Figure 9. The doctor's operating theatre looking towards the front of the house. Patients arrive for consultations on the far side of the wall of glass lenses. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

This sequence locates the building and the female patient as a subject whose body is manipulated by the control of the male 'technicians' Chareau and Dr Dalsace.[39] The technician's presence in the building is revealed by the shafts of reason's light penetrating its dark voids like a laser. Proximity to the source of scientific recuperation (the doctor's suite) engenders a sense of faith and calmness witnessed by the well-lit reception, before the patient submits herself to the capable hands of the doctor. Her body is fragmented and mirrored through a series of

mediating devices (windows, sliding doors, mirrors, shafts of light), which leave her identity in question and re-present her as a medical specimen, ready for the doctor's intervention. Similarly the interior, which is swathed in darkness on first encounter, is progressively sanitised and technicised as it approaches the doctor's suite, cleansed through the use of white walls, plane surfaces and the manipulation of natural light. The sequence climaxes in the lens-clad consultation room, the first of three spaces that form the medical suite and cross the house from front to back.

The consulting room (Fig. 8) is the only double-height room apart from the salon, emphasising the potency of its occupant in the symbolic programme for the house. The glass lenses the building's resonate with symbolic programme. In the field of gynaecology, a successful diagnosis demanded improved techniques and instruments by which to reach the interior of the female body. The nineteenth century saw the intervention of a crucial instrument, the speculum (from the latin *specere*, to see; also literally, a mirror), for accessing the reproductive organs through the vagina. The speculum, which took a number of forms, was generally made of metal and could be dilated after insertion so that a good view could be had of the patient's internal organs. Good light – usually daylight – was required to see anything, and a lens was frequently used to focus it, allowing the doctor to peer into the internal cavity. Mediated by the lens, then, the medical subject is opened up to the scrutiny of the male gaze using beams of light to illuminate the site of dis-ease.

The second of the doctor's rooms is the examination room, containing an elaborate changing booth in which the patient removes her clothes. A giant mirror suspended above the changing room dismembers and re-presents the female form. In the mirror reside symbolic questions of representation and identity, as well as enquiry. This is the only room in the house that is fully internalised, located in the centre of the building against a party wall, with no access to daylight.[40] Programmatically it is a space of transition, but it is also the point at which the patient is transformed from subject to object. The quality of the space and its light, together with the presence of the mirror, suggests theatricality and artifice, consistent with the obligatory use of artificial light in the internal examinations that took place on the couch placed along one wall of the room. Finally, the last room in the medical suite is the operating room, located at the front of the house but with no view to the *cour d'honneur* (Fig. 9). As patients arrive at the entrance on the far side of the wall, their shadow is cast upon the glass lenses that form a backdrop to the operation carried out in the diminutive theatre. Here we are confronted simultaneously with two ways of seeing the female body. First, in the interior, elements recalling the technicisation of the processes of intervention in the body (tools, bench, medical equipment) are silhouetted against the graph paper backdrop of medical rationality. The elements of domesticity seem to metamorphose into instruments of the doctor's art: the bed becomes a couch, the side table becomes a trolley in stainless steel, and the table lamp becomes a light and speculum. Second, these pieces of furniture are also tropes for the missing patient: the

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couch with its stirrups and headrest seems to stand silently for the body, the speculum for the absent vagina. Set against the backdrop of cleanliness and light, we are presented with an incontestable statement of modernist and medical propaganda for the female body as with the house, wherein light is always good, as is the doctor's art.

The foregoing analysis is consistent with early twentieth-century medicine's metaphor of the body-machine, which gave credence to the idea that the body was a series of systems capable of rationalisation. In the eighteenth and early nineteenth centuries social codes demanded great circumspection during a tactile examination so as not to transgress the bounds of decency.[41] When use of the speculum became common later in the century, however, the female body had to be manipulated into a suitable position for easy insertion of the instrument and for subsequent examination by the doctor. The favoured positions were humiliating for the woman, but the metaphor of the body-machine encouraged the isolation of the abdominal and genital area from the subject herself by veiling the woman's identity, so preserving her dignity.[42] Although this may be regarded as a redeeming feature of this form of examination, its logic tended to treat the patient as an object, which allowed it to be fragmented into isolated parts and conceptualised as dysfunctional.

By analogy, the building housing the gynaecology suite is regarded pejoratively by Dr Dalsace because it is 'sick': that is, dark. Beams of light must penetrate it in order to render it 'luminous' and good. Chareau builds dark, fearful spaces dedicated to the mysterious workings of female reproductivity, and he introduces shafts of light to order and explain the arrangement of the interior. Belying the modern appearance of the spaces, the organisation of the ground floor borders on the irrational, and seems to draw on metaphors of fear, darkness and the unknown. This arrangement permits Chareau to reorganise the interior using bright, white architecture, confirming him as gynaecologist to the building.

A second reading may be made if we now turn our attention to the body of the woman who inhabits the house, and the ways in which she sees and is seen. Vision is not a neutral transaction, it is one laden with social coding, desire and power relations. In the classic scenario, woman is the viewed and man is the viewer.[43] This is given poignancy in film, where light falling on the glass of a lens captures the object of desire, framing the body for consumption by the male gaze and rendering it the site of sexuality and seduction.

An example that suggests this reading is to be found in the many instances of perforated materials and opaque glass that define the boundaries between territories in the house. In one example, a screen divides the main staircase from the prying eyes of patients arriving for a consultation on the ground floor (Fig. 10). Though there is no functional necessity to bring the two realms (doctor's suite and home) into contact, Chareau chooses to, as it were, flaunt the privacy of the domestic interior to the passing patient. Similarly, perforated metal and rippled glass are used extensively as screens in the bathrooms, and through them wall-lights present a veiled view of the body that is given an added allure because it denies the body

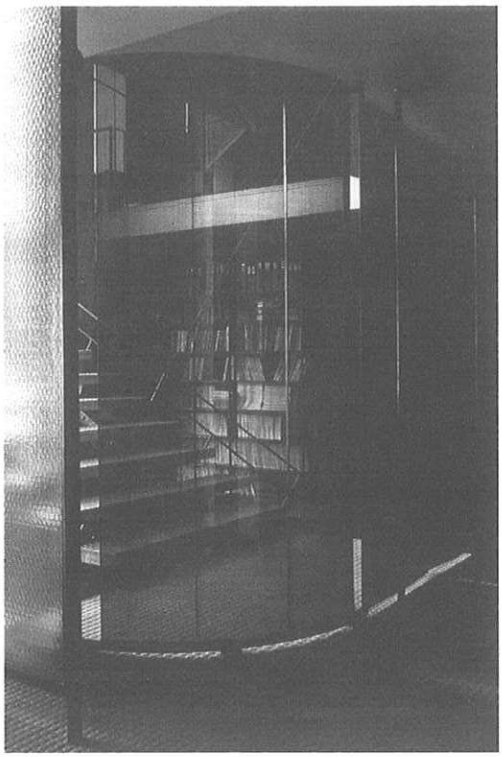

Figure 10. The main staircase showing the perforated metal screen drawn across the ground floor landing. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

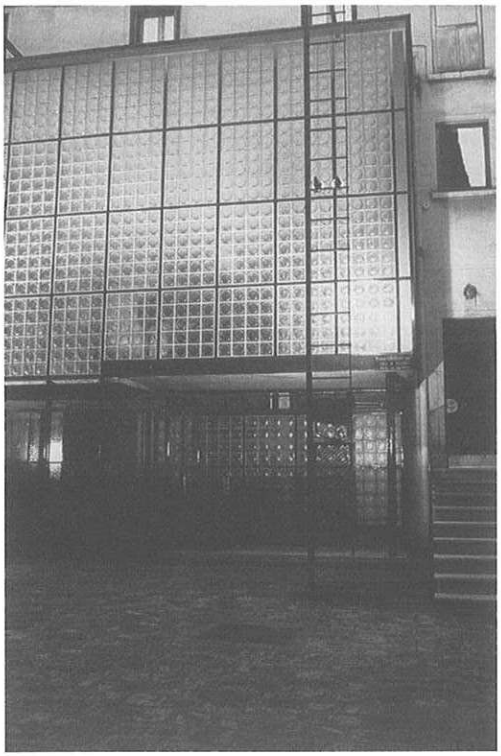

Figure 11. External view of the house from the cour d'honneur at night, revealing the salon behind. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

a corporeal reality, reducing it to a form of representation.

In the first-floor spaces of the house the forms of both the male and the female resident are set against a backdrop of light-filled glass. The front façade forms a diffuse light backdrop to the main salon so that figures in the interior appear in two ways: in one guise, as rounded, moulded and softened; in the other, as flattened silhouettes against the radiant background. Light fetishes the body, but in the salon, where social relations are negotiable, social codes determine its effects. The female in silhouette offers the beholder a vision of femininity as mysterious and visually alluring, yet a sense of her own power is returned to the woman because her controlling gaze is obscured by darkness. Under different conditions, light penetrates all areas of the salon allowing her gaze to monitor the entirety of its double-height. In her role as guardian of the house her own vision is all-pervasive.

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The external skin of the building draws on a further analogy with the body, in which a healthy skin signifies a healthy body. When viewed from the exterior, the façade takes on the appearance of a drape over the internal organs of the building, giving little away but glimpses of nearby objects. The cells of the exterior are like the warp and weft of clothing/cladding, alluding to what lies beneath. At night the skin becomes translucent and the guts of the house are revealed like an X-ray (Fig. 11). Here, the white façade of the modern movement is transformed into the light façade of the technical and cinematic era. A repetition of hundreds of identical industrially produced component parts assembled into a grid, the façade is associated with the rational measure of science and technology against which the body of the woman is judged. Her dark form is made the 'other' of the order of the masculine mind embodied by the luminous squares. It is as if in the designer's mind the reality of domestic life is collapsed and replaced by the dream sequences of a back-projected social theatre played out in the salon.

The salon is one space that escapes thorough technicisation, which I have equated with control. Excepting the library staircase, it is missing the mechanised elements that tend to be found elsewhere. Here, visual control takes primacy over mechanical control, and the limitations imposed by the programme are apparently at their weakest. The most 'public' space within the house, the salon, with its luminous backdrop, is like an external space open to the daylight. As such, it is the place where a fluid but shared social and cultural life is negotiated. Although we are presented with a fantasy about the role of woman, she is free, within cultural constraints, to negotiate her occupation (Fig. 12). The territory between fantasy and reality opens up opportunities for self-definition and even for subversion of social conventions.

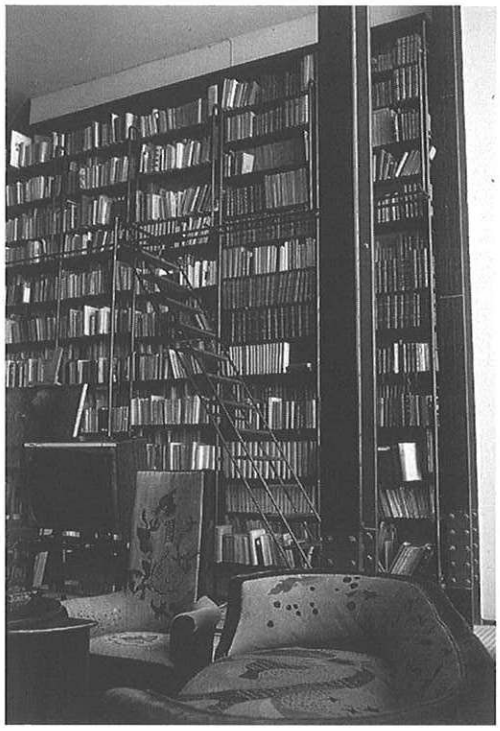

Figure 12. View of the interior of the salon showing domestic props. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

Hygiene and dirt

In modernist ideology, light is cleanliness. A clear skin indicates a clean body, a sanitised house. The medical suite is made of white walls and light.

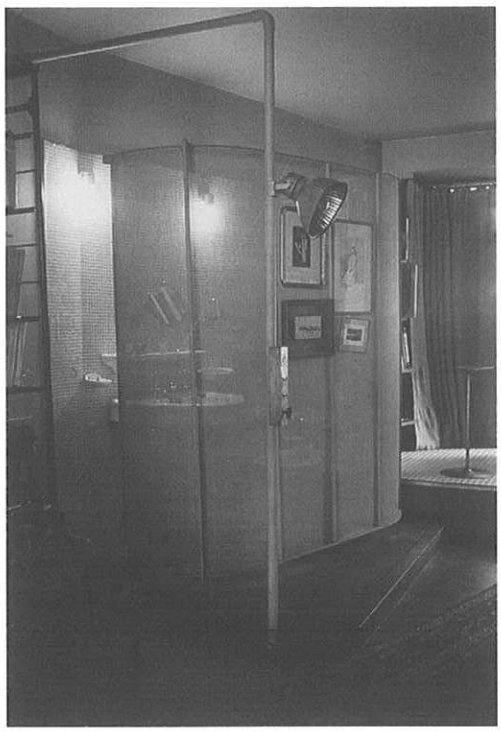

Figure 13. Second floor bedroom. Bathroom screen revealing sanitary ware behind. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

Within the house, the 'sterilisation' of the medical rooms also 'disinfects' the other parts of the building. In the body of the female patient, as in the house itself, light and the gaze penetrate and perforate, washing things down, flushing out the 'alien' sickness and dirt.

As sites of the cleansing and rejuvenating of the body, the bathrooms in the house take up the theme established in the doctor's suite. The bathrooms are annexed to the bedrooms, allying the place of sexual acts with the requirements of cleansing. The intimacy of the spaces permits the bathroom screens to be made of semi-transparent perforated metal, which veils but does not fully conceal the nude body; rather, they enhance the body's seductive power. In the absence of the live body the screens take on the appearance of cladding (i.e. clothing) to the body metaphors presented by the sanitary appliances (Fig. 13).

As in the example of the operating table in the doctor's theatre, the body going about its toilette is subjected to the efficiencies of this servicing operation. A different appliance (bath, shower, bidet, basin) deals selectively with the cleansing of different parts of the body, separating waste products in a hierarchy of different orders of dirt. In a move that seems to confirm their status as pieces of 'equipment', each appliance is subject to the control of the technician/architect as he contrives to make the bidets swivel about one point, allowing the user to manipulate them and the screens that contain them, like the doctor does during his examination of and operation on the body's internal organs. The surfaces are shiny, reflective, permanently bright, ageless. In place of the real, secreting body is a clinically clean, fetishised trope.

The medical suite uses light and order (signified perhaps by light falling on the glass lenses) to ward off the dangers of disorder, dirt and disease. Just as the order of the medical suite infects the house, however, the mess and dirt of the house infect in turn the clinical nature of the ground floor. Its spaces are dark, needing artificial light to overcome the gloom; its plan is convoluted and hardly 'functional'. Fragments of the world above recur in several places (the entrance bells; the main stair;

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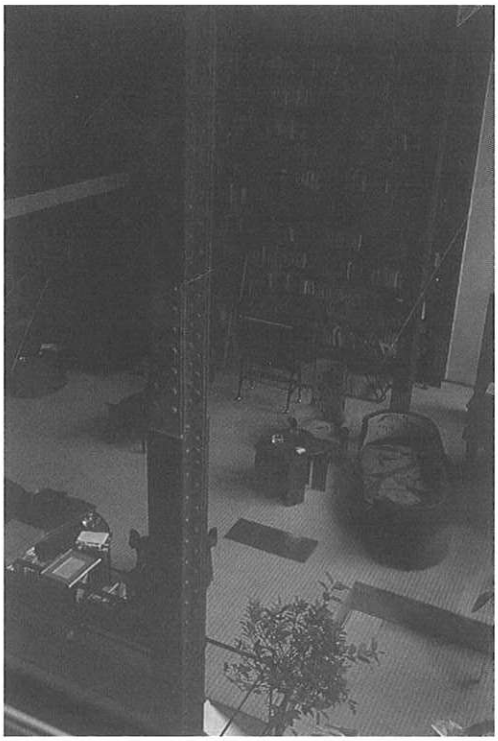

Figure 14. The salon showing one of the steel columns clad in black slate with its 'bloody' interior. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

the doctor's study; the winter garden; the maid's quarters; the domestic garden), a reminder of those who work or visit there. Perhaps the invading traces of domesticity suggest that science is not as pure as it might appear, and that the image of cleanliness and order is a mere fetish, an object used to suppress the fear of real life.

The metaphor of the internal/external dirty/clean body is carried through to the columns of the salon. These are I-section universal steel columns, whose flanges are clad in black slate, which seems to emphasise the nakedness of the steel surface in the hollow web (Fig. 14). The web is painted red as if it were an inside, cut in section, and seems to signify dirt rather than cleanliness. Meanwhile the furniture in the salon retains elements of bourgeois domestic comfort and tradition. Could it be that these are the final bastions against the drive to technicise domestic life, to fetishise the body? For surely it is in the zone of social life that the female can subvert, adjust, refuse to be complicit with the reduction of the body to a set of mechanisms and processes. Here life, with all its mess, chaos, and dirt, fights back: in the books cluttered onto shelves, in the tapestried chairs, in the untidy growth of pot plants, the haphazard arrangement of chairs. In this context, the cut red columns seem to stand as a symbol of the monthly 'dirt' that is the sign of female fertility. The rhetoric of the programme may be concerned with health and cleanliness, but perhaps the signs of reproduction are finally acknowledged.

The client and the 'other' client

In this revised her-story, both architect and husband play the role of male technician, and the space of the house is the measure by which the body of the building is controlled by his actions. Dr Dalsace's description of the distribution of internal uses – '. . . the ground floor is given over to medicine, the first floor to social life and the second to nocturnal habitation'[44] – is noteworthy for its omissions: no word is said of the servants or their quarters, which actually occupy fairly extensive spaces on all floors, though mostly confined to a separate wing. The

physical separation of served and service spaces remains intact, discreetly unspoken and unsignified, while the functional division of domestic space into areas for work, leisure and sleep (areas for production, controlled social intercourse and reproduction) are referred to in the quotation.[45] In addition to planar separation, there is a sectional hierarchy that also respects traditional social conventions: the social space (salon) is located on the front of the house adjacent to the *cour d'honneur*; adjoining this in the centre of the building is the dining room and the Doctor's private study; finally, on the garden side we find Mme Dalsace's day room and the winter garden. The domain ascribed to the female – the bedroom, boudoir and also the garden – remain resolutely the most private places, with carefully controlled access and vistas. Thus, the house delivers our expectations of the conventions of a bourgeois interior, including the status of servant whose bedroom is located in the end of the exposed wing.

However, the free plan does give rise to some interesting moments of unease where these relationships are problematised, permitting the female resident freedom to resist the conventions set down for her behaviour. Social codes are subverted, adjusting the meaning of the domestic interior and in the process proving that architecture builds into itself limits to its own social determinism.

The main stair is the threshold to the private territory of the house, but it is strategically placed in relation to the medical suite. Chareau consciously does not attempt to separate functionally distinct parts of the house. Rather, the ground floor is essentially a free plan, with ill-defined boundaries between the medical areas and the house and the servant's zone and the house. Patients arriving at the surgery are deliberately brought past the staircase on their way to the waiting room. Visually, the stair belongs to the upper floor: the first step is a platform lifted off the ground; each step is separated from the next and the structure is veiled behind two screens, one of glass and the other of perforated metal (Fig. 10). Although the stair rises in the opposite direction to the patient, acting rather as a rebuff than as an invitation, light passing between the treads and the stairwell falls on the screens, beguiling the passer-by and asserting the presence of the cultured, domestic harmony above. Reclining like a veiled seductress it beckons to the voyeur bold enough to take a glance with the offer of tantalising half-glimpses of a forbidden interior.

In a further instance, the secondary staircase that leads directly to the doctor's private study on the first floor is unexpectedly situated outside Dr Dalsace's consulting room in the corridor, although one would imagine it at home within the privacy of the consulting room (Fig. 15). Structurally, the stair is hung from the floor above, therefore correctly belonging to that floor. Composed of painted steel, it has treads that are open grilles like those of a service stair, which suggests that access is restricted to those with a technical knowledge (in this case, of course, Dr Dalsace). Provocatively positioned at the exit from the surgery (not unlike the relationship of the main staircase), the stair has an aesthetic that can be read as a reference to the Doctor's role as technician in the life of the house and of the female body.

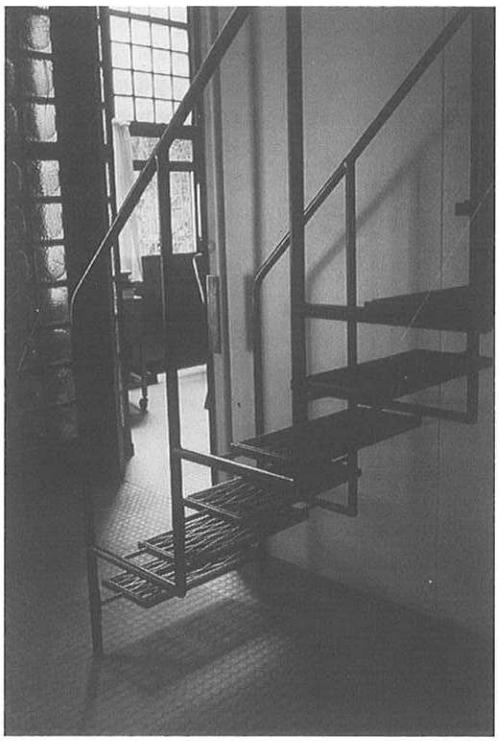

Figure 15. The 'technician's' staircase: the doctor's private staircase outside his consulting room leading to his private study. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

Figure 16. View of Mme Dalsace's winter garden. By drawing the curtain she could monitor who came and went from her husband's consultation room. (Copyright Robert Vickery, courtesy of the Architectural Association Slide Library.)

The apparent consistency of the conventional spatial programme is also challenged by the relationship between the winter garden and the reception area for the patients. The winter garden, on the first floor, which is metaphorically part of the garden brought inside and tamed, has a narrow window overlooking the route taken by the patients into the Doctor's suite on the floor below. Chareau permits the gaze of the housewife to survey the flow of patients through to her husband's consulting room as they enter and leave (Fig. 16).[46] However, her view is narrow and fragmented. She sees only the rear view of the patient, whose body is lit from the side by light from the garden façade as she enters the consultation suite. Maintains discreet anonymity for clients from the prying eyes of the wife, yet allowing a way by which she can survey her husband at work, and monitor the propriety of the medical encounter. Chareau implies that the housewife's gaze exerts a subtle control

over personal and professional relations, asserting domestic morality.

Finally, in the example of the staircase from the master bedroom to Mme Dalsace's day room we find a technically ingenious design solution, which overtly signifies control. In this instance a telescopic staircase expands and contracts through an opening in the floor of the master bedroom, connecting it with the day room below. The imagery could hardly be more overt: a (male) device or tool expands and contracts through the female spaces. The 'tool' may be manipulated by the woman controlling access into her secreted 'womb with a view'. Symbolically, therefore, this route to the site of reproduction is controlled by the female – suggesting the wife's consensual participation in the sexual act as well as control over her own sexuality. Yet this is very much a secondary, minor route between floors. While it may adjust the personal relations between husband and wife, it does little to change the major organisation of the house, signifying, perhaps, only a minor challenge to the structure of sexual relations within the home. Yet Chareau seems to suggest – even encourage – a somewhat more liberated sexual role for the wife than that conventionally permitted by society, for within the privacy of the home sexual relations between husband and wife are signified as open to negotiation.

These examples illustrate that the traditional social codes governing the apparently cosy domestic order are subtly challenged in specific instances. In all these cases, the relationship between the symbolic mechanisms for control and the real-life actions of the women and men as they play out their respective roles confirms the rhetorical, and purely representational, position of the mechanism in the shaping of social relations. While the freedom of the woman may be confined within the context of cultural conventions, it is never non-negotiable. In the final analysis, representations of order cannot confine, or define, the unpredictability of real life.

Conclusion

In the modern era, medicine conceptualises the body as a machine, a development that enables the isolation of the constituent parts of the body and the surgical incision to cure the patient of her 'disorders'. The scientific rationale that legitimises the gynaecologist's intervention in the female body also legitimises the architect's adoption of the role of scientist/technician in solving the problems of the city. Since a building and the city work in tandem (the one forming a single 'cell' in the tissue of the urban fabric), the home and its interior are one of the targets of this enterprise. Modernism's project was to reform the interior of the home and by so doing to ensure a morally and physically healthy society. The architect/technician used an authority borrowed from science and the rhetoric and rationale of science to reframe the problem of the social as the problem of the material. He appealed to the aesthetics of the machine to represent this change while using radically disruptive strategies to achieve it. Architect-physicians thought that by invoking the image of control and streamlining the interior in the manner of industrial products they could bring about a social revolution. Such approaches omit to recognise that the social

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does not respect such conceptions because it is contingent and variable, dependent on cultural phenomena outside the architect's reach.

The house, as an allegory of the female body, is the body of the woman. This is made clear in the Maison de Verre, where the connections between medicine, architecture, the female body and the interior are made explicit. The female body is veiled, internalised, privatised. Mechanisms are required by which her internal organs may be viewed – even accessed. Her labour is confined to childbirth. The doctor who enables (re)production by working on his patients performs the same set of actions as Chareau the architect/technician does on the existing building. Chareau makes incisions in the existing flesh of the city, holds open the wound, and removes the aesthetic problem – the cancerous growth of bourgeois domestic clutter. In its place he inserts a shimmering array of technical gadgetry, replacements for the dark, old-fashioned furnishings of the traditional interior, and the new house is resurrected in the image of the technological age. The objects of domestic life are selectively appropriated by the techniques of the male and fetishised into mechanisms or instruments that stand for the absent body, substituting a controllable, predictable, perfected, environment in place of the sentimental, fickle interior. This is the birth of the sanitised lifestyle, the architecturally photogenic interior, the home rationalised out of inhabitable existence.

Yet throughout the building the unpredictability of life creeps back. In specific instances such occasions are anticipated by the designer and fashioned to acknowledge complex social relations, such as in the wife's monitoring of her husband's patients. In the salon, where social relations are constructed in space and time, contingent forces and negotiated inhabitation challenge the impulse for determinism, calling the apparent order into question. In this 'external' interior, the place of fluid social encounters, life's unpredictability reasserts itself, and modern architecture's will to power is proved futile. Significantly, mechanical gadgetry is limited here to moving screens and mechanisms for opening windows. Meanwhile, articles of domesticity are everywhere present, signs of the feminine that find space to fight back, insisting on a presence in the new order. The rationalised, sanitised interior is proved to be merely the image of order, a vain attempt to hold the feminine at bay, challenging the female inhabitant to act against the grain.

Notes and references

1. For example, see Richard Rogers, 'Paris, 1930', *Domus*, no. 443 (October 1966), pp. 8–19.
2. Mark Cousins, 'The first house', *Arch-Text*, 1 (1993), p. 36 pp 77-126.
3. Kenneth Frampton, 'Maison de Verre', *Perspecta*, 12 (1969).
4. Paolo Mellis, 'Il Grande Vetro dell-Architettura', *Domus*, 640 (June 1983), pp. 22–29.
5. Brian Brace Taylor, 'Voir et savoir dans la Maison de Verre', *Connaissance des Arts*, (1992), pp. 54–60.
6. For a history of Chareau's career, see Brian Brace Taylor, *Pierre Chareau: Designer and Architect*, (Cologne, Benedikt Taschen, 1992). During this

period Chareau's collaborator was the Dutch architect Bernard Bijvoet.

7. I refer in particular to Christine Battersby, *Gender and Genius: Towards a Feminist Aesthetics*, (London, The Women's Press, 1989).
8. Battersby, *Gender and Genius*, esp. Chapter 5 ff.
9. Jerzy Soltan. 'Working with Le Corbusier', in H. Allen Brooks, (ed.), *Le Corbusier: The Garland Essays* (New York, London: Garland, 1987), pp. 1–17.
10. Le Corbusier is perhaps responsible for the propagation of this attitude: his dismissive behaviour towards his clients has been documented. See for example, Tim Benton, 'Villa Savoie and the architect's practice', in Brooks, *Le Corbusier*, pp. 83–105.
11. A cliché sufficiently well understood as to have entered popular imagination in the character of Howard Roarkn in Ayn Rand's book *The Fountainhead*.
12. She introduced Chareau to a number of avant-garde artists and designers, as well as providing space for his own talent. See Taylor, *Pierre Chareau*, pp. 8–9.
13. Related by the house guide on a visit, March, 1996.
14. See Kenneth Frampton, 'Maison de Verre', *Arena*, 81 (901), (April 1966), p. 257.
15. See Kenneth Frampton and Marc Vellay, *Pierre Chareau: Architect and Craftsman 1883–1950*, (Rizzoli, 1984), p. 237 and 246–8, and Frampton, *Perspecta*, p. 77. Some account for the fact that Chareau never produced a subsequent building to match the Maison de Verre by attributing the design to his partner Bernard Bijvoet. Yet Bijvoet never claimed authorship despite his involvement in the project. See, for instance, the section written by Bijvoet in Mellis, 'Il Grande Vetro dell'Architettura', p. 22.
16. Frampton, *Perspecta*, p. 77.
17. *Ibid*. p. 77. Frampton also remarks on Chareau's attention to the richness and sensuality of materials, as if this were a strange, perhaps overly feminine concern; *Ibid*. p. 78.
18. A list of prominent members of the Union des Artistes Moderne (UAM), a group of forward-looking designers of which Chareau was a member, included a high proportion of women. It is well documented that at the Bauhaus women tended to be directed towards the decorative arts rather than architecture, a career that was considered more appropriate to their sex. Some exceptional women, such as Eileen Gray, moved into architecture after an education in interior design, much like Chareau.
19. Frampton, *Perspecta*, p. 77.
20. Frampton and Vellay, *Pierre Chareau*, p. 241. The source of this description is not identified.
21. Quoted in Frampton, *Perspecta*, p. 77.
22. *Ibid.*
23. For example, *Urbanisme*, (Editions Crés), first published in Paris in 1924, and *Précisions* (1929).
24. Le Corbusier, *The City of Tomorrow,* (London, The Architectural Press, 1947).
25. *Ibid.* In particular, Chapter XIV, 'Physic or surgery', pp. 263–283.

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26. 'The condition of the whole city lies in the condition of its cells . . .', Le Corbusier, *The City of Tomorrow*, p. 85. He elaborated this theory in Le Corbusier, *Précisions*, in particular the chapters entitled 'The undertaking of furniture' and 'A man = a dwelling; dwellings = a city'. See also Charlotte Benton, *Charlotte Perriand, Modernist Pioneer* (Design Museum, 1996), for an account of Perriand's collaboration with Le Corbusier on the project for the modern interior.
27. See, for example, Lisa Tierson, 'The chic interior and the feminine modern: home decorating as high art in turn of the century Paris', in Christopher Reed (ed) *Not at home: the Suppression of Domesticity in Modern Art and Architecture* (London, Thames & Hudson, 1996), pp. 18–33.
28. For example, Eileen Gray. See Philippe Garner, *Eileen Gray: Design and Architecture, 1878–1976*, (Cologne, Benedikt Taschen, 1993).
29. See, for instance, Mary Dally, *Women Under the Knife: A History of Surgery* (London, Hutchinson Radius, 1991).
30. William Ray Arney, *Power and the Profession of Obstetrics* (Chicago, University of Chicago Press, 1981), p. 6.
31. Men were considered to need sex to remain healthy whereas in women eroticism was regarded as pathological. Gena Correa, *The Hidden Malpractice – How American Medicine Mistreats Women* (New York, Harper Colophon Books, 1985).
32. James V. Ricci, *One Hundred Years of Gynaecology 1800–1900* (Philadelphia, The Blakiston Company, 1945).
33. Frampton and Vellay, *Pierre Chareau*, p. 240: 'Chareau used this commission to invent and perfect new prototypes of components, and in a sense the creator of the Maison de Verre seems to have regarded the work as a laboratory for the development of a hypothetical industrial architecture.' Also, Frampton, *Perspecta*, p. 79: 'Limited in its actual prefabrication, it nonetheless postulates, through its modular order, a world of high quality mass production.'
34. Quoted in Frampton and Vellay, *Pierre Chareau*, p. 240; and in Frampton, *Perspecta*, p. 79.
35. See Frampton and Vellay, *Pierre Chareau*; Frampton, *Perspecta* 12; Brian Brace (Cologne, Benedikt Taschen, 1992) Taylor, *Pierre Chareau*, etc.
36. Ground floor: medical practice; first floor: public and semi-public space (salon, study, day room, dining room); second floor: bedrooms and bathrooms. The service areas, including kitchen and maid's quarters, occupied a separate wing.
37. See Taylor, *Pierre Chareau*.
38. Quoted in Frampton, *Perspecta*, p. 79.
39. I am indebted for this critique to Emily Martin, 'Science and women's bodies: forms of anthropological knowledge', in Mary Jacobus, Evelyn Fox Keller and Sally Shuttleworth (eds), *Body/Politics* (New York and London, Routledge, 1990), pp. 69–82.
40. During a routine internal examination, the doctor would peer through the speculum into the vagina. He would need a source of light in order to see into the cavity. Historically, the genital area of the female patient would be placed

facing a source of daylight (a window, for example); sometimes the doctor's assistant would carry a beam of light or one would be strapped to his head. See, for example, James V. Ricci, *The Development of Gynaecological Surgery and Instruments*. (Philadelphia, The Blakiston Company, 1949), pp. 345–6, and Harold Speert, *Obstetric and Gynaecological Milestones Illustrated*, (Parthenon Publishing Group, Carnforth, 1996), p. 484.

41. See, for example James V. Ricci, *The Development of Gynaecological Surgery and Instruments* (Philadelphia, The Blakiston Company, 1949), pp. 306, 307ff.
42. Harold Speert, *Histoire Illustrée de la Gynocologie et de l'Obstetrique*, (Paris, Les Editions Roger Dacosta, 1973), pp. 284 and 490.
43. Laura Mulvey, 'Visual pleasure and narrative cinema', *Screen*, 16 (1973), pp. 6–18.
44. Quoted in Frampton, *Perspecta*, p. 79.
45. The plan of the Maison de Verre seems deliberately to eschew the virtues of functionality, and its success relies on the presence of servants to direct visitors around the ground floor, despite the apparent clarity of the bell pushes that separate visitors to the house from patients and tradesmen. Presumably this is one reason why the servants' wing projects into the *cour d'honneur.*
46. This is a situation comparable to that described by Beatriz Colomina in the interiors of Adolf Loos in her essay 'The split wall: domestic voyeurism', in *Sexuality and Space* (Princeton Architectural Press, 1992) pp. 73–128.