In 1929, on the occasion of the publication of drawings of her house E 1027, Eileen Gray wrote an essay criticizing avant-garde modernism’s descent into the “cold calculations” of abstraction. She questioned the assumption that “a play of masses brought together in daylight” was the ultimate goal of Architecture. “The human being is not pure intellect”, she observed. Buildings should serve their inhabitants in body as well as in mind, touching “the most intimate needs of subjective life.” A full, sensual, and humane architecture need not return to historicism or ornament, she argued, “Sometimes all that is required is the choice of a beautiful material worked with sincere simplicity.” Her antidote to abstraction was in working materials.

Among early modern architects, she stood almost alone in criticizing visual abstraction in design yet her words are confident. Her convictions are supported by a detailed description of how her house would be experienced bodily throughout the day and in different sorts of weather. Her critique of abstraction, in both words and design, was based on years of personal experience, not as an architect but as an artisan working materials. Gray was known in Paris, primarily for her lacquer furniture and had become an architect through the practice of craft. In the 1920s, she had earned the respect of members of the De Stijl movement and of Le Corbusier, yet she questioned some of the assumptions underlying their work. Geometric form developed in abstract painting may thrill the eye yet it does not make a complete architecture. Buildings, she argued, must also engage the body materially, in the habits of daily life.

Her materialist remedy for abstraction seems naïve, yet her words echo with ideas from contemporary architectural debate. Gray’s argument that modern architecture does not need ornament but rather “beautiful material” recalls Adolf Loos’ polemic and his built work in Vienna. Deeply veined polished marble columns of the Goldman & Salatsch store confront the ornate classical façade of the entrance to the emperor’s palace across the square. Such a beautiful material worked with “sincere simplicity” also resonates with John Ruskin’s essays of the 1860s. Ruskin argued that the moral state of
the workman is revealed in the quality of their work. Sincerity in the heart of the craftsman is sowed into the material by the knowing touch of the hand so that it may come to fruition in the pleasure of the user. Ironically Loos was arguing against the use of ornament in architecture and Ruskin advocated it. In Eileen Gray’s words however, the contradiction seems to disappear. Figurative ornament is not necessary but a sincere relationship with materials is.

Many of Gray’s contemporaries in the modern avant-garde had worked materials directly, under the influence of the Arts and Crafts and Art Nouveau movements. Loos, Ludwig Mies van der Rowe, and Le Corbusier, in their youth, had each apprenticed as artisans before becoming architects and some of that experience emerged in their design and their polemic. Loos knew how to polish stone. He had seen its inner figure emerge under his hand and he carried that sensibility into his architectural design. With that surety he could attack ornamentalism and offer an alternative.

Eileen Gray knew how to polish lacquer. She had watched it transform in her hands. The habits of work required by lacquer technique continued in the rhythm and spatial quality of her furniture and later her architectural design. As Loos constructed his arguments, in part, out of his experience working stone, Gray’s sensitivity in design and the confidence of her words arise, in part, from an intimate understanding of her craft.

Lacquer is an Asian art of exquisite objects made for princes. In Europe, lacquer held the mystery of the East in its sulky surfaces and the infinitely delicate figures suspended in its layers. It was very desirable and very expensive. Gray learned the technique before 1910 from Seizo Sugawara, a Japanese artisan who had come to Paris with the Exposition Universelle of 1900. Sugawara emigrated from Jahoji, a town in northern Japan that specialized in the production of lacquer work; Gray had come from an aristocratic family in Ireland. Both found a freedom in Paris that they would not have known at home.

Gray apprenticed herself to Sugawara and several years passed before she showed her work publicly. Lacquer is an almost impossible material to work: a mildly toxic resin of a tree native to Asia that hardens slowly under humid conditions to an impervious finish. The traditional Japanese craft Gray learned required painting at least a dozen thin layers of lacquer over a prepared base. Each layer must be allowed to dry in
a warm, dust-free, humid environment for a day or two then polished smooth with several grades of pumice. Lacquer applied too thickly or unevenly, or allowed to dry too fast or too slowly could ruin the piece. There is no technique for erasing mistakes. Designs may be added in the last few layers. Patterns are painted in lacquer then allowed to dry until tacky, gold or silver dust is sprinkled on with a tsitsi, a hollow bamboo tube with silk sieve on one end, Tap tap. Gray preferred to incise lines or lay in large areas of gold or silver foil and she experimented broadly with embedding textures in the surface, including sand (one piece has foil from a cigarette pack). This most creative and most sensitive stage of the craft is added on top of a surface in which many hours have already been invested. In one common technique, patterns laid in gold or silver powder are covered with a final layer of black lacquer so the figure disappears, then the surface is rubbed until the design reappears through the final layer and the surface is flush. Finally, after the designs are complete, the entire lacquer surface is polished with graded grits of ground charcoal. Traditional Japanese practice required that a piece be rubbed with charcoal made from the magnolia tree, then charcoal made from camelia, then charcoal from the paulownia tree, then crape myrtle. Each grade of grit removes the trace of the previous one. Finally the piece would be polished with powder of stag antler (male), then rubbed with doeskin (female) and finished by rubbing with the fingers. The texture of fingerprints takes away the final trace. At each layer, polishing the lacquer deepens the surface from dull to lustrous and final polishing brings out the inner glow slowly, step by step. In the artisan’s hands, lacquer turns wood into stone.
The art of lacquer is slow, laborious, repetitive, and risky. Work proceeds in layers intermittently; so several pieces are in process at once. Each piece requires many hours of intimate work over several months to deepen its glow. Over years of work, repetitive gestures of rubbing the surface to smooth it and stroking the surface to catch flaws teach an artisan’s fingers detailed grades of rough and smooth. Lacquer must cover the entire piece, front and back so edges are often rounded to create an uninterrupted surface. In polishing, an artisan turns a piece over and over, touching inside and outside in a continuous motion. Gray wrote, “Art is founded upon habitude, but not upon the fleeting or artificial habits that give rise to fashion.”

The habits of work become habits of life.

Implicit in lacquer technique is a Japanese understanding of time and materiality. Sugawara did not teach philosophy but his practice embodied a life foreign to the West. The months required to complete each piece of lacquer depend upon the material, not ambitions of the artisan. Hours of exacting, repetitive work and days waiting are required to make an empty surface. The western concept of patience does not yet explain how an artisan engages the slow rhythm of work that alternates between repetitive tedium and moments of intense concentration. Designs added to the final layers are a workmanship of high risk. Expensive materials cut into a refined surface with no erasures makes every gesture count. In addition, a Zen aesthetic values spontaneity in design, requiring that lines come directly from the spirit without intervening thought. Risk should be met not with caution but with intuitive abandon.

Finally, the underlying Tao sense of opposites in balance was embedded in the nature of the craft: rough versus smooth, gold against black, light emerging from darkness. Lacquer was originally elevated to an artform in China because it offered opposing qualities simultaneously: the most lustrous glow within the deepest black.
Eileen Gray brought modern lines to the Asian craft. At first, she incised swooping Art Nouveau curves and drew mythological figures such as those in a screen of 1910 she called “La Destin”. Later she used the straight lines, spare planes and bare surfaces of modern abstraction such as her gridded screens. Lacquer technique favors smooth surfaces and eased edges so it adapted well to modern form. In Paris, partly through Gray’s work, lacquer became a fad, even an obsession among collectors. It was elegant, exotic, sensual and expensive. Within the craft of lacquer, Gray became a modern designer. Her furniture and interiors have been noted for their sensuality as if her eye were an extension of her hand. Her designs explore tactile contrasts through materials: rough versus smooth, polished versus matte, deep versus shallow, metallic planes against fur. Her lines are fluid and her surfaces flush, often wrapping around corners. In Gray’s architectural work, the same sense of touch prevails. Her houses stand not as objects in a landscape but as part of a layered composition of textures. Her architectural choreography was slow, rhythmic and precise. She often used permeable screens between layers of space, so a view or a destination
would be revealed gradually.
Her portable furniture had strong lines in silhouette which played against the flat geometry of wall surfaces, as a figure drawn in last.

E1027, for example, is layered in both plan and section. The house is terraced into the hillside with multiple levels stepping down to the sea. Within the house, the entry sequence requires three turns, each time revealing a screened view around an eased corner so the eye follows the surface like a hand. Movement is slow. Stenciled on the wall she wrote, “entré lentement.” The eye follows the words at a readers pace. Pile rugs define specific areas within the large living space as terraces define space outside. They overlap one another so spaces intersect. She insisted that windows have shutters, as eyes need eyelids. Windows, shutters, screens, and much of the furniture can be opened, closed and moved to change the light and space within. She wrote that on stormy days when the sea and sky are relentless gray, one could close the curtains and open a small window onto the garden for a view of green. The design of the house sets up contrasting textures throughout from the smooth planes of stucco set against the rocky landscape to the brushed metal finish of curved walls, to furs draped over beds like animals.

Gray wrote of an “interior atmosphere” that architecture must create as a place in which the spirit of the inhabitant
can extend, both in company and solitude. She complained that the “Avant-garde does not consider the atmosphere that the inner life calls for.” She variously describes the interior atmosphere as “organic,” “a symphony in which all inner forms of life are expressed,” and as a “whole that might extend and complete” the person who dwells within. Implicit is a parallel between an architectural interior and the inner mental life of its inhabitant. These ideas were current in Art Nouveau design in Paris at the turn of the century, and had been developed in psychological theories advanced by Dr. Jean-Martin Charcot a precursor to Freud. Gray concurs, “Art must encapsulate the most tangible relations, the most intimate needs of subjective life.” “Architecture is the most complete of the arts creating not only objects but spaces within which a person might rediscover… the joys of self-fulfillment in a whole that extends and completes him.”

This delicate relationship between inner life and interior space is half of the dialogue of artistic pleasure set up by John Ruskin and William Morris. They maintained that such pleasure experienced in art could only be derived from a reciprocal pleasure invested in the material by an artisan. Morris said it best; “Art gives twice, once to the maker and once to the user.” Gray wrote that architecture must rediscover emotion in order to become complete. Not the emotionalism of Art Nouveau, she explained, “An emotion purified by knowledge and enriched by ideas.” Gray repeatedly said that she enjoyed designing and building her houses more than simply possessing them. Her work was a pleasure doubled, once in the making and again in the use.

Eileen Gray approached architecture through craftsmanship, grounding her design in the time and materiality of handwork. In her buildings, one moves smoothly in the course of daily motions, touching the surfaces with both hand and eye. Her pleasure in the habits of contemplative work became pleasure in the habits of contemplative living, demonstrated in her design of E1027. In the essay published with drawings of the house, she criticized her contemporaries for the sterility of their architecture. In particular she questioned abstract design that transferred forms directly from the immaterial art of painting. “The simplification that seems to dictate modern art” satisfies the intellect but not the body. Gray wrote with confidence. After years of work and thought invested into an architecture of experience her critique was less a polemic than a considered opinion backed by knowledge gained in craft.

2 She alludes to Le Corbusier’s famous definition of architecture. Her words also recall a statement by John Ruskin that the play of masses in architecture is less expressive than the decorative detail as the form of a person’s body is less expressive than their face.


5 The Bauhaus, formed by Walter Gropius in 1919, was a school of handcraft in its early years, requiring young designers to learn woodworking, pottery, weaving, or stone carving before they studied architecture. This training as well as the abstract exercises of the Vorkurs distinguished the Bauhaus from academic schools of Architecture that taught history and drawing. See Marcel Franciscono, *Walter Gropius and the Creation of the Bauhaus in Weimar: The Ideals and Artistic Theories of Its Founding Years* (Urbana, Chicago and London: University of Illinois Press, 1971)p.16 and throughout.

6 Loos, *Ornament and Crime* p.15 In his 1897 essay “Our School of Applied Art” (first published in Die Zeit Vienna), Loos appeals to the crafts as a source for modern form “Painters, sculptors, architects are leaving their comfortable studios behind them, saying farewell to high art and turning to the anvil, the loom, the potter’s wheel, the furnace and the carpenter’s bench. Away with all this sterile drawing, away with academic art. What we should be doing now is examining life, our habits, our need for comfort and practicality to discover new forms, new lines! Off you go, lads, art is an obstacle to be surmounted and left behind….Revolution always comes from below and in this case below is the craftsman’s workshop”

7 Gray had learned the basic technique in London in 1902 from British furniture maker before returning to Paris in 1906 to work with Sugawara. She first exhibited her work in 1912 at the Salon des Artistes Décorateurs. Constant, p.11

8 Lacquer is resin of Rhus verniciflua or Rhus succedanea trees native to Asia. They are in the same family as poison ivy and the cashew tree.

9 Caroline Constant pointed out this detail, p.24.


11 Gray, “Eclecticism to Doubt” in Constant, p. 239


14 William Morris, “The Aims of Art”