7 Lessons of Painting for Architecture —

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The basis of my research and my intellectual produc-
tion has its secret in the uninterrupted practice of
painting.

— Le Corbusier

1. Threshold: It is said that the idea of art as research,
specifically research into form, started with Paul Cézanne.
One need only look, for example, at *Bridge at Maincy*, c.
1879-80, or at *Flowers in a Vase*, c. 1885-8. Le Corbusier,
I believe, was directly influenced by Cézanne's visual
discoveries. And I am intensely influenced by both.

Thus, the following represents some rough notes on my
research of the interrelationship between architecture and
painting. I hope to give a more lucid and thorough explana-
tion in a future article. Right now my purpose is simply to
stake out the intellectual territory. Excellent articles have
been written on the topic of architecture and painting, such
as those by Schumacher, McCarter, Sekler, Hejduk, and
Rowe and Slutzky. But I haven't discovered a text that
identifies in a systematic way the particular instruction that
the study and practice of painting has provided me. The 7
Lessons of Painting for Architecture that I identify here are
the beginning of my attempt to do just that.

2. Paintings as maps: I think of paintings as maps to/of
architectural ideas. On a general level, reading paintings,
and especially making paintings, sharpens visual thinking. It
has the practical benefit that it heightens appreciation of two-
dimensional properties of site plan, floor plan, section, and
elevation, and the three-dimensional properties of the visual
field that they comprise. It increases awareness of the
problem of form-making & form-meaning, of space-making
& space-meaning. The study and practice of painting is an
important part of my architectural research; and vice versa.
I am an architect. And I am a painter. Each informs my work
on the other. I frankly can't imagine it any other way. There
are many architectures. But for me, two questions arise: were
I not an architect, what would I paint? And, were I not a
painter, on what basis would I make an architecture? Paint-
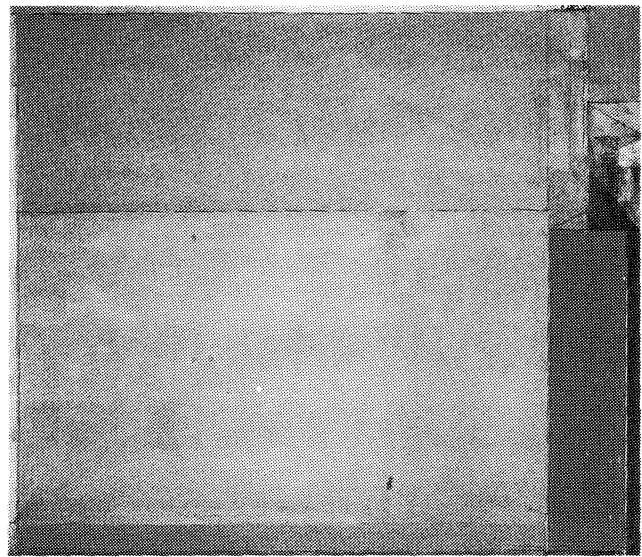ing helps me look deep into the realism of essential questions

Fig. 1. Richard Diebenkorn, *Ocean Park Series #49*, 1972

as to architecture's identity as a visual art. For example, how,
on what basis, does one decide what a building should look
like? That is to say, what is one's starting point, one's
intellectual, theoretical premise, by which to make and
measure visual decisions? Decisions that ultimately repre-
sent, presumably, a serious and advanced aesthetic proposi-
tion, and usually one of not insignificant material size, at
least compared to a modest painting. On what deep mental
foundation does one's aesthetic proposition rest? To what-
ever degree others may consider it to be rock-like or sand,
surely it must be at least explainable, if not teachable? What
is one's datum? And one's provocation? Beyond personal
imagination and intuition, beyond the pretense of pragma-
tism and utility, or beyond fashionable-aesthetic-coolness,
that is. What is one trying to achieve? And why? How do you
explore what a building *could* look like? Ultimately, by
definition, a set of aesthetic premises, however unreflective
they may be, underlies all decisions an architect makes, from
site planning strategies to the exact disposition of a small
window in a facade or a duplex outlet on an interior wall. On

what basis does one aesthetically inter-organize the planar and volumetric structures that constitute the **Formal|Spatial Field**?

Actually, I see the exploration of these ideas, for which painting serves to provide at least some meaningful answers, as my life's work. So perhaps I should say that I am well beyond the issue of whether architecture and painting are related. Given the extensive chronicle of Art History, in which Painting, Sculpture, and Architecture have obviously been interrelated for thousands of years, given the work of the great masters (Alberti, Michelangelo, and Le Corbusier, to pick a few names at random), on what basis would anyone seriously suggest that they are not related? Is it not, then, a valid possibility that they could continue to be related, at least through the explorations of some, at least to the year 2007, say? There are many architectures, as I have said. Many valid explorations. I just happen to be rather traditional. And I have only caught the merest glimpse of the possibilities of new architectures that this time-honored view may yet reveal.

3. Sight|Site Reading: What do you see? I asked my graduate students this question in regard to a Juan Gris Painting (1917) at the start of studio this past fall (fig. 3). I really like this painting. As much for its faults as its achievements. As much for its negative instruction as its positive. And I've spent many hours on numerous occasions studying it, up-close with my nose to the canvas and from the normal museum-goer distance, at the Williams College Art Museum. In point of fact, on a technical level, Gris's paint-by-number-technique and basically homogeneous, hum-drum surface pales rather startlingly in relation to the technical achievements and obvious mastery of the Milton Avery adjacent to it, *Girl in Wicker Chair*, 1944. But if Avery's painting teaches a list of lessons in technical and color mastery, Gris's instructs on compositional matters that are more obviously architectural and central to the visual revolution ignited by Picasso's *Les Demoiselles d'Avignon* only 80 years ago, 1907. Moreover, 1917 looms as a remarkably significant year in the emergence of modernism and the attendant liberation of individuality/style both in the plastic arts and music. It was the year Theo Van Doesburg started the publication of *De Stijl*, which announced a new plastic language, a new experiment in architecture, painting, and sculpture that has made its indelible mark on 20th-century aesthetic consciousness. It was also the year generally
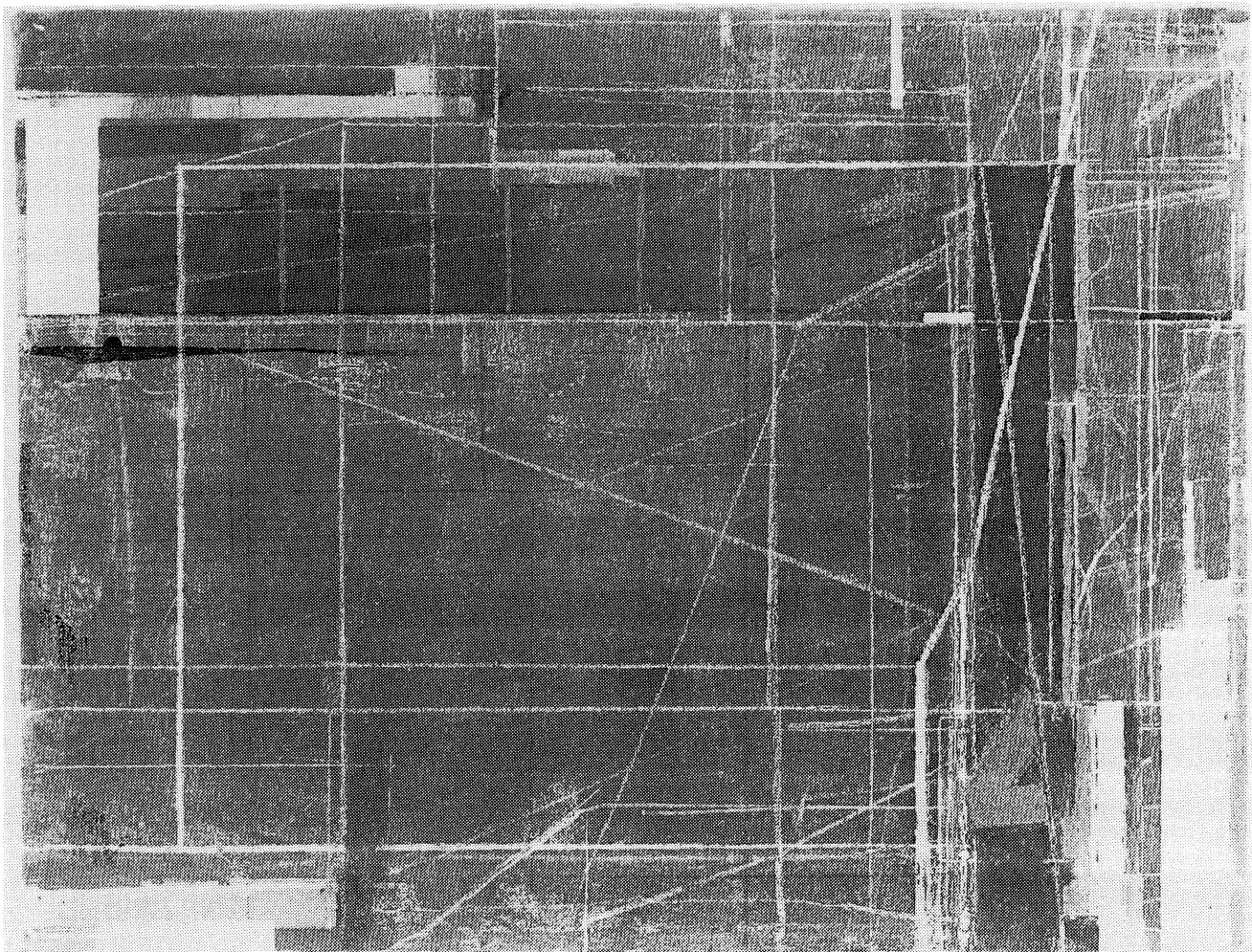

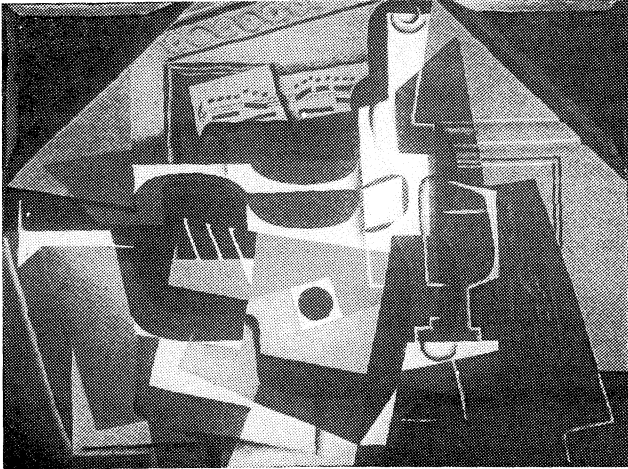Fig. 2. Author, *Roland Park #5*, 1996
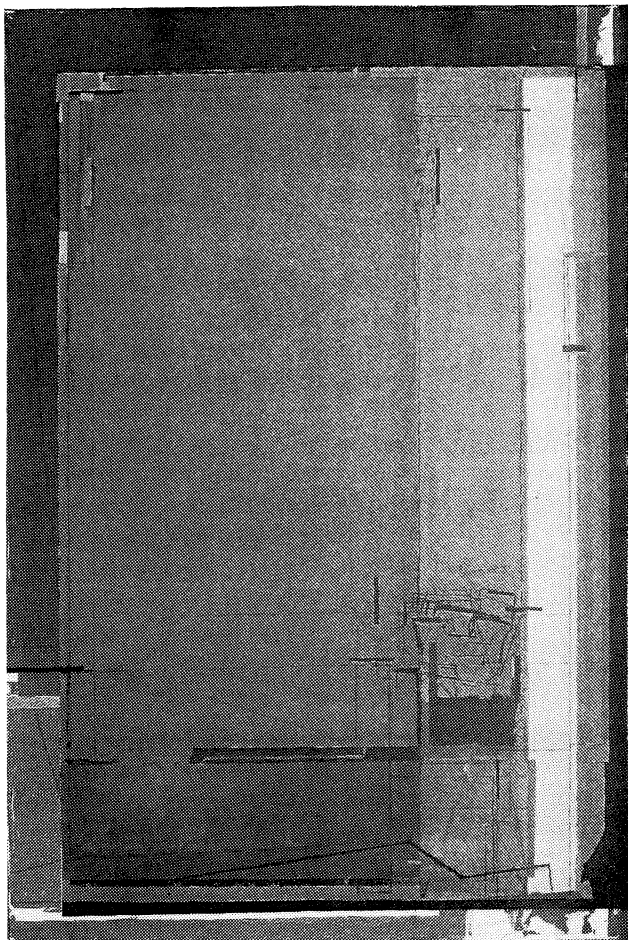
Fig. 3. Juan Gris, *Still Life*, 1917

Fig. 4. Author, *Field-Painting #9*, 1996

attributed to the coherent emergence of jazz. Since we were to begin work on a studio project involving a museum for jazz, the choice of the Gris seemed all the more meaningful. But I must say it was with some hesitation that I gave this particular painting, on two levels. First, there are other paintings, Diebenkorn's Ocean Park series especially (fig. 1), that more clearly teach various positive lessons about spatial control of the plane. And for me, spatial control of the plane, and control that is in the nature of its internal forces centrifugal rather than centripetal (Gris's, unfortunately is more the latter, dominated as it is by the traditional object-in-the-center mentality, for which we have Mondrian largely to thank for ultimately subverting), is a central concept in making the connection to architecture. For every plane (every rectangular painting canvas) is analogous to an architectural site. Every site is a field. Every field is both horizontal (plan/site plan) and vertical (facade/elevation). And every field is necessarily involved with the problem of figures that occupy that field (e.g., buildings in a site plan, windows in a facade), figures that are themselves sub-fields within which are other figures, and so on, all involved to varying degrees, depending on the individual painting or architecture in question, in a matrix of activity, sometimes intense and dense, sometimes empty and still, in a clear or equivocal (conscious or unconscious) relationship between positive and negative forms and spaces. Still, I felt, the Gris could instruct as much by its negative lessons as its positive. And, on the other level, my hesitation was also because I thought the exercise (what do you see?) would be so simple, they'd probably see everything, given that they had 24 hours to work on it, and that I would perhaps not be able to point out anything new that at least one of my twelve splendid students wouldn't have obviously seen.

Well, there were many wonderful answers. They ranged widely from the poetic evocations and subjective, general observations of the majority to the objective, specific observations of a few. In short, they ranged in terms of the degree to which they were verifiable, *painting-specific* observations, things you can point to with your finger. On the one hand, many observations were more or less true but, due to their generality (slipped planes, distorted figures, etc.) might well have been describing another, or many other, paintings by Gris, if not also other Cubist paintings. On the other hand, some basic things that are obvious (I call them facts) went unobserved and, much to my delight, caused considerable surprise when pointed out. At least one student, for example, hadn't yet discerned the presence of the guitar, and I'll always remember the object-lesson of her delight when she saw it and thus drove home for her and all of us in a very real and personal way Le Corbusier's warning that we're always confronting the hypnotic phenomenon of "eyes that are blind."

My list of 7 observations about the Gris painting that I shared with my students was not intended to be earth-shattering. Actually, it was my attempt merely to summarize, and quickly, as I made my departure from the Williams

museum last August before heading south to Charlottesville, 7 *obvious* lessons that no one should miss — 7 main, overarching facts about the painting. They represent what I regard as a necessary, though surely not a sufficient, explanation of this painting, which is an object deserving of endless contemplation. Most importantly, they function as a threshold to the more generalized concepts of the 7 Essential Lessons, of which they are a subset. (Some are difficult to observe in a b&w reproduction, especially a poor one.)

1. The Split-Screen: [Schumacher] A primary device of Renaissance and modern painting for the partitioning, and hence organization, of the plane, from Piero della Francesca to Seurat to Le Corbusier; the two paradigmatic split-screens are the *equal*, or symmetrical (the diptych: a 50/50-split) and the *unequal*, or asymmetrical, as is the case here, which involves major and minor spatial fields (e.g., a 1/3 to 2/3 split, 25/75, 30/70, etc.). The device, or historical convention, of the split-screen manifests a concern for a Greek-like underlying abstract structure provided by mathematics. It's obvious, but you have to know what to look for. Once you see it, you see it everywhere. Schumacher's article on "Deep Space," in which he describes Le Corbusier's study of Piero's paintings and the impact they had both on the invention and photography of his architecture, is the source for this idea.

2. The x/y + z Axes: A corollary of the split-screen, the presence of the emphatic decentered Cartesian axes must be discerned as a major organizational assertion, one that regulates the prevailing order, or normative condition, of the visual field. The implied gridded matrix, or spatial coordinates, posits the underlying 2-d|3-d plastic structure of the painting, against which the formal|spatial turbulence and distortion, contraction and expansion, and the coexisitent skewed x|y axes, are read; the datum.

3. A Table: It isn't that the table is hard to see. But exactly where its boundaries are, and cognizance of the fact that one can look at the painting and never cause oneself to trace the boundaries (i.e., unless someone asks you "what do you see"), is another matter. When you finally wake up to the fact that the table, on which the guitar rests, is a primary assertion of the material depiction of the painting, that it represents a primary field, or landscape of activity, wherein the horizontal and vertical fields are conflated, which the explicit registration of the x|y axes signifies, you then are faced with the arduous task of actually pinning down the elusive boundaries of the table's edges. For it appears variously and simultaneously both horizontally and vertically in the picture plane; the former relates to *horizon*tal extension, sympathetic with the primary disposition of the guitar; the latter relates to the ambiguity between illusionist recession along the z-axis into the picture space of the room's interior versus collapsing of the picture space as the table is flipped up parallel to the y-axis and thus is read as a non-illusionistic entity, without recession, that one scans vertically.

4. A Window: Into the deep space to the left, the major interval of the split screen (versus the shallow space to the right provided by the advancing wall/wainscot), a window is
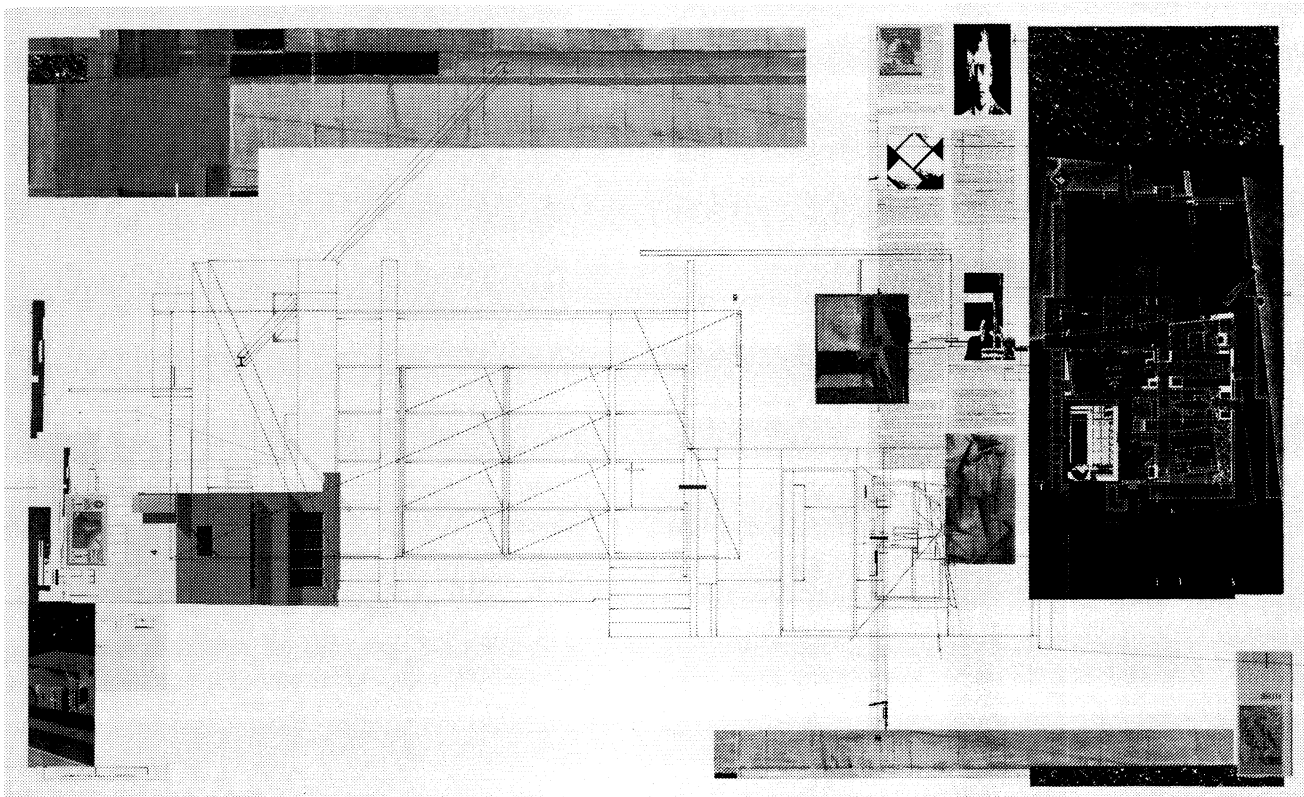

Fig. 5. Author, *Collage: Dante|Telescope House* ᶻˡᵒʷᵉ, 1996 (Justin Heiser, assistant)

framed. And thus the correlative question is raised, where is the music? Is it on the far wall, the back plane, functioning as a surrogate window to an exterior space beyond? Is it on the far end of the table, thus defining the middle ground, when the table is read as extending along the z-axis illusionistically deep into the picture space (*thus positing an equivocal reading of table and window*)? Or is it nearer still, at the foreground, if not the surface, of the painting, either weighted by gravity to the physical table itself or anti-gravitationally floating above it, levitated in some demate-rialized mode in the space defined by the grouping of still-life objects on the table, the guitar, goblet and vase? Perhaps it is simultaneously all of these and another, more cerebral, possibility as well: for perhaps it is merely the demateriali-ized reflection in a mirror, a mirror in the deep space of the painting that reflects sheet music that physically resides in front of the picture plane, in our space, the space of the viewer (an idea adumbrated by the apparent spilling of objects over the bottom edge of the painting). Gris sets the play of window and music in motion. In indeterminate spatial flux, the sheet music is ultimately also tied to the guitar. They co-exist in musical counterpoint, a spatial fugue, one that heightens our perception of the classical tripartition, or layering, of space from front to back within the bounded field of the vertical surface.

5. Symmetry: Perhaps overlooked on first reading in favor of the dominant implication of asymmetry, symmetry is here established most obviously by the two chamfered, photo-graph-album-like corners at the top of the painting.

6. Rotation: The swirling, optical vortex of centripetal forces, for which the cyclopian-eye of the guitar sounding hole is the focal point, is another fundamental property of the construction. This bull's-eye, target-art, aspect of the paint-ing (the circle-in-the-square form is at the geometric center of the x-axis) is, for me, one of its negative compositional lessons in regard to the idea of architecture as space definer versus space occupier, about which I will say more later. Now we see the photo-corners as engaged in the description of a rotated, claustrophobic field, marked by the spinning, phonograph record-like movement (the circle is the spindle), as if the objects of the interior are tethered by invisible radial force-lines. The anthropomorphic vertical figure to the right of the guitar, the materialization of the y-axis that establishes the visual split-screen, extends the rotation theme by the idea of spiraling, a vertical spiraling that may be seen as a displaced condition in section/elevation of its roof plan (i.e., the circle in the square), and/or the vestige of the guitar on end, an act of motion represented through the device of simultaneity; here Gris is setting up properties of dynamic motion, rotation, displacement, passage of time (an object here one moment, there the next), and he sets this in opposition, precariously, to the general stillness, tranquility, clarity, discrete boundaries that we associate with the banal-ity of everyday life, especially the life of the serene interior;

7. Phenomenal Transparency: [Rowe/Slutzky] On two levels, as a formal device (both optically and organization-
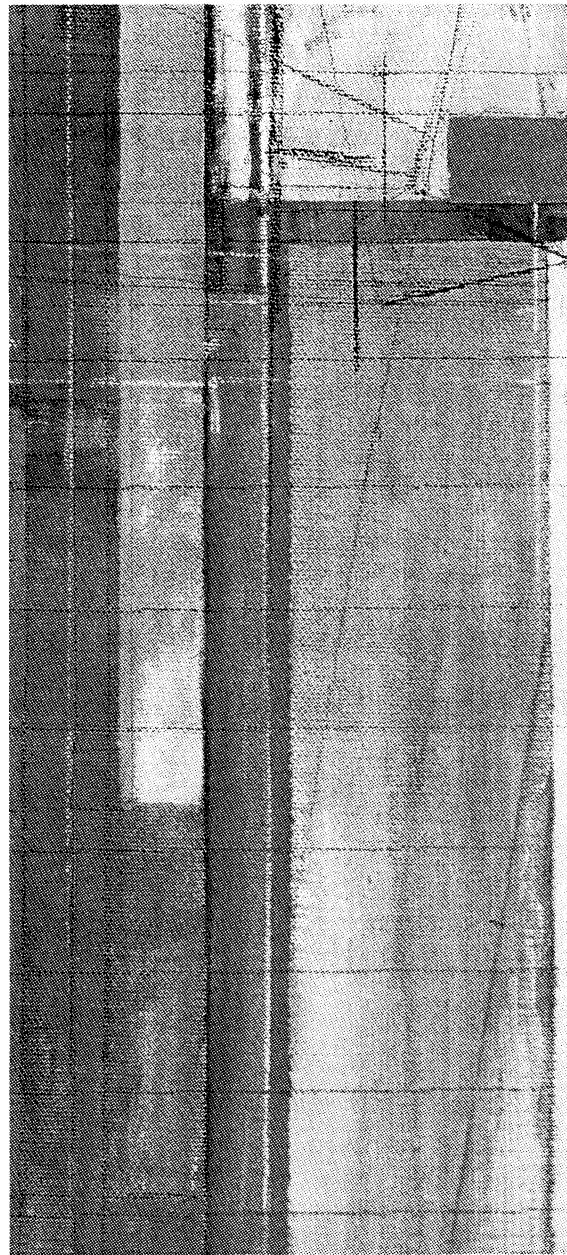

Fig. 6. Author, *Roland Park #4*, 1996

ally), and as a conceptual device, *PT* must be recognized as a fundamental property, even as the *sine qua non*, of this painting. The first level refers to specific representational, optical translucencies (e.g., seeing through the goblet to the table) and to abstract, organizational devices (e.g., the "pulling through" of line and plane). The second level refers to the relationship between form and content, or Move|Meaning, which I'll explain in my list of the Essential 7 below.

Ultimately, this simple exercise in seeing is really an exercise in reading. In deciphering a text. I call it sight|site reading. And it is a faculty that is transferrable to any visual text, from a building site to a building wall. (In music, sight

reading is the ability to play a piece of music that you've never played/seen before, say a Mozart sonata, and, ideally, to play it flawlessly.) Sight|site reading plays on the interrelationship of the eye and the intellect in solving the complexifying riddle of the aesthetic field. Of course, deciphering a 2-d, semi-representational painting of a couple of square feet is easy. Deciphering a complex 3-d urban site or inventing a 3-d architecture of thousands of square feet is hard.

4. The Essential 7: Here, then, are 7 Lessons of Painting for Architecture. There are far more than 7, to be sure. But these are a good place to start, I believe. All are inherent, to one degree or another, in the Gris. (For example, go back and re-see the Gris, or your last building, through the lens of these 7.):

1. **Move|Meaning**
2. Abstraction|Representation
3. Plastic Structure: 2-d|3-d
4. **Figure|Field**
5. Center|Edge
6. Line|Plane
7. **Autonomy|Contingency**

Any categorization is fraught with peril. The lines between these 7 are blurry. It's precisely the codependence, the interrelationship among them all that is so important. But for purposes of examination, and clarity, it is helpful to try to differentiate them. At this point, I would like to give a few short notes about the big ones (bolded), for within these seven there is a hierarchy. First, **Move|Meaning**. All the others fall under this dominant rubric in one way or another. The other two dominant ones are **Figure|Field** (at the center of the group), in which Center|Edge figures especially prominently, and **Autonomy|Contingency**, which concerns the central ideas of relationship-buildings and "difference."

1. MOVE|MEANING: My term for the classic dialectic of Form|Content, about which I have written elsewhere (I also call it Structure|Symbol), has to do with the tension between the syntactic and semantic properties of an architecture. Slutzky defines it as the problem of the double-nature of the aesthetic field, which he says, ultimately, is the essence of **Phenomenal Transparency**, a problem, I believe, at the center of Victor Shklovsky's mental wrestling in the formulation of Russian Formalism during the nineteenteens. As Slutzky writes, "All art tends towards structuring the contradiction between that which appears and that which signifies, between form and meaning." This involves the equivocality between content that is considered to be *ex*trinsic to form and content that is considered to be *in*trinsic to form, i.e., form itself. **Move = Formal Devices** (such as the split screen, the grid, recentering, intersection/interruption, stop/go, shift/continuation, plan to section to elevation reciprocity, etc.). It is concerned
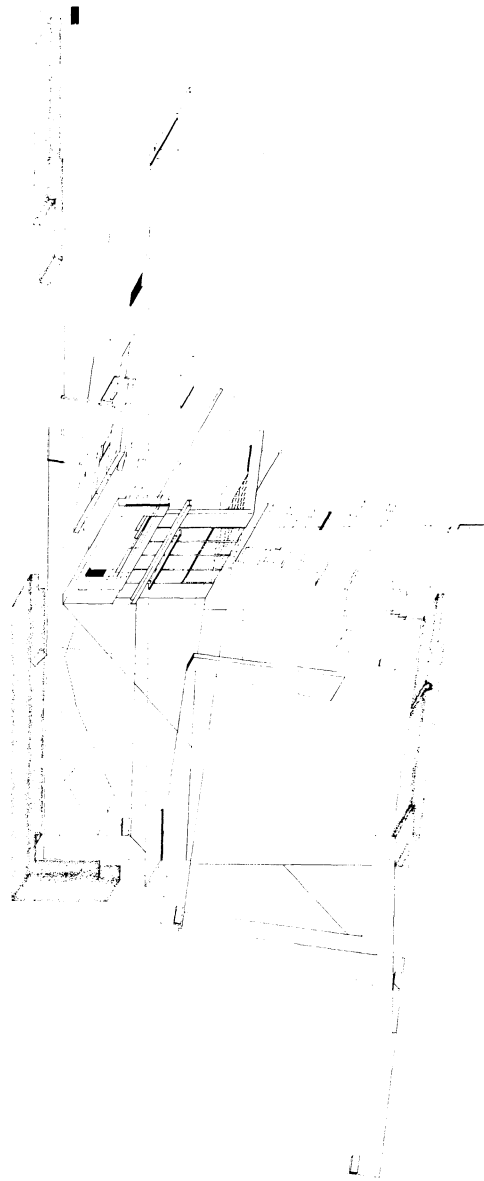

Fig. 7. Author, Axonometric: Dante|Telescope House [Zlowe] (Christian Blomquist, assistant)

with the particular system of conceptual and material techniques that comprises architecture's presence as a plastic language (the calculated Chess Game of play within the adopted "rules" of the formal|spatial game, as it were). Essentially, **Meaning = Associative Ideas**. In his important essay, "The Double Nature of Painting," British art critic, Roger Fry, defines three categories that help sort out, on a simple level, the relative relationship between form and content: pure painting, which essentially emphasizes form for form's sake (which I call Pure-Move); painting that is narrative-centered (which I call Associative-Meaning); and a category that manifests a concern for both, that occupies the equivocal middle ground (which I call Move|Meaning). According to Fry, the latter category, when realized at the level of the sublime, represents the

highest, though rarest, achievement in art. Examples of Move|Meaning paintings are Piero's *Annunciation*, 1453, and Matisse's *The Painter's Family*, 1911. Most architecture today privileges the first category, Move. But I am interested in the edge of the resonant middle ground, in an architecture that extends the incomplete research of the semi-abstract paintings of the Cézanne-inspired Cubists and Matisse, which inspired the profound Move|Meaning work of Le Corbusier (such as La Tourette, 1956-57, and the Assembly Hall at Chandigarh, 1953). Terragni's unrealized Danteum also operates as a sublime datum of Move|Meaning. Terragni, who was influenced by the abstract painter Radice as well as by the *Divine Comedy*, produced in the Danteum what is perhaps the modern paradigm of the equivocal relationship between pure architecture and pure associative ideas. My project, *Dante|Telescope House*[Zlowe] (figs. 5 & 7), is an experiment in a Move|Meaning architecture.

4. FIGURE|FIELD: My project is also an experiment in a Figure|Field architecture. The idea of **Making the FIGURE & Marking the FIELD** is at the center, as it were, of the Move-type problem of deciphering and inventing the vertical surface and the horizontal plane. And it is the coexistence of the horizontal and vertical planar fields, the layering of space, that comprise the spatial|formal matrix. Rowe/Koetter describe an adjacent idea in *Collage City* as object/texture, and they trace a historical and intellectual link spanning at least from Renaissance Rome to 20th-century painting, in which we comprehend an idealized conception of architecture that functions as **space definer** as much as **space occupier**. The lesson of the idea of equality and/or equivocality of building and exterior space, of solid and void, of a definable constructed object and its contingent, spatial| formal interlock with a definable, figural void — for the Romans, of course, the outdoor room with its dematerialized soffit was viewed as the supreme architectural achievement — obtains sublime manifestation in Raymond Hood's Rockefeller Center and in The Lawn by Jefferson. In the latter, the paradigmatic, grassy rectangular plane is simultaneously at the center of a finite sub-field (i.e., the localized Academical Village, which represents what I call the **Foreground Site**) and at the edge of an implied ray-like plane that extends infinitely to the South (to a landscape "outside" the frame of the local field, which I call the **Background Site**).

Important sub-lessons descend from Figure|Field, such as framing & boundaries, marking & enclosure, locking and interlocking. My present research focuses on the sub-lesson of the **Empty Center|Hypercharged Edge** (Lesson 5). I look to the remarkable researches conducted, for example, by Braque, especially his pasted paper spatial experiments between 1912 and 1914, such as *Fruit Dish and Glass*, 1912 (about which I have written elsewhere); by Mondrian, such as what I regard as his breakthrough painting, *Composition 1916*; and by Richard Diebenkorn, who, influenced largely by Mondrian and Matisse, give us remarkable instruction

through paintings such as *Ocean Park #49*, 1972 (fig. 1), or *Untitled (Triptych, part 3)*, 1972. Inspired by Diebenkorn, I have adopted what I call the **7%|93% Solution**; that is, I look for ways to (re)define the boundaries of a given site (architectural or painterly) such that it is comprised of **7% Constructed Figure** and **93% Marked Field**.

These lessons transpose to investigations of vertical surface, indeed to all spatial fields, planar and volumetric. For all fields, horizontal, vertical, prismatic, are essentially more-or-less bounded fields, **Latent Marked Sites**. And in this regard, that is to say with regard to the abstract issues of the idea of a **Site Contingent, Spatial|Formal Interlock**, as well as Marked Fields, the paintings earlier this century by Léger, Fritz Glarner, and Rawlston Crawford are especially illuminating. They contribute to my research of a kind of hypermodern, harmonic dissonance of the figure|field relation.

7. AUTONOMY|CONTINGENCY: A direct result of the Move-Lesson of Figure|Field, this Lesson generalizes a fundamental conceptual principle, which is operative, I believe, at all levels of design: **Architecture as Fragment of a Larger Whole** (e.g., see articles by Colquhoun and Graves). It is the path to **a Site-Specific Architecture** and **Relationship-Buildings**. The Cubists teach lessons, such as Picasso's *The Poet*, 1911. In point of fact, it is the Cubists to whom we owe the idea that occupies the very center of Modernism, namely, the apparent paradox wherein there emerged the coexistence of the **Autonomy of Form** & the **Destruction of the Autonomy of the Object**. The concept of **Force Lines|Force Fields** is an important specific device for realizing an architecture's contingent formal|spatial relationship to its site-specific context. Look to the paintings of the Italian Futurists (c. 1914) for the idea of insinuation of form into an existing, invisible, spatial matrix, simultaneously geometrical and dynamical. Matisse asserted: "It is solely a question of playing up differences." **Difference** is central to a site-specific architecture. An autonomous, object-centered (as opposed to relationship-centered architecture) knows no differences. But autonomy does operate, however, on a desirable level with respect to what I call the **Imported Site**: that is, the non site-specific intellectual agenda (such as an interest in the relationship of painting and architecture) that one brings to every site.

5. Painting as Device: As I've said, paintings are like maps that lead us to rewarding insights about architecture. Actually, one of my conclusions is that these insights are difficult to discover by using the map of architecture itself. It requires lateral thinking. At the very least, as the revolution called modernism that emerged during the first two decades of this century showed, painting is a tool, a device, an instrument for unlocking architecture on some remarkable levels.

6. Architecture as Game: Le Corbusier speaks of "playing intensely the architectural game." (He is referring to the Move-part of architecture.) He gave four famous diagrams.

All are about either square or rectangular fields, whether clearly defined or implied. These provided the limitless "resisting foundation" (to use Stravinsky's term) of his prodigious work. It is painting's business to explore the nature of the bounded plane. As Hejduk observes, the square was the preferred field of De Stijl and the rectangle of Cubism. My current work centers on the rectangular field, but as informed, like Diebenkorn, as much by Mondrian as by Picasso. I think of these researches as one side of what I consider to be the Double Plastic Nature of Architecture. This exists along the axis between the compression of the plane (painting) and the elasticity of mass, or volume (sculpture).

7. Towards a Hypermodern Architecture: I hope that these 7 lessons inspire contemplation of other ways that painting can instruct about architecture. I also hope that they lead us, as Le Corbusier's study of painting led him, to the discovery of new/old ideas, to new form-making & new form-meaning, to new architectures that the world has not yet seen.

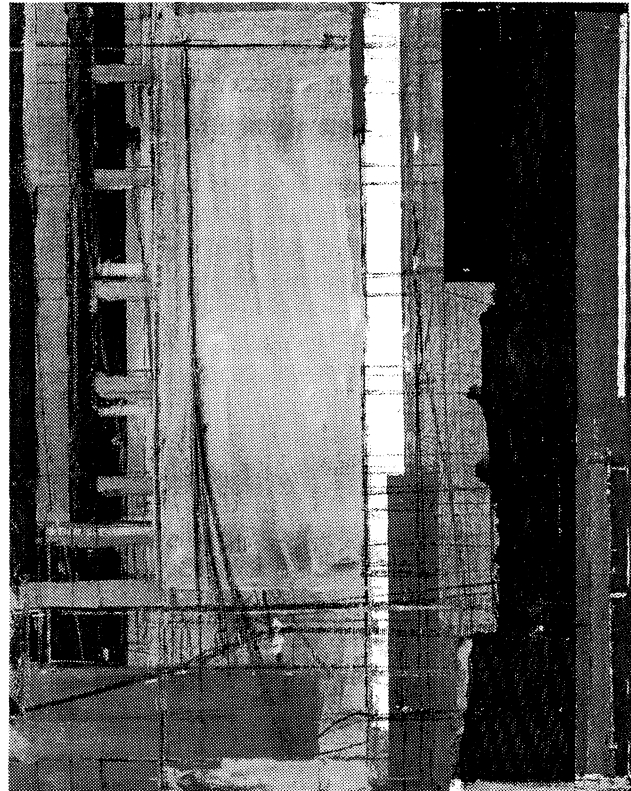> Painting is a medium in which the mind can actualize itself; it is a medium of thought.
>
> — Robert Motherwell

Fig. 8. Author, *Field-Painting #11*, 1996

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