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There is at present a fashion for the application of images onto building facades. The most common line of comment on this phenomenon is to fetishize “the image.” According to such accounts, images have changed their status, or locale, and become monstrous hybrids of human consciousness and the Internet. They have come to be on buildings through some will or teleology of their own, lessening the materiality of building and threatening the culture of architecture.<sup>1</sup> Or so the story goes. Few remark on another obvious aspect of this trend, which is that of the relatively recent availability and rapid uptake of the technical means for the application of images onto buildings. As early as the 1940s, José Luis Sert, Fernand Léger, and Sigfried Giedion were calling for a new civic iconography of kinetic sculpture, which was to include fireworks and large-scale projection and murals.<sup>2</sup> None of this was very practical, however, until the last few years when megascreens and large-scale banner printing became available. Similarly, we have only recently gone beyond nineteenth-century techniques in the etching of images into glass and masonry. To a certain extent, these two observations reverberate within the work of Walter Benjamin and his famous attempt to argue at a most general level for an interrelation of histories of technology and mentality.<sup>3</sup>

Benjamin understood vision as containing an opposition between optical and tactile perception that related to the articulation of art and architecture.<sup>4</sup> These ideas, developed to describe the role of cinema in the 1930s, undoubtedly has something to tell us about more recent phenomena such as theme parks, where images become tangible, and the Internet, which has made tactility the principle of the computer screen. Yet Benjamin’s ideas cannot be used simply to describe the present circumstance. To do so would be to forget the historicity of those ideas, and to indulge a greater essentialism in which architects and artists seek to describe the image as nature, existing outside of art.<sup>5</sup> Typically, such an approach supposes that popular image culture is a natural outgrowth of perception, which unfolds unselfconsciously. I argue that the image has indeed changed for architects, but not because of changes in human perception, perceptual technology, or some putatively unconscious popular image culture. The topics, themes, and materials on which cultural disciplines such as architecture work are not given so directly. The logic of architecture is an internal logic, a nonconceptual yet rational set of operations that develop historically from past architectural issues. What architecture works on is not the present problematic of the image, but rather the earlier forms of this problem, such as the relation of cinema to art and architecture that Benjamin described in the 1930s. This has become internalized and formalized as a thematic and indeed as a repertoire of techniques. As Theodor Adorno says, “Form is sedimented content.”<sup>6</sup> The images applied to buildings today relate not to the Internet, but to the social and technical context of the arts in the 1930s. It is this dialectic across history that makes architecture so useless in any current program to reconcile culture. Yet, it is this uselessness that opens a critical dialectic in the present between, on the one hand, an apparently free, aesthetic use of

applied image and, on the other, the raw facts of the commercial value of images in the new electronic capitalism.

My proposal is that for much of this century the image has been a technique or tool of architecture, whereas now it has become a “material.” By this I mean to put aside the relation of images to perception and ideas in the mind, and also to put aside the issue of how image technologies might replicate or change such mental relations. Rather, I am concerned with the materiality that the image possesses, both actually and conceptually, through being taken up as “stuff” that can be used in the making of a work of art or architecture. It is, at the very least, unsubtle to imagine that there is a history of visualities or forms of human visual perception that underlie and explain developments in architecture and the visual arts. The reverse is a better explanation. Our conceptualization of visual experience—as being perspectival, or corporeal, or cinematographic, or tactile—is an effect of how art and architecture locate, develop, exhaust, and exchange materials such as space and the image. These are the general issues that open from what might seem a trivial, and no doubt passing fad for the application of images onto the façades of buildings.

The contemporary Swiss architectural firm Herzog and de Meuron has made a reputation for itself by combining an elegantly reduced formal vocabulary with a fine sense of material. This might sound like harking back to high modernist formalism and, on one level, it is, but it is framed and exhibited as such, hence, opening a space of critical inquiry. The simpler the forms become, the more complexities are admitted in the concept of form. The more those materials are subjugated to form the more concretely individuated they become. Images, for example, are not a usual architectural material, but Herzog and de Meuron’s office begins many design projects by asking from what images the work will be made.<sup>7</sup>

In current architectural literature there is uncertainty about whether to call Herzog and de Meuron’s formal strategies neomodernist or minimalist (or both). Neomodernism here stands for a historiographic intent and minimalism for perceptualist strategies. Herzog and deMeuron’s buildings appear generic—not as a modernist desire to affirm production and to plan the future—but due to an interest in how the generic can become affecting. In their work we can see the influence of recent art history discourse in which the minimalism of the 1960s and 1970s is no longer understood as a form of idealism, but rather as a kind of practical phenomenology.<sup>8</sup>

The application of images to these buildings functions like quotation marks; the images say, “To continue the modern is to traduce it.” The situation is, however, more complex than this historiographic protocol suggests. The images not only make the modern into a context to be quoted; as representations, they come from outside of architecture, from a space of mimesis that is not the medium of architecture. When asked about the leaf pattern applied to the skin of the Ricola-Europe warehouse and production facility in Mulhouse, France (1994), Jacques Herzog describes the firm’s struggle to find the image (which is a photograph by Karl Blossfeldt) and to determine its module.<sup>9</sup> The appropriateness of the image and the means of appropriating it are a part of the work in a way that the images themselves are not. In an architecture that is otherwise so mute and abstracted, however, the images are clearly visible as the stuff from which the work is fashioned.

Images, as culturally specific objects, are normally thought to be the province of the visual arts. As disciplines, the visual arts and architecture are historical constructs that have had varied relations. It is traditional to assume that there is a constraint to these relations due to the medium in which each discipline is bound. Architecture exists in the medium of space; painting, printing, photography, and film exist in the medium of images. What is it then for one discipline to take the medium of another as its material? We identify an image as such when we recognize that it supposes (but does not possess) a spatial depth. Equally, we might say that we recognize architecture (against a ground of mute building) when we can appropriate it as an image, when it projects a certain imagability, a structuring of our visual attention that accords with other acculturated ways of looking that we have learned from images.

In the Ricola warehouse, the virtual depth of the image of the leaf (which is in fact very shallow) runs a pattern of interference across the smooth skin of the building, lending the kind of effect architects once found in carved stone. The sheer building form resolutely denies this apparent nostalgia for the tactile value of surface. As the leaf images are printed on translucent acetate, their visibility is dependent on the direction of the light. This results in a diurnal change in the perception of the motif that, when added to the apparent reference of the leaf motif to the warehouse's tree-lined grounds, gives the building the site-specificity that is traditionally demanded of architects. At the same time the structure of citation casts this as a merely historical concern. We see then that Herzog and de Meuron make use of the paradoxical spatial effects of the image to complicate their reductive form toward a state of vagueness where its formal properties are liminal, and perhaps even contingent to the aesthetic of the building. Yet, they did not begin with this formal contract and design an image that would enact a relation of form and ornament as a classical architect would have done with the leaf of the Corinthian order. The leaf motif is not determined by its architectural role; it preexists, and much of the felicity of its effects in this building already exists in Blossfeldt's photograph.

This is a moment of a mutual respect. The architecture hails the image and gestures toward its familiar other, the visual arts. The criteria the architects use in applying the leaf are all architectural; they have to do with its module and the coordination of the module within both the structure of the building and the play between spatial depth and visual density that they are attempting. Nevertheless, at the level of technique, these ancient architectural devices are similar to the "seriality" that epitomizes the formal concepts of postwar visual art. The reduction toward generic form of the Ricola warehouse might be mistaken for simple idealism without the images referring to art, to Andy Warhol, Daniel Buren, Donald Judd, and so on. Architecture takes its effect while passing through the embrasure of a formal concept from the visual arts that names it as architecture. It is the application of the image, as art, that makes this building architecture, which will subsequently lead us to experience that its proportions are better coordinated, its siting better considered than other mundane buildings. The image qua art hails this building as its interlocutor, as architecture, and the image qua image is appropriated as a material to be formed for architectural effect.



Figure 1. Herzog and de Meuron, architects, Ricola Europe SA, Production and Storage Building, Mulhouse, France, 1994. Photograph by Margherita Spiluttini. Copyright © 1994 Margherita Spiluttini. All rights reserved.

Much of my exposition thus far can be summarized in saying that images are material for Herzog and deMeuron. I mean little more by this than that familiar usage in which we speak of “materials” that are formed by an artist in the work. Yet, that usage is already quite complex. Implicit in this usage is the idea that when the artist chooses a material, the choice becomes a part of the work because the material thereafter enables and constrains what can be made. Conversely, while the choice of material is “artistic,” it is constrained by what is available to be had as material, that which has already been constituted as such. Thus, material is the arena in which the sociotechnical and historical worlds overlap the purported autonomy of art. For Herzog and de Meuron, indeed for all recent architecture employing this image strategy, it means that perceptualist techniques open onto questions of history.

The work of Herzog and de Meuron is a useful stage for my discussion of the image as material because their work has always been about materiality in both the physical and metaphoric sense. They are famous for their techniques of construction where the fabric of the building becomes imagistic, just as they are concerned with the material techniques of the application of two-dimensional images onto concrete and glass. This concern with inventive fabrication is another historiographic relation to the modern—a return to craft after the drama of its impossibility. This interest also relates to contemporary art. Herzog and de Meuron claim to be much influenced by Joseph Beuys and their use of material, like his, is always highly nuanced, either toward the provisional or toward the obsessive. We could understand their recourse to images as an attempt to produce in architecture a similar effect that Beuys produced in the visual arts by taking up felt as a material. Yet, Herzog and de Meuron’s new material is less unlikely and less abject than many of the new materials discovered by artists. It is the material of another medium, the visual arts. The building’s effects are thus novel at the same time as they open a vista onto the complex history of the relation of art and architecture. Herzog and de Meuron balance this situation in two ways: first, by accepting the images as the gift of a sister art, and second, by working explicitly on the materiality of the image.

The library for the Eberswalde Senior Technical School (1997–99) near Berlin is a simple functional box with book stacks below high-level strip windows accompanied by smaller eye-level windows. What is remarkable about the building is that it is entirely covered with an image cycle generated by the photographer Thomas Ruff. The images derive from both high art and newspaper reportage. Herzog and de Meuron’s “architecture” seems confined to developing the processes by which the images can be printed on concrete and glass, and, in this example, of having elicited from Ruff this gift of images. Herzog and de Meuron’s architecture thus escapes art into material construction and into the curation of art; an approach that seems at once traditional and to radically name the problematic of postminimalist art and its dependence on technical and curatorial services.

Herzog and de Meuron did not invent this architectural strategy of applied imagery. The technical-expressive possibilities of applied imagery emerge in recent history in Robert Venturi’s attempt to take lessons from the image-dense environment of Las Vegas and are developed in projects by Rem Koolhaas and Jean Nouvel of the late 1980s, which are only now being constructed.<sup>10</sup> But it is probably the Ricola

warehouse that truly made the motif visible and has led to its becoming an architectural fashion destined perhaps for triviality. The timeliness or outdatedness of the image, however, as an architectural material is not primarily an issue of overfamiliarity. It is rather an issue of the age of the image. The projects of Koolhaas and Nouvel sample images from advertising, which in this context stands for the natural environment of the image. The formal point in applying images is to double the register of scales that can complicate and heighten the composition but, at the same time, make it more conditional. Despite the artwork on the Herzog and de Meuron buildings being purposefully created by artists and then curated by the architects in its application, I hold that it maintains this relation of contingency between the formal effects of the image and the architecture. The contingency is not, in the case of Herzog and de Meuron, within the layers of culture at any one time; it is not that of an art form in a sea of popular image culture; but, rather, the contingency exists between the visual arts and the art of architecture, in the contingency of their separate but intersecting histories.

The contract of image as contingent material can be seen by contrast in what I think is a failed example of the new image “style,” François Soler’s Paris apartment building, *Suite sans Fins* of 1997.<sup>11</sup> Soler uses image samples from Giulio Romano’s *Sala di Psiche* in the Palazzo del Te.<sup>12</sup> Using computer techniques, Romano’s interior fresco cycle with its narrative structure is sampled and reconstituted as a serial iteration of image fragments that are then applied in a semitransparent medium over the glass exterior walls of the apartments. Apart from the curious sentimentality of the images chosen, what I think is at fault in this approach is the age of the art. Appropriating visual art from four centuries earlier (indeed art with a not-dissimilar relation of real and illusory spatial effects) tends to imply that visual art is a timeless resource for visual experience and, in doing so, overlooks the great ruptures in concepts of the visual that wrenched art and architecture apart after the seventeenth century and thrust them into conflict in the twentieth century. In contrast to Herzog and de Meuron, Soler’s use of applied images seems theatrical and contrived toward affecting the subject; it wants that contingency of the relation of form and image which also exists outside of any subjective experience in the complex history of intermedial visibility.

Soler’s appropriation of Romano nevertheless reminds us of the extent of the history of exchanges between architecture and the visual arts around the medium of the image, and this leads me to specify my claim about the novelty of applying images to buildings. This novelty, the claim to the “now,” lies not in the use of images but, rather, in that the material of architecture should be images. Moreover, this novelty is not an accidental value, an added felicity to the architectural use of images. In the last few years, architects have chosen the image as a material precisely because this involves interrupting the long history of the image as an architectural technique. By taking examples from Baroque architectural illusions and Le Corbusier’s attitude toward painting I can sketch something of the scope of such a history. Before doing so, however, it will be useful to understand the concept of the image’s double perceptual reality.<sup>13</sup>



Figure 2. Andrea Pozzo, *Triumph of St. Ignatius of Loyola*, 1691–94, Saint Ignazio, Rome. View into the vault. Photograph by John Macarthur.

A material image is like a mental image, though nothing like phenomenal visual perception. Eyes are not static, nor the field of view bounded. What is more ocular focus is narrow and successive. Mental images are built from particular successive perceptual acts in spatialized visual experience. A photographic image, such as an illustration in this article, is, by contrast, fixed, invariable, and in uniform focus. In order to perceive the image as if it were a phenomenal view of a building from a spatial position, it is necessary to know that it is an image and not a pattern of colors and shapes on a flat surface. Anyone, from almost any viewpoint, can see into the photograph of the Ricola warehouse and perceive the same image. Yet, each of us looking at the photograph from different viewpoints must make a mental adjustment, a compensation, in order to see the same image. In that compensation to perceive what is invariable about the image, we each perceive what is particular to our spatial position. Moreover, this same act of compensation would be required even if we attempted to make the body conform to the camera's model of vision by shutting one eye and aligning ourselves to the vanishing point. Some tiny misalignment is required for the recognition that the image is an image and not a flat thing in space. To lose oneself in the virtual space in the image is to anchor oneself in phenomenal space.

We can see something of the tension in the double reality of the image as a space and as an object in the illusionistic, painted architecture of the Roman Baroque. Andrea Pozzo's ceiling fresco in S. Ignazio in Rome is perhaps the most thorough attempt at the coordination of architecture and painting as a spatial affect.<sup>14</sup> The fresco depicts

God addressing Ignatius through an opening in the clouds in the center of the vault, while the Jesuits in four continents look up to him from the lower sections of the vault. A person on the floor of the church is in a particular spatial position, but looking up into a fantasy totalization of the world that is intended to be the same for all viewers. Counterreformation doctrine attempted to revive the cult of the saints, but at the same time cleanse it of idolatry. Cultural policy demanded that this be achieved, not through abstract symbols, but rather through affecting allegories. Accordingly, the saints became more palpable in their role as intermediaries. The problem for Baroque artists was both how to depict the congress of God with the saints and how this space of mediation would open into quotidian experience.

Pozzo's fresco tries to answer the question of how we occupy this intermediary space, and it is answered with an advanced geometrical technique, by which he is able to design an image as a flat screen but then interpolate this onto the curved surface of the vault. The foreground of Pozzo's image is of architectural elements, columns, balustrades, and arches, framing the deeper vaporous and aerial saintly space. Thus, it is extraordinarily difficult to pick the threshold between the phenomenal space of the church and the intermediary saintly space. Pozzo has marked out such a threshold, but it is already within the virtual space of the image. It is significant that he also elides the edge between media by confusing the double perceptual reality of the image. He introduces a third state. The image appears, geometrically and mentally, a perspective projected onto the flat screen of the picture plane, but it is in fact painted onto the complex curved surfaces of the vault and cross vault that have a phenomenal depth—even though this is unlike that represented in the image. Thus, the phenomenal depth of the curved picture surface is a kind of perceptual approximation of the illusory depths of the notionally flat image. The ideality of the image leaks out into space like light through the cracks in the clouds. Art and architecture apparently escape what binds them to their media through a saintly intermediation.

The critique of Baroque illusionism was pointed. Critics at the time thought it did not give a space to the devotional work humans must do to open the spiritual space.<sup>15</sup> Moreover, the proof of this doctrinal lapse is experienced perceptually. Despite Pozzo's skill in stretching the focus of the ideal viewpoint, there remain points of view where the illusion does not hold because at high incident angles one can see the curvature of the vault. The Bavarians thought that Italian ecclesiastical art was theatrical, which is to say a kind of placelessness out of place in church. In order to redress this problem, while rewarding quite similar sensibilities, they developed the Rococo where the image is reframed and its double reality made explicit and indeed celebrated. The material of Rococo is the *rocaille*, or shell work, an ornament generated in imitation of natural forms of shells. Perceptually, this *rocaille* serves to frame the image in a manner that admits the mutability of the form of the vault. Yet, there is a conceptual instability in using the shell as material, which is the tendency of *rocaille* to become the content of the work. The architecture has its role in bearing the images. The images ornament the architecture. This perfect binary is impossible, however, because the two media have an edge between them, and that edge has a thickness; that thickness of the stuccoed zone, which is neither architectural, spatial, and conventional, nor painterly, imagistic, or mimetic, begins to look like an abstract art that can replace them.

Le Corbusier's *Maison la Roche* is perhaps a diagram of the relation of art and architecture in the era of subjective aesthetics.<sup>16</sup> La Roche commissioned this house so as to live surrounded by the art he collected—among others, the purist paintings of Le Corbusier and Amédée Ozenfant. We approach the house down a cul-de-sac to face the bellied wall of what is revealed to be the gallery. We turn to enter a tall hall lit from the entry and a small skylight. We find our way up into the gallery, to view the paintings. The gallery has a ramp that allows us to vary our view point with regard to the paintings. At the top of the ramp is la Roche's study, overlooking the gallery and the entry hall and lit by the skylight that had been visible on first entry.

This approach to architecture is like both landscape design and cinema; it is interlocutory and based on visual sequence without exactly having a story. An anecdote about this commission has it that la Roche and Le Corbusier fell out because the architect insisted that the client not fill the house with paintings. Le Corbusier designed storage so that la Roche could put the paintings away when he had finished looking at them.<sup>17</sup>

To hang an image raises the whole problematic of ornament, the need of architecture for supplementation, and the failure of its claims to be an autonomous art. Le Corbusier does not refuse to have the paintings hung permanently because of a rivalry between the arts—after all, they are his paintings. Rather architecture is to become image—or a kind of projector of the image. By an extraordinary predetermination of body position and viewpoint, the house has a sequential and unfolding visual field that is coordinated formally. It has images like a film has images. The *Maison la Roche* is threatened by the inverse of the problem at St. Ignazio—not that phenomenal spatiality will overcome the illusory space of the image, but rather that paintings will cause us to recall the true flatness of the image and remind us that the house is a space we wander around in, not a filmic spectacle rolling before our eyes.

Much of the formal vocabulary of recent architecture, such as that of Herzog and de Meuron, is constituted by a regretful turning away from Le Corbusier's picturesque modernism toward the drier end of the modern canon and figures such as Ludwig Mies van der Rohe.<sup>18</sup> It is a neat trope then that this disavowal is not only made by formal reduction but by the use of images, which have no place in Mies van der Rohe, but which nevertheless break the cinematic analogy like a billboard in a picturesque landscape. In my description of Pozzo and Le Corbusier, I have attempted to show how, at different moments of a history, images provided a space within architectural technique. Now it is more appropriate to understand them as materials. As technique, images were a kind of knowledge and the relation of art and architecture was articulated through shared *tekhné* of the image. The use of images, not as a knowledge relation in the action of imaging, but as objects that are part of the world like stone and timber, is a fundamental shift for architecture both historically and logically.

To look for a historical parallel to the use of images in recent architecture, we have to return to the origin of perspective, which is the name of the *tekhné* of the image as it tends toward positivity. An example of this can be found in the *Sala della Pace* in the *Palazzo Pubblico* in Siena with its famous fresco by Ambrogio Lorenzetti.<sup>19</sup> Some accounts have Lorenzetti as the inventor of perspective, and clearly he could construct



Figure 3. Le Corbusier, Villa La Roche, 1923 - 25, Paris. View from La Roche's study into the gallery. Photograph by John Macarthur.

it, but he was unable to conceptualize the line that passes from the vanishing point to the viewpoint.<sup>20</sup> In any case, what interests me here is the casualness with which space and image pass through one another and the harmony of architecture and painting that this misrecognition produces.

The painting and the building are completely interpolated into one another at the level of their content. The fresco depicts a free city, well governed and at peace, and architecture is the medium for achieving this. The city depicted is a hill town, ancient and independent like Siena, not a Roman colony on the plains like Florence. The streets and houses show wealth, foresight, and consideration in planning and are well provided by a docile countryside. The Palazzo, however, also represents this. It is the seat of the Nine who govern in peace. Its campanile makes its just power visible over the Campo and the Mercantile below the window in the room, where the produce of the countryside does indeed arrive. What suits the image to the room, from an architect's point of view, is not the appropriateness of its theme, its sharing of content with the architecture, but its stunning duplication of the architecture, its semantic redundancy. It is the painting's reiteration of architecture at the level of concept that allows us to see it—both as image and as an architectural device—which structures the section of the room with a band of color and thickness that moves freely against the module of the other wall surfaces. Lorenzetti's perspective is naive compared say to Pozzo's, because the vanishing point is obscure and the space of the image seems quite shallow. As architecture, this apparent inadequacy means that the fresco assumes little about spatial position, and thus makes itself available as material to make the room. From another point of view, however, the room itself becomes material for the fresco. The point of view of the perspective in part of the fresco is that of the personification of Peace (Lorenzetti apparently conceiving the viewpoint as something in the image and not other to it). Peace sits in a panel on the back wall looking out of the image and back into it across the space, thus gathering the space of the room and its occupants into the image.

A century after Lorenzetti, Filippo Brunelleschi showed that there could be a consistent geometrical account of the relation of images to sight. Brunelleschi drew a perspective image of the Baptistery of S. Giovanni from a viewpoint at the doors of the Duomo. He then devised a demonstration of its truthfulness in which an observer would stand in the cathedral doorway and look through a pinhole in the back of the image at the Baptistery. A mirror could be inserted and removed and the perceptual image and constructed image could not be differentiated. Hubert Damisch has made a thorough historical and conceptual analysis of the demonstration and two of Damisch's observations interest me here.<sup>21</sup> The first is that contemporary accounts emphasize that Brunelleschi was an architect. The stories suggest that he invented perspective to assist his brother artists, so that they could better include buildings in their images. It is also likely that he was providing proof of the fact that the dimensions of buildings do not vary as the viewpoint changes. This is common sense and it accords with our experience of buildings, but geometric perspective could fully reconcile the variability of the image of building with the invariability of its dimensions. In this light, we might say that what Brunelleschi is demonstrating is not the perspectival nature of the image, but rather how the architect's knowledge in dimensioning the plan can produce an image.



Figure 4. Ambrogio Lorenzetti, frescoed cityscapes in Sala della Pace, in the Palazzo Pubblico, 1337 - 40, Siena, Italy. Photograph by John Macarthur.

Perspective is also a gift that passes between arts.<sup>22</sup> Brunelleschi, the constructor, gives art the key to mimesis, and, in turn, art gives back to architecture the means to imagine yet to be constructed spaces. This gift is not of the medium of the art disciplines; painting does not give architecture the space that it knows already. It is rather the gift of an origin, an outside of knowledge. The gift arrives from an elsewhere that is not the medium, that names its exteriority, its conjunction with other disciplines and media. Now the gift is also a temporal contract in that it anticipates reciprocation— and I have sketched something of this pattern of exchange in my remarks about the history of the image in architecture. The images used in architecture do not come from the visual arts by accident. It is not that architects might have developed their own culture of architectural images, but found it more convenient to commission painters. It is rather that the disciplines understand their intermediality through the gift and appropriation of images between them.

A curious detail in Brunelleschi's demonstration is that he painted the image on a mirrored surface. This was so that when looking at the image of the Baptistery, one would see clouds in the sky, and the image would be that much truer of visual experience. Damisch points out, however, that the clouds are outside the point of the demonstration. They are not constructed by linear perspective. Depicting them is a technical problem for painters that cannot be assisted by perspective. They have a spatiality that escapes being fixed in the interrelation of painting and architecture. Damisch argues that, from Brunelleschi onward, the cloud becomes the exterior contingency that renders the image as a system in the visual arts.<sup>23</sup> We might say, in any case, that clouds, and seascapes and vaporous phenomena in general, are a kind of material that painters such as Paolo Veronese, Pozzo, J. M.W. Turner, or Gerhard Richter use to different ends. In the recent architecture that interests me, the image has become the cloud; it is a valued material because it stands both at the heart and outside the spatial system.

Recently there has been an attempt to understand the architecture of Mies van der Rohe in terms quite like those of Brunelleschi's demonstration.<sup>24</sup> This can return us to our starting point in the paradox of lush images becoming the material of a minimalist architecture. An important strand of current architectural work is premised on rewriting Mies van der Rohe in the terms of the theory of minimalism in the visual arts.<sup>25</sup>

In such an account, Mies van der Rohe's buildings are not the expression of industrialization in an ideal form. Rather, they are devices that, through a severe reduction of form, cause us to attend to our perception of them. Their form is minimally articulated in order to articulate phenomenal experience, as contingency, as the cloud. I am suspicious of this story because, beneath its concrete history, it wants architecture to always be the same, and because it wants that sameness confirmed in the practices of the visual arts. Art and architectural works can then all be referred to the human subject—cast as a native—of a realm of acculturated vision that somehow exists before art. The visual is not structured as a cultural potentiality already present in what we see and then used by art forms as a medium for their work. If what is generally meant in cultural studies by the term “visuality” is visual apperception, or a self-consciousness of seeing, then this is not prior to art—whether historically or

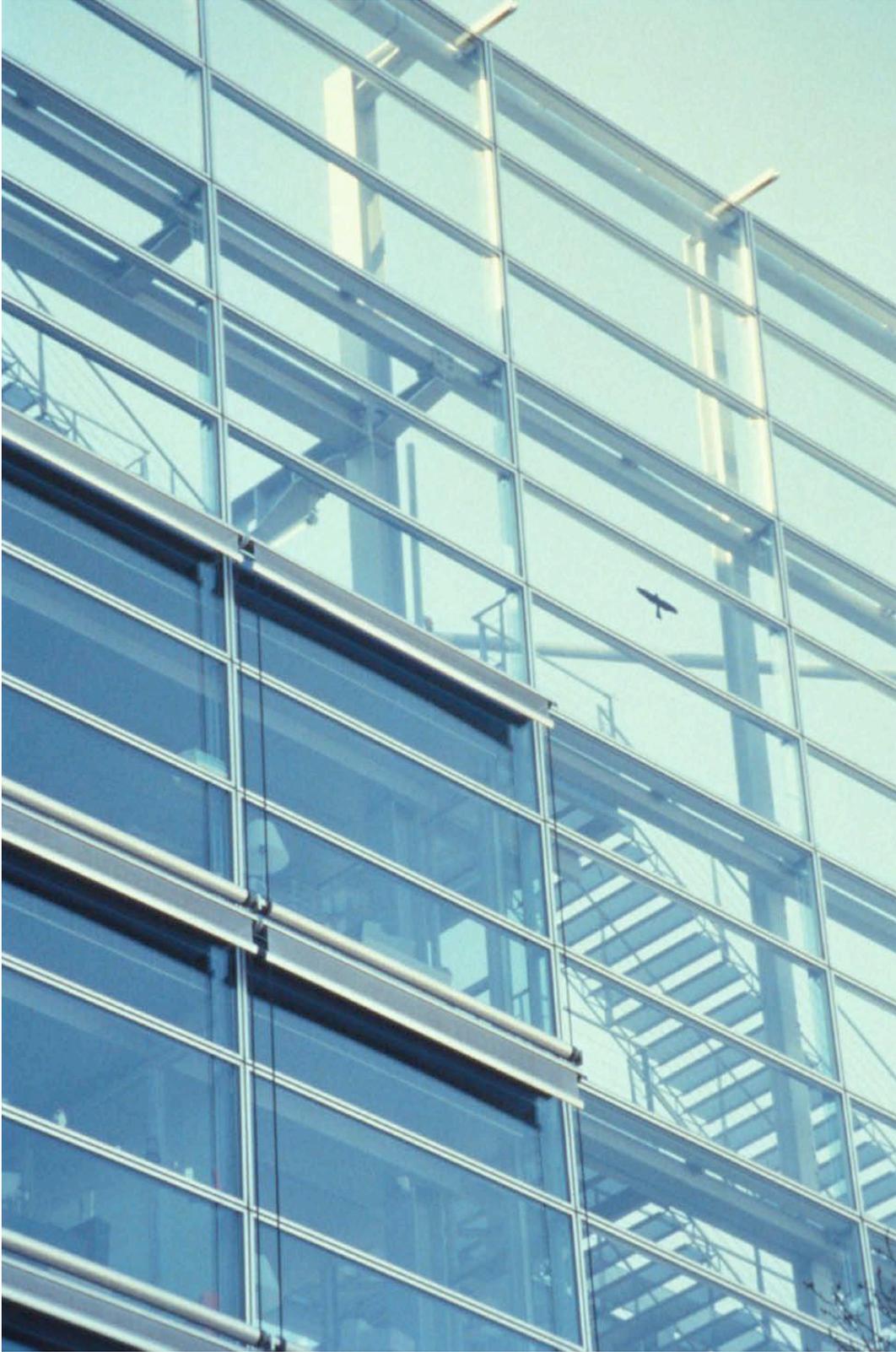


Figure 5. Jean Nouvel, Fondation Cartier pour l'Art Contemporain, 1994, Paris. Detail of fa.ade with bird-scare decal. Photograph by John Macarthur.

perceptually. “Visuality” is a conceptual tool, a demonstration like Brunelleschi’s, which has some things to show us about phenomenal experience when that experience is given the role of mediating cultural forms. Few theorists today would propose that analysis of this intermediality could be founded on the ontology of the media employed by that discipline, because such an art discipline would then truly be a religion. Yet, nor can it be founded in any useful way on the concrete histories of art disciplines, which are simply too specifically political. I think that the privileged point of analysis of the visual is in the things exchanged across media; and these are techniques and materials.

I conclude by making something of an allegory of Jean Nouvel’s Cartier Foundation in Paris, where the applied imagery is truly contingent.<sup>26</sup> The building is an institute and gallery for contemporary art, which is supposed to have an ecological theme. In a city where buildings fill their plots, it steps back and makes a garden, a wild garden of the plants common to this area before it was built over in the nineteenth century. The form of the building is largely dependent on the contingencies of the direction of the light and the human activation of sun shading in response to it. But there was a problem, apparently unforeseen, that in certain conditions the external glass walls did indeed become transparent and pigeons crashed into them, shattering these very expensive panels and killing the birds. To solve this problem the architects had the image of a hawk stenciled onto the glass to make it visible to the birds.

It is this tiny fragment of an image that allows the building to consist as an artwork. Without the hawk, the building is a kind of idealization of the contingency of vision, which is after all, something that we do not need architecture to make clear to us. The necessity to apply the hawk image jolts the whole form of the building back into a dialectic with its ecological content. What is more, the image, by coming from elsewhere, like the clouds in Brunelleschi’s experiment, signifies the history embedded in Nouvel’s formal devices. We might say that the hawk demonstrates what Adorno would call the determinate negation of the content of the work in its form. This negative dialect points us to another, that is, that the form of the building is “sedimented content” in that it contains the history of past encounters between architectural form and content, such as glass. Glass was perhaps the material of architecture in the early twentieth century. If we read Mies van der Rohe, Benjamin, Bruno Taut, or Paul Scheerbart, it is clear that glass was the material that modernist formal techniques had prepared themselves for, and that could be made into new sense perceptions, new subjects, and a new society.<sup>27</sup> We live in that society now, more and less, and glass is a mature building technology of which Nouvel is something of a master. Glass is no longer a material. It has become a means, a technique. The hawk stenciled onto the glass panel reminds us that there is no unmediated production of visual experience by architecture. The visual lies at the intersection of images and spaces, in the history of their techniques and materials.

## Notes

- 1 See, for example, Neil Leach, *The Anaesthetics of Architecture* (Cambridge: MIT Press, 1999).
- 2 José Luis Sert, Fernand Léger, and Sigfried Giedion, "Nine Points on Monumentality," in Joan Ockman, ed., *Architecture Culture 1943 - 1968* (New York: Columbia University Graduate School of Architecture, Planning, and Preservation, 1993), 29 - 30.
- 3 Walter Benjamin, "The Work of Art in the Age of its Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn (New York: Schocken Books, 1968), 217 - 51.
- 4 In this he follows Alois Riegl, *Late Roman Art Industry*, trans. Rolf Wienkes (Rome: Giorgio Bretschneider, 1985), and Heinrich W. Ifflin, *Principles of Art History* (New York: Dover, 1950).
- 5 In fact this is similar to the concerns that Theodor Adorno had about the populism and technological positivism of Benjamin's approach in the 1930s. Theodor Adorno, "Letters to Walter Benjamin," in *Aesthetics and Politics*, trans. Ronald Taylor (London: New Left Books, 1977) 110 - 33. Also see Theodor Adorno, "The Culture Industry" in Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment* (New York: Herder and Herder, 1973).
- 6 Theodor Adorno, *Aesthetic Theory*, ed. Gretel Adorno and Rolf Tiedemann, trans. Robert Hullot-Kentor (Minneapolis: University of Minnesota Press, 1997), 144. My schematization in this section is a free interpretation of Adorno's remarks on material found largely in the section "Coherence and Meaning," 136 - 62. Adorno's other explicit text on material is the section "Inherent Tendency of Musical Material," in *The Philosophy of Modern Music* (New York: Seabury Press, 1973). Lambert Zuidervaart provides an indispensable commentary in his *Adorno's Aesthetic Theory: The Redemption of Illusion* (Cambridge: MIT Press, 1991). I have been studying Adorno in company with the Adorno Reading Group at the University of Queensland; my thanks to them.
- 7 Jacques Herzog and Jeffrey Kipnis, "A Conversation with Jacques Herzog (H&deM)," *El Croquis: Herzog e<sup>3</sup> de Meuron 1993 - 1997*, no. 84 (1997): 7 - 28.
- 8 Rosalind E. Krauss, "The Grid, the Cloud, and the Detail," in Detlef Mertins, ed., *The Presence of Mies* (New York: Princeton Architectural Press, 1994).
- 9 Herzog and Kipnis, "A Conversation," 12.
- 10 Robert Venturi, Denise Scott-Brown, and Stephen Izenour, *Learning from Las Vegas* (Cambridge: MIT Press, 1972). The other projects referred to are Rem Koolhaas and the Office for Metropolitan Architecture, ZKM Centre for Art and Media Technology, Karlsruhe, 1989, and Jean Nouvel, Medipark project.

- 11 The building on Rue Emile Dulchiem named "Suites sans Fins."
- 12 Sala di Psiche, Palazzo del Te, Mantua, 1527 - 1532.
- 13 The concepts described in the following section are largely précised from Jacques Aumont, *The Image* (London: British Film Institute, 1994), 40 - 44. Aumont is describing the hypothesis of psychologist Maurice Pirenne.
- 14 Andrea Pozzo, *Triumph of St. Ignatius of Loyola* (1691 - 94).
- 15 The argument of this paragraph concerning the critical reception of the Italian Baroque, I owe to Karsten Harries, *The Bavarian Rococo Church* (New Haven: Yale University Press, 1983). My discussion is inflected through Jacques Derrida's remarks on the parergon in his *The Truth in Painting* (Chicago: University of Chicago Press, 1987), 37 - 82.
- 16 I refer to the more elaborate half of a duplex also known as the Villas La Roche and Jeanneret, Paris, 1923 - 25.
- 17 Here I am simplifying a complex dispute that also concerned lighting and how the putative succession of purism over cubism was to be expressed. Nevertheless, according to Tim Benton, the significant aspect of the dispute was the density of the hanging as it affected the visibility of the architecture. The dispute is documented in letters between Le Corbusier, La Roche, and Ozenfant. See Tim Benton, *The Villas of Le Corbusier* (New Haven: Yale University Press, 1987), 65 - 70.
- 18 I refer to the rise of neomodern styles, sometimes called minimalism, the genealogy of which is claimed in documents such as Mertins, *The Presence of Mies*, and *Less Is More: Minimalism in Architecture and the Other Arts*, ed. Vittorio E. Savi, and Joseph M. Montaner (Barcelona: Actar, 1996).
- 19 This description of the Lorenzetti fresco draws on the work of Jack Greenstein as well as my own observations. Jack Greenstein, "The Vision of Peace: Meaning and Representation in Ambrogio Lorenzetti's Sala della Pace Cityscapes," *Art History* 11. 4 (1988): 492 - 510.
- 20 Greenstein, "Lorenzetti's Cityscapes," following Rudolf Wittkower, *Idea and Image: Studies in the Italian Renaissance* (London: Thames and Hudson, 1978).
- 21 Hubert Damisch, *The Origin of Perspective* (Cambridge: MIT Press, 1994). Also see Eugenio Battisti, *Filippo Brunelleschi* (London: Rizzoli, 1981), 102 - 9.
- 22 This scenario of gifting assumes the well-known doctrine of the sisterhood of the arts, their likeness that is to be found in the differences between them. More specifically, the Brunelleschi demonstration is like the genre of ekphrasis in which poets transcribe artworks and their visual experience of them into verse. Ekphrasis is structured by an uncanny logic. It is not possible for the poem to have us see the artwork with our ears, but to the degree that it succeeds, verse and words become other to themselves. On ekphrasis see Murray Krieger, *Ekphrasis: The Illusion of the Natural Sign* (Baltimore: The Johns Hopkins

University Press, 1992) or, W. J. T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994). The antique accounts of ekphrasis emphasize that the poem is a gift or prize and this idea can usefully be read with Jacques Derrida's reflections on the logic of the gift in "Economimesis," *Diacritics* (June 1981): 2 - 25; and *Given Time: I. Counterfeit Money* (Chicago: University of Chicago Press, 1992).

- 23 Damisch, *Origin of Perspective*, 93 - 95. Here Damisch is representing ideas that he had earlier published in *his Théorie du nuage: pour une histoire de la peinture*, (Paris: éditions du Seuil, 1972).
- 24 Krauss, "The Grid, the Cloud, and the Detail."
- 25 Mertins, *Presence of Mies*; and Savi and Montaner, *Less Is More*.
- 26 Fondation Cartier, Jean Nouvel, Emanuel Cattani et Associ.s, Paris (1994).
- 27 On the historical properties of glass see Detlef Mertins, "The Enticing and Threatening Face of Prehistory: Walter Benjamin and the Utopia of Glass," *Assemblage*, no. 29 (1996): 7 - 23.