Mies van der Rohe's Photocollages of the Weimar Era

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A SHIFT IN MODE

Interlaced among Mies van der Rohe's realized buildings of the 1920's were two particularly prolific and important groups of unrealized proposals. While fallow of construction, these two ideational phases held great consequences for his career: the first for establishing his reputation as a "radical innovator" of visionary architecture in Germany, and the second for prefiguring the more sedate, tectonically driven concerns of his subsequent corporate American practice.[1] The proposals in the first group were his pioneering and canonical 'five projects' of 1921-24; those in the second were his 'skin study' entries for four competitions of 1928-29.[2] Due to their import, neither group has suffered any lack of scholarly study or reproduction in the Miesian literature. Yet when these two are juxtaposed a curious disparity arises between them that has escaped analysis. In bringing these speculative groups before the public as *representations*, Mies in the first predominantly used wholly conventional methodologies of perspective, physical model, and orthographic, while in the second he predominantly used the more novel, technologically modern medium of photocollage.[3]

While this shift in presentation mode might seem an inconsequential topic within Mies's weighty and eventful career, it gains significance when viewed in its Weimar Republic context. The sociopolitically minded artists of Berlin between the wars raised the orchestration of photographs (montage/collage) to momentous heights.[4] Today, eighty years later, their clipped and grafted works still inspire intense scholarly excitement and set the benchmarks for what critical theorists of art choose to valorize as 'truly' avant-gardiste (i.e.: negatively Marxian) and choose to dismiss as hopelessly mainstream (i.e.: affirmatively bourgeois). That Mies himself went 'public' with photographic formulations in the charged context of the Republic begs investigation. Given their Weimar context, it is natural to attempt to place Mies's photocollages upon what Paul Mann calls the "polarized field" of dialectical discourse between resistance and mediation in the representational arts.[5] Is Mies an architectural parallel to John Heartfield, the Dada montagist?[6] Given contemporary critical theory's widespread identification of the word 'montage' with leftist sensibilities, my insistence upon labeling Mies's output as photo*collage* (instead of the more socio-politically loaded photo*montage*) already exposes my belief that Mies stood for mediation, not resistance, on that fractious cultural field. Re-

sistance plays into Mies's embrace of photographic presentations, but it was society's resistance to him, not the other way around. His works were hardly images of accusatory negation like those that were fostered by Weimar's 'true' avant-garde.

Another reason to probe this change in presentation mode is to better understand how Mies wished his work to be publicly viewed. All of the unbuilt proposals in these two ideational phases were intentionally and elaborately prepared for exhibition, competition, or publication formats. Since these projects were speculative (either with no client in sight or else intended for submission to juries), their presentations were not for Mies tentative indicators of built realities to come but likely were to be these projects' final records.[7] In such cases, Mies would not approach his representational choices casually; a shift in mode likely harbors meaning. Yet another reason to probe this shift is simply that photocollage's role anywhere in Mies's *oeuvre* has received little comment, a rather surprising lacuna given the medium's prevalence throughout his life.[8] The questions of precisely when he began to use this technique, of how he developed and employed it, and of why he may have done so are rarely asked systemically.[9] One may as well begin by probing his most contextually loaded use of the medium, during Weimar.[10]

MIES AND PHOTOGRAPHY

Photocollage was but one facet of Mies's lifelong fascination with photography in all its manifestations and degrees of manipulation. Compelling reasons emerged early for him to consider photographs — especially job 'glossies' — seriously. The ephemeral nature of so many of Mies's first modernist buildings left his Weimar reputation wholly indebted to select prints, which rapidly became the endlessly reproduced surrogates for his lost works. As Beatriz Colomina, among others, has noted: "The work of Mies became known almost exclusively through photography and the printed media."[11] While certainly not a publication phenomenon like Le Corbusier,[12] Mies did help fund and edit the short-lived journal, *G*, which liberally illustrated his Weimar works.[13] Further, Mies understood the benefits of photo tampering; he (or an assistant) was expert at hand painting and, later, airbrush. Mies liberally retouched

numerous photos throughout his career as a way of altering objectionable contextual elements and even of altering his own compositions.[14] Photography also became critical to Mies's view of pedagogy. Soon after assuming the Bauhaus Directorate, Mies raised photography at the school to the status of an autonomous curricular discipline independent of the advertising department, and dramatically enhanced the position of the subject's teacher there, Walter Peterhans, a photographer whose work Mies admired so deeply as to later bring Peterhans along with him to IIT.[15] Using collage to extend photography into his architectural design and representation processes was natural for Mies given his keen interests in the field. This was the man who, after all, had himself immortalized late in life by sitting for Karsh.[16]

Photocollages appeared throughout Mies's career — albeit at different intensities.[17] He used the medium before, between, and after his two clusters of unbuilt proposals of the 1920's.[18] His earliest known effort appeared in the first public competition the young architect entered: the 1910 Bismarck Monument.[19] In addition to several immense charcoal renderings, Mies made two photocollages that emphasized the dramatic siting of his stolidly monumental, *Schinkelschule* proposal.[20] This project's historicist 'Romantic Classicism' immediately belies any supposition that Mies's breakthrough to technological modernism in the early 1920's provoked his embrace of the technically 'modern' medium of photocollage. While it is unknown whether Mies actually submitted these photocollages to the competition jury, they are large and astonishingly accomplished, showing that at the tender age of twenty-four Mies had already attained an aggressive command of this fairly new and challenging representational medium.[21] Already perfected was the basic procedure he would follow throughout Weimar: within a huge print of the context taken from an attainable, realistic position, he would excise (or direct to have left blank) a zone into which his own building would be hand drawn.[22] Factual (photographic) reality thus wholly surrounded and encapsulated his projects. When the Weimar Republic collapsed under Nazi pressure and Mies retreated from the outside world into his hermetic 'Court House' phase, he briefly inverted rather than abandoned this basic procedure. Collage totems of factual reality (statues, exotic veneers) were now themselves encapsulated and surrounded by a *drawn* matrix (his walled quadrants). After his arrival in America, Mies's hand-drafted, isolating 'context' opened to reveal glimpses once more of a photocollage exterior world. Though tightly framed at first, these photographic zones gradually migrated outward toward the periphery of his images, and slowly surrounded his architecture again.

Photocollage served Mies for fifty years after his Bismarck beginning, through many variations in architectural manner and outlook. In the final major commission of his career, the Berlin *Neue Nationalgalerie* of 1962-67, we find him studying the interior marble and wood finishes through this medium.[23] The intervening half-century witnessed upward of 80 photocollages, counting his studies and finished pieces.[24]

THE 'FIVE PROJECTS' PHASE

The initial group of ideational, unbuilt projects contained three office proposals (the first Friedrichstrasse Competition Project, Glass Skyscraper Project, and Concrete Office Building) and two villas (the Concrete and Brick Country Houses).[25] Mies did make several photocollages of the first Friedrichstrasse project — and these will duly be addressed at length; yet Mies likely created these as preparatory studio underlays for conventionally rendered, presentation perspectives (his movement toward photocollage as his primary, public medium had to wait 7 more years). What most intrigues me about the public exhibit pieces Mies put forward for the 'five projects' group is that despite their unquestionably revolutionary *architectural* means, there was nothing very revolutionary about their specific *representational* means.[26] The images which Mies chose to present for public consumption were thoroughly traditional methods of depiction, methods that had in fact been largely vetted during the Renaissance.[27] Of course the aesthetic and technical futurology of the projects themselves makes it difficult to focus on their representational systems alone. To suggest that such overwhelmingly prescient visions are conventional in any aspect seems like special pleading around their margins. But plead I will; to detect a dogged margin of convention in Mies's work, in whatever manner he may have expressed it, is critical to understanding his career.

The many rendered presentation perspectives Mies made of the 'five projects' were particularly customary in conception. Though breathtaking as sheer craft, these renderings' heavy charcoal textures, textbook shade-and-shadow conventions, pedestrian eye-level viewpoints, and general attentiveness to context (in the urban proposals) were conservative for the times. Leaving aside for the moment the progressive experiments others were contemporaneously making in photography, Mies's efforts were far from novel even on the level of hand drawing. Berlin, in addition to having close links to the Bauhaus, was the geographical intersection point during the early 20's for *de Stijl* and Russian Constructivism,[28] each of which conceived *drawn* space through extremely novel visualizations. Perspective rendering of any sort, when compared with Theo van Doesberg or El Lissitzky's contemporaneous explorations of axonometry's seditiously generative process implications, was a tame 3D methodology.[29] And even among the modernists remaining conversant with perspective, Mies was hardly forward-looking. When Melnikov, for example, used perspective, he often undermined its literalism by exploiting a non-contextual portrayal, a de Chirico-like distortion of construction, and a high-level vantage — a viewing position that provoked a more abstract, object-like presentation and a more vertiginous plunge toward the composition.[30] Compared to this, Mies's renderings are staunchly realist.[31] The most arresting aspect of Mies's perspectives was, in fact, their sheer scale. His Friedrichstrasse perspective was nearly six feet high; his Concrete Office rendering nearly *ten* feet long.[32] Such immersing gigantism, paired with Mies's obvious technical virtuosity in charcoal media, overwhelms the viewer's reaction, cloaking the cautiousness of Mies's representational choice. Instead of asking the systemic question of "why so traditional a perspective of so revolutionary a work?," we are first tempted to ask "why so big?" The scale of these perspec-

tives exposes Mies's pride in his masterful yet wholly conventional graphic technique; perhaps they were generated solely out of his desire to vaunt his obvious *Schinkelschule* drawing skill. The scale also establishes beyond question their public character; these could hardly be intended for anywhere other than a substantial gallery space.[33]

Much the same traditionalism pervades Mies's models of the 'five projects.'[34] The most unusual and often reproduced of these — the Glass Skyscraper maquette — admittedly experimented with the new material of Plexiglas. But despite this, the overall impression remains conventional as a representation. This transparent phoenix was affixed to a huge base, was encircled by contextualizing chunks of traditional city fabric, and was typically photographed rather factually in its entirety from standard, pedestrian, street-level positions.[35] Borrowed background trees added to the projective realism. Again, the method of representation is serviceable but less innovative than the architecture itself. Contemporaneous *de Stijl* or Constructivist architects, in contrast, sought wholly new categories of model-making expression. The highly isotropic character of their compositions was enhanced by their displaying of their models without any recognizably grounded context — teetering on stools, affixed to walls, or even suspended freely in mid-air.[36] They exploited all manner of sectional models, serial models (those that showed processes of transformation), and kinetic models (those that opened to expose the interpenetration of masses or the relationships of interior and exterior).[37] And when it came to photographing architectural models, the Russian Constructivists had a taste for dramatically fragmentary or tilted views, and also montages of spectral, multiple exposures implying motion.[38] None of these devices attracted Mies's curiosity.

With the orthographics of his 'five projects,' Mies did move farther from convention. His Brick Country House plan broke new ground in drawing methodology with walls running off three sides of the page — a justly celebrated graphical expression of these walls' theoretically infinite outward extension.[39] Here, architectural and drawn innovations coincide. Further, his rendered elevations of the first Friedrichstrasse project achieve a stark simplicity, drastically muting the context and allowing the mass's bluntly rectangular profile to collapse 3D space. These are the most abstractly progressive images within this first group of ideational projects.[40] Still, Mies's contemporaries went farther. *De Stijl* and Constructivism's jointed, fold-down, multi-view orthographics and combination orthographic/axonometric views are revolutionary reconfigurations of the architectural process on the graphic page.[41] While Mies was aware of these developments (both van Doesburg and El Lissitzky were published in *G*), he had no use for such novelties.

This entire assessment is not meant as criticism of Mies; to his credit, novelty was never his *sole* goal (a point I will reiterate when reviewing his later public deployment of the more outwardly novel method of photocollage in the 'skin study' projects). This assessment is only meant to highlight a one-hundred-year divide that is never acknowledged in discussions of the 'five projects.' Mies, especially with his enormous perspectives, depicts some of the most powerful architectural techniques of the dawning *20th*-century through some

of the most powerful rendering techniques of the dawning *19th*-century (i.e.: Gilly, Weinbrenner, Schinkel, or von Klenze).[42] Mies's architecture and representations are equally skilled, yet Janus-faced. Only a master could fuse such fervently forward and backward glances into *unified* images — glances that together could wring the neck of a lesser architect.

Before moving on to relate these conventional presentations of Mies's to his public deployment of photocollage in the 'skin study' competition projects, the several photocollage studies he *did* make in this first cluster warrant careful attention. Three are known, all of Friedrichstrasse (two are lost, and today are reproduced only from negatives). Mies's making of these reminds us that he had established his capability in photocollage a decade earlier during the Bismarck Competition and certainly could have (if he wished) used photocollage extensively and publicly across *all* of the 'five projects.' How these three photocollages relate to the huge, extant Friedrichstrasse charcoal perspective has never been explored.

The Friedrichstrasse competition brief directed each contestant to prepare two "freehand" perspective views from prescribed positions.[43] It is my contention that Mies's photocollages were preparatory steps toward producing these required views. The two lost photocollages were likely of relatively small scale and were of exactly the same proportions.[44] These two show the building from diametrically-opposed directions looking north and south along the busy Friedrichstrasse Boulevard. They seem like early trial runs for a planned, pendant pairing of views to satisfy the competition requirement. Both remain sketchy in character and both indicate the building at its penultimate phase of design, immediately prior to Mies's final decision to remove certain reentrant facets at the acute corners of his glass skin.[45] The third, extant photocollage is a huge enlargement of the previously-used, south-facing photo. Mies cropped the south photo's proportions slightly from the right side and interjected a much more developed drawing of his building, now beginning to show the floor slabs, the glass skin's reflectance, and the simplified corner facets that all ultimately appear in his charcoal presentation rendering. No doubt this third photocollage functioned as either a direct underlay or as some other type of transfer mechanism for making his south-facing, 'final,' hand rendering. After taking into account cropping on the bottom and further cropping on the right, this third photocollage print's immense size (200 cm in height) exactly matches that of the final rendering, and every form between the two precisely corresponds.[46] In the literature it has gone unrecognized that Mies constructed his canonical Friedrichstrasse rendering not from scratch but somehow directly or substantially off a photocollage.[47]

Whether or not these last steps were repeated to create another (now entirely lost) pendant hand rendering of Mies's project looking north along the Boulevard is anyone's guess. While the competition brief requested a second view, I doubt it was actually realized in 'final' (non-collage) form since it likely would have appeared somewhere in the project's contemporaneous publicity. In any event, the point is that while photocollage was important to Mies's process at Friedrichstrasse, he did not judge it suitable for the jury room, gallery wall or publication. Photocollage was a legitimate *tool*, not

a legitimate *result*. We could, of course, assert that his actions only reflect this particular competition's brief, which required "freehand" perspectives. But surely this was not an impediment. Photocollage can — and in Mies's case *did* — include substantial components of literal, freehand drawing. Also, as noted above, Mies made 'final' hand renderings of other proposals among the 'five projects.' In these other projects, freed of any known competition constraints, he could have presumably put forward huge photocollages as 'end results' to his hearts content, yet he did not. (I suspect that he *did* make a gigantic photocollage underlay of his Concrete Office Building, but then redrew it for exhibition purposes exactly as he had done at Friedrichstrasse. The abbreviated, somewhat ghostly, 'non-constructed' feeling of the contexts in the two projects' renderings are identical. There is no reason to assume any disparity of process between them.)[48] Mies, circa 1921-24, wanted 'traditional' perspectives for hanging, not photocollages.

GOING PUBLIC: A PHOTOCOLLAGE QUARTET

Mies's turnabout on this issue becomes understandable when placed within two contexts: the reception his 'five projects' received and the collateral developments in photo orchestration in Berlin. Media attention and several substantial built commissions soon followed Mies's 'five projects,' but Weimar's hyperinflationary economy and the era's core conservatism (despite its fractiously effervescent surface) insured that his built works in the early to mid-20's were less adventurous than his visionary schemes.[49] The aesthetic/technical bravura of the 'five projects' attracted no immediate developers, only publishers.[50] The jury of mostly businessmen for the first Friedrichstrasse Competition rejected his proposal without even an honorable mention (as Mies recalled late in life, the jury "pushed my design into a dark corner, probably because they thought it was a joke").[51] Issues of "functional requirements, the environment, and questions of town planning" were raised against his scheme — this last item likely a reference to the building's total lack of setbacks that could relate it sensitively to the surrounding urban context.[52] Image also played a role: one commentator on the competition complained that Mies's building could only function as "a warehouse."[53] Despite its realist perspectival representation, his proposal was not viewed as *believable* in central, bourgeois Berlin. Mies could take consolation in the fact that the villas from the 'five projects' held promise of producing some important domestically-scaled progeny (Barcelona and Tugendhat were both on the horizon as Mies began his photocollage 'skin study' presentations), and his Weissenhof apartment block was a large, domestic success on a peripheral site in a provincial city. Yet no chance at a major, signature, business building or cultural institution in metropolitan Berlin had developed. Poelzig and Mendelsohn, in contrast, each already had a major theater to their names: the Großes Schauspielhaus (1919) and Woga Complex (1926-28) respectively. Bourgeois Berlin had so far ignored Mies.

Another contextual issue that surrounds Mies's public deployment of photocollage was the gaining prevalence of photo orchestration in Berlin. Mies may have been startlingly prescient with his 1910

Bismarck Competition efforts, but no longer. If Weimar culture was a receptor of many of *de Stijl* and Constructivism's new representational systems, it was a generator as regards things photographic. While the Bauhaus itself was initially less active than one would have anticipated in photography (though even it progressed rapidly after 1923/24 with the arrival of László Moholy-Nagy),[54] there was no lack of other loci for photo activity in the Weimar Republic. Leitz in Wetzlar, after all, introduced the Leica in 1925.[55] As early as 1915, the Berlin Dadaists had led the way toward the fragmentation, manipulation, and recombination of photographic imagery, and by the time Mies went public with photocollage in 1928/29, their chaotic, explosive and provocative uses of the medium were omnipresent in postcards, book covers, periodicals, gallery exhibits, and the popular press.[56] Figures in Berlin such as Hannah Höch, Raoul Hausmann, George Grosz, and John Heartfield, as well as Max Ernst in Cologne and Kurt Schwitters in Hanover, prominently appropriated and then transformed photography's realism toward their own ends.[57] Mies was fully aware of the new horizon for photography; *G*, for instance, published John Heartfield and Raoul Hausmann.[58] Here came a novelty Mies knew and respected. In such a context, even someone as dedicated to charcoal as Mies would have to acknowledge that huge, rendered, hand perspectives might have become *passé*.

During 1928-29, four virtually contemporaneous competitions took place: three of them in central Berlin (the Adam Building, the Alexanderplatz reconfiguration, and the second competition opportunity for the original Friedrichstrasse site) and one in downtown Stuttgart (the Stuttgart Bank Building). Mies produced his second cluster of unrealized works. Instead of presenting immense hand perspectives, he now spoke directly through large photocollages.[59] In these Mies still carefully hand draws his own structure, but gone entirely is any drawn expression of the surroundings. His representational city fabrics take advantage of the "special relationship to reality" that only photographic methodologies can offer.[60]

An irony underlies Mies's public deployment of the more technically 'modern' medium of photocollage for this cluster of 'skin study' projects. These four proposals prefigured the more blocky, prismatic massing strategies of his corporate American works and are widely regarded as being less experimental and less compelling in terms of form than the earlier 'five projects.'[61] Also, in comparison to the earlier group, this second cluster less fervently celebrates or exposes modern technology. Mies now drastically curtails the volumetric transparency of his glass skin renditions, hiding the underlying structural expression and its method of generating the mass (in contrast to, for example, the transparent exposure of tectonics in the Concrete Office Building). At the very same moment that his public representational mode decisively moves forward 100 years, his architectural conceptions — seen through some eyes — pull back from aggressive originality and embrace more 'conservative' strategies. One certainly cannot ascribe the arrival of a more heightened technical modernity in representation here to any new needs fostered by this architecture. Clearly a transformation had occurred in how Mies wanted his work *perceived* by juries and the public.[62]

Not only did Mies change the public voice for this second group, but also at the same time he reworked the imagery of a scheme from the previous 'five projects' group — transforming it into photocollage. In 1928, he recast his curvilinear Glass Skyscraper project of 1922, presenting the same structure now as realistically incised — like his new photomontage projects — into a ground-level photograph. No longer did it look like an obvious view of a maquette resting on a base. Gone are the surrounding plaster contextual pieces and borrowed background trees. I suspect (based upon the specifics of the photograph he used here) that this rework was his first step in proposing the Glass Skyscraper as his new entry for the second Friedrichstrasse Competition.[63] If so, he subsequently decided against pursuing this and generated a wholly new scheme — one that suggestively possesses the only predominantly curved massing of the four 'skin study' projects. In any event, such a representational recasting of an earlier idea suggests how decisively by 1928-29 Mies desired his speculative proposals to be seen through the medium of photocollage.

Mies's technical virtuosity in the assembled set of 1928/29 photocollages is unmatched. Particularly astounding is his effortless sliding of a rendered volume in his Alexanderplatz scheme behind an existing lamppost supporting a silhouetted ladder in the ground-level site photograph. A magnifying glass examination of the surviving negative gives no clue as to how he could have achieved this *tour de force*. Nearly as impressive is his retention of needle-thin streetcar electrical wands in front of his rendered building in one of his Stuttgart Bank photocollages. He preserves traffic bollards and a hanging street light in front of his Adam Building rendering. Mies's weaving of drawn and photo imagery is compellingly *believable*. Every line in his inserted volumes conforms precisely to the perspectival cant of the existing urban fabric. Today's digital media may make this into child's play, but eighty years ago the believability of Mies's efforts was a rare achievement.

Soon after he designed them, Mies photocollages of his 'skin study' proposals were being widely published and avidly debated in print.[64] Frustratingly, though, the heightened believability of his photocollage images did not persuade the bourgeoisie to grant him these commissions. His Alexanderplatz entry, in fact, placed last out of the six participants.[65] The importance of these schemes lay in the future. Mies's projects of this second cluster were crucial for his American aesthetic and for his equally skillful efforts with photocollage in Chicago. The four 'skin study' schemes were prominently featured in Johnson's 1947 monograph on Mies, three of them through their photocollages alone. Two photocollages, as well as a summary plan and a shot of a preliminary model represented the fourth scheme, for the Alexanderplatz. Thus was America introduced after the war to Mies's late-Weimar proclivities in large scale office block planning: largely through photocollage.[66]

PHOTOCOLLAGE VS. PHOTOMONTAGE

Precisely the *believability* of Mies's 'skin study' photocollages is what makes me call them collages, not montages. Mies's fastidiousness in weaving photographic context and drawn proposal to-

gether in these images (a careful warp and woof composed of the existing conditions and his futuristic proposals) distances his efforts from contemporaneous *Weimar-stimmung* developments.

Since its popularization at the beginning of the 20th-Century, the term 'montage' has often been applied to artworks (and of course films) that employ purposefully fragmentary and jarring compositional strategies challenging the very concept of artistic unity. For Matthew Teitelbaum, for example:

> *"Montage offers a kaleidoscopic expanded vision which, by collapsing many views into one, suggests an experience of unfolding time. In effect, montage replaces the image of a continuous life glimpsed through a window frame — the heritage of the fine arts since the Renaissance — with an image, or set of reassembled images, that reflect a fast-paced, multifaceted reality .. "*[67]

In the urban realm, this immediately calls to mind examples such as the atomized compression of the cityscape in Paul Citroën's *Metropolis* photomontages of 1923 or the colliding juxtapositions of old and new in Malevitch's photomontage *Project for a Suprematist Skyscraper for New York City* of 1926.[68]

Even more specifically, the term 'montage' began in the 1920's to acquire (and has increasingly continued to acquire today) a socio-politically negational cast. Montage, in these historical and contemporary views, creates the fractured character of the 'truly' avant-gardiste artwork, which seeks to critique and expose (in the Dadaist/ Marxian mode) the bourgeoisie's ideologically driven use of art as superstructure — the use of art to make a deceitful portrayal of life as 'holistic' in the modern metropolis of production. Peter Bürger's seminal 1974 study, *Theory of the Avant-Garde*, is the epitome of these precise, definitional analyses. Montage, for Bürger, is the *essential* avant-gardiste methodology, presupposing a "fragmentation of reality" whereby "the parts emancipate themselves from a superordinate whole." Bürger sharply differentiates "organic" (holistic, bourgeois) artworks from "nonorganic" (avant-gardiste, Marxian) images. He details how montage fosters overwhelming independence and autonomy among the parts. This aggregated appearance reveals the artwork itself to be an "artificial construct" suited to exposing the artificial character of the ideologically constructed society that it seeks to critique. Through montage the avant-garde artwork "breaks with the appearance of totality."[69] Following upon Walter Benjamin, Bürger links montage to allegorical practices — the casting together of melancholy, fragmentary "runes," which through their very basis in reality expose how fragmentary contemporary reality has become.[70] Bürger, like many before and after him, valorizes Weimar era Dadaist photomontages (particularly those of John Heartfield) as the apogee of this critical practice. As many authors have noted, for Weimar's socio-political artists like Heartfield, the "reality" inherent in photographic imagery was essential to their dissident goals. Photos, being inherently techno-mechanical, were subversively appropriate components in their attack on the technological modes of production. Further, photography's "special relationship to reality" allowed their works to move potently out into the class struggle of daily life, becoming

operative in ways that painting's language of abstraction never could.[71] Thus, in K. Michael Hays's words: "The medium of photomontage exactly suffices dada's destructive, negational task."[72] Not that all these well-meaning efforts got very far.[73] Paul Mann, in his scathing exposé on such avant-gardiste methods and the contemporary vaunting of them by critical theory, details how this kind of "strapped idealism of resistance" ultimately and ironically makes one realize that "every resistance is only further production."[74]

If views such as Bürger's summarize photomontage at its most precise in the Weimar era, then I am well justified in calling Mies's efforts in his 'skin study' projects photocollage, for they share none of these 'truly' avant-gardiste, socio-political pretenses or advanced visual effects. Again, similar to his Janus-faced renderings, Mies maintains a backward glance even as he steps forward into this more technologically modern medium. Far from allowing his inclusions to fragment the image, his photographic city views remain cohesive. No immediate "decipherment" need be made to allow entry into his images; Mies avoids the montagist's "conscious alteration of the obvious first sense of a photograph."[75] Readability — what Bürger would derisively dismiss as "a living picture of the totality"— remains absolute for Mies.[76] While Mies's architectural volumes unleash a stark abstraction into the city, this newness is represented within a context, not at the expense of a context. Toward that goal, Mies's representations carefully avoid collisions, distorted vantages, and fragmentation of the overall 'wholeness' of the image. These photocollages portray his projects not as melancholy critiques of the prevailing order but as viable possibilities within that order.

Admittedly everyone does not read Mies this way. K. Michael Hays, for example, interprets Mies's Alexanderplatz scheme precisely through the lens of Weimar avant-gardiste montage.[77] Hays suggests an analogy between a 1929 'truly' avant-gardiste image by Max Ernst and Mies's Alexanderplatz collage overview (and also extends this comparison to Mies's quite similar, decade-later overview of the IIT Campus).[78] Both Ernst and Mies, according to Hays, seek with their spliced constructions to create a "laconic display of two incommensurable experiences interlocked across the surface of the work."[79] Hay's use of the word "incommensurable" invites challenge. The word is appropriate to the Ernst image, where unity is indeed purposefully forestalled through Ernst's raw juxtaposition of alternate worlds. Ernst's washerwomen below and wrestling giants above remain wholly uninformed of the others' existence. This image reminds one of Theodor Adorno's Marxian definition of montage: "The principle of montage was supposed to shock people into realizing just how dubious any organic unity was."[80] Consistent with this goal, Ernst's "incommensurable" halves merely abut, their schism critiquing the very goal of unity in the modern bourgeois metropolis. But photocollage for Mies hardly serves this same goal. Believability, not schism, is his aim. While the repetitive and abstractly prismatic quality of Mies's blocks certainly brings something new to the metropolis — the "implacable silence" noted by Hays,[81] Mies, as detailed above, graphically mediates between this abstract quietude and the quotidian preexistence of the surrounding city. Bürger, following upon Adorno, would call such mediation

a "semblance of reconciliation" — a handshake with the bourgeoisie.[82]

Not only is such reconciliation operative in the realist cast of Mies's graphic technique, but — if one looks closely — echoes of reconciliation are found in Mies's actual urbanism in the 'skin study' proposals. It is hard to agree with Hays when he writes that Mies's Alexanderplatz scheme "is a radical critique . . . of the established spatial order of the city . . .," and adds that ". . . the relentless sameness of [Mies's] units and their undifferentiated order tends to deny the possibility of attaching significance to the placement or arrangement of the forms."[83] To say this we must ignore portions of Mies's scheme. True, Mies makes no streetwall urbanism, but his starkly blocky forms are placed with urban significance. It is not just that Mies's volumes leave uninterrupted the existing street patterns or tram lines, or that they always respect existing view corridors into and through the site. These qualities are also found in the contemporaneous Berlin projects of Ludwig Hilberseimer, which can with more justification be described (as Hays elsewhere does)[84] as negationally avant-gardiste critiques of the urban order. It is rather that Mies preserves — however faintly — preexisting hierarchical patterns of city space. For example, not only does the existing traffic circle survive its urban reconfiguration in Mies's Alexanderplatz scheme unhampered in any way, but Mies stops his militarily repetitive blocks short of it and pivots a higher block outward at 90 degrees to acknowledge the presence and importance of this central space. Further, he uses an absolutely symmetrical 'set piece' (composed of a major volume flanked by lower wings) to address and receive the major entry avenue into plaza from the direction of the old city's center. These are precisely the kinds of "formal operations" or "representational devices" which Hays feels are wholly lacking in Mies's scheme (and that indeed are wholly lacking in Hilberseimer's work).[85] These spatial 'reconciliations' may be somewhat begrudging gestures by Mies compared to the nearly beaux-arts, curvilinear reinforcement that other competition entrants gave to the Alexanderplatz's central urban space, but they are nonetheless gestures Mies did elect to make.[86]

Reconciliation is counter to the 'true' motives of avant-gardiste montage, either as graphical image or as architectural action in built space.[87] Earlier I mentioned how some Modernists like Melnikov subvert the 'literalism' of perspective by adopting a high view rather than a pedestrian view. The fact that Mies elected to make an 'overview' photocollage of the Alexanderplatz has, I think, a very different motive. Mies used the overview here specifically because it could best illustrate the way his scheme, while radical in some respects, broadly conformed to the existing urban hierarchy. Perhaps Mies was still smarting from comments about how he had ignored the urban context in the first Friedrichstrasse Competition. He wanted to stress his considerable efforts at urban reconciliation this time.

Similar subtle gestures of urban reconciliation exist in other of Mies's 'skin study' projects.[88] And after Mies immigrated to America, this type of gesture only strengthens. Reconciliation is abundantly present in the American photocollage by Mies (the IIT aerial view) that Hays also compares to Ernst's 'truly' avant-gardiste example.

In this IIT view, the total conformance to Chicago's preexisting rectangular street grid, the way the street axes pass through the campus, and especially the paired symmetrical blocks flanking the street vistas all weave his scheme to the existing urbanism. By later in Mies's American career these gestures of reconciliation will become a major emphasis of his work, as Seagram's axial alignment across Park Avenue with the New York Racquet Club amply shows. To a staunch aficionado of the 'true' role of the avant-garde, such flirtation with gestures toward "an organic whole" is an anathema, a sell-out to the metropolitan bourgeoisie's ideological/superstructural deceit.

RESISTANCE AND PHOTOGRAPHIC REALITY

While both Mies and the Dadaist/Constructivist practitioners of montage sought out photography's "special relationship to reality" and turned it to their own ends between the wars, those ends differed substantially. For Mies and the montagists, photography's enhanced mimetic potential offered immediacy, and thus potency. As Lissitzky remarked, "No kind of representation is as completely comprehensible to all people as photography."[89] Both Mies and the montagists employed photography's realism to *convince* the public, but differed in what they wished to convince the public of. For the montagists, the realism of the fragments within their compositions accusingly sought to rivet, by analogy, the public's attention upon the fragmentation of surrounding life — the distance still to be traveled between the contemporaneous metropolis and some (ever receding, Marxian) utopia. Mies had no utopian leanings. For Mies, photography's realism yielded enhanced believability instead of socio-political critique. Rather than focus upon the need to reconfigure society away from an irredeemably splintered (Capitalist) reality, Mies sought through collage to make his 'skin-study' proposals as believable as possible within the existing order. His modernist prisms were not utopist yearnings revealing and expanding the cracks within a shattered and flawed reality, but rather were a foreshadowing of the gradual process of transformation that confronts any reality, regardless of whatever socio-political system holds sway.

Viewed through this intent, Mies's embrace of photocollage in these four competition projects is only a furthering of the staunchly realist mode of his hand-rendered, perspectival images of earlier in the decade — images which already had sought to place his projects believably, even beseechingly, on site. Mies, for whom politics meant nothing, wished more than anything simply to build, for anyone, anywhere, anytime.[90] It is hard to feel that his embrace of photography's enhanced realism in the 'skin-study' proposals was anything other than a further attempt to persuade, despite the resistance his first cluster of technologically advanced, ideational projects had generated. If at the time of his canonical 'five projects' Mies had felt *Schinkelshule* realism might carry the day and grant him a signature commission, by the time of his 'skin-study' group he was ready instead to give photography a try. Perhaps he felt juries would more readily perceive his schemes as realizable facts, not fictions, if seen set amidst the visibly factual reality of the quotidian cityscape. Or perhaps he felt that portraying the existing city through photography's technological modernity would make the technological modernity of his works seem less jarring — more palatable.

Seen this way, both Mies and the Weimar montagists' uses of photography were spawned by resistance — Mies's beseechingly so as a response to a conservative society's skittish reaction to his work, and the montagists' accusingly so as a response to a society they wanted to expose and condemn. This reading assumes, of course, that Mies still remained fundamentally an optimist throughout late-Weimar times, in contrast to the Dadaists' incessant nihilism. There is another interpretation that should be weighed, though — one that would judge Mies's photocollages as culturally pessimistic. Perhaps he knew full well as he initiated his second cluster that such steel-and-glass high-rises would never stand a chance of realization in the context of late-Weimar. His shift to photocollage in this rationale would be a way of recording for posterity (through the most realistic and exacting of record-keeping methods) his progressive vision of what could have been — as part of 1920's bourgeois society, instead of in an utopian future. Even if so, this still leaves Mies distant from the montagists. The montagists rejected contemporaneous society through their works; Mies, if he indeed was acting pessimistically, made works that morosely recorded for posterity Weimar society's rejection of him. The flows of the resistance are asymmetric.

Of these two readings of Mies (optimist/pessimist), I suspect that optimism — even if in retrospect rather naïve — was what drove him. While several of the 'skin-study' projects were left schematic, his second Friedrichstrasse proposal was planned out to the last elevator bank, ready to commence construction documents if only his photocollage could persuade. He even sketched the furniture layouts.[91] After the Nazi seizure of power, and after articles with titles such as "Flat Roofs, Flat Heads" began to appear in building journals,[92] Mies still actively sought work through competitions (the Reichsbank of 1933, for example). He viewed his work as part of an ongoing dynamic of transformation independent of daily, or larger, societal vicissitudes. If success was not immediately forthcoming, then more exacting persuasion, not pessimism, was in order. America, ultimately, an ocean away, would prove his faith right.

Turning over even the most minute specifics within Mies's *oeuvre* — such as the conditions surrounding his Weimar use of photocollage — lays bare again and again his most quietly momentous theme: a willingness to be a part of culture's continuous flow. No matter how epochal the moment might seem, *Geschichte* tempers his grasps at radicalism. The conservatism of his *Schinkelshule* perspectives and the urban realism of his later photocollages are but two exposures of this quintessentially Miesian substrate. Kenneth Frampton, to cite another exposure, has unearthed and tracked a persistent blend of the retrospective and prospective in Mies's tectonic sensibility.[93] Colin Rowe notes yet another Miesian tensing of modernity with history when discussing how Mies's compositions "equilibrate both an outward pull and a centralizing moment."[94] These Janus-faced postures make Mies, that 'avant-gardiste bourgeois,' difficult to place in the sadly "polarized field" of discourse

frequented by recent critical theorists.[95] Mies's refusal to traffic in polarities is what will insure his continued significance (and lesson) once this strain of contemporary criticism abates.

NOTES:

[1]Quote from: Philip Johnson, *Mies van der Rohe* (New York: The Museum of Modern Art, 1978), pp. 21 & 34. For further remarks on the importance of the first group for Mies's career, see: Wolf Tegethoff, *Mies van der Rohe. The Villas and Country Houses* (New York: The Museum of Modern Art, 1985), pp. 15-18. For the importance of the second group, see: Franz Schulze, *Mies van der Rohe. A Critical Biography* (Chicago: The University of Chicago Press, 1985), pp. 146-147.

[2]My characterization of this second group as 'skin study' projects comes from: Frank Russell, ed., *Mies van der Rohe. European Works* (New York: Academy Editions, 1986), p. 46. The second Friedrichstrasse Competition project is, for unknown reasons, left out of this book, but obviously belongs with the other three 'skin study' projects.

[3]That this disparity of presentation method reads so strongly today could, of course, simply represent the accidents of survival. The majority of what remains for scholarly study of these two clusters are precisely their assembled 'public' imageries — their various presentation devices. Even so, the juxtaposition has merit since it is a comparison of apples with apples: the public face Mies presented in one phase with the public face of another.

[4]In the literature relating to 'cut-and-paste' photographic works in the Weimar era, a plethora of alternate names is used, for example: papier collé, *Klebebild. Fotoklebebild. Wirklichkeitsausschnitt.* photocollage, and photomontage. See Christopher Phillips, "Introduction," Matthew Teitelbaum, ed., *Montage and Modern Life. 1919-1942* (Cambridge: MIT Press, 1992), p. 26.

[5]Paul Mann, *The Theory-Death of the Avant-Garde* (Bloomington: Indiana University Press, 1991), p. 18.

[6]On Heartfield's political sensibilities, see: Peter Selz, "John Heartfield," *The Massachusetts Review* (IV:2, Winter, 1963); and Joanna Drew, ed., *John Heartfield. Photomontages* (London: The Arts Council of Great Britain, 1969), p. 11.

[7]It should be noted that Tegethoff has suggested that the Concrete and Brick Country Houses may have had Mies himself as a client [see: Wolf Tegethoff, "From Obscurity to Maturity: Mies van der Rohe's Breakthrough to Modernism," Franz Schulze, ed., *Mies van der Rohe. Critical Essays* (New York: The Museum of Modern Art, 1989), pp. 52-54]. Even so, the projects remain schematically theoretical.

[8]Most general studies about architectural representational methods merely note that Mies used photocollage. See: David Gebhard and Deborah Nevins, *200 Years of American Architectural Drawing* (New York: Watson-Guptill, 1977), p. 215; and Deborah Nevins and Robert A. M. Stern, *The Architect's Eye. American Architectural Drawings from 1799-1978* (New York: Pantheon Books, 1979), p. 148.

[9]The most thorough study to date of the *residential* photocollages is: Tegethoff, *Villas . . ..* op. cit. Interesting remarks on the role of photocollage in Mies's American career are found in: Joseph Masheck. *Building-Art. Modern Architecture Under Cultural Construction* (Cambridge: Cambridge University Press, 1993), pp. 101-105.

[10]This essay forms the first third of an ongoing, more comprehensive, career-length study of Mies's photocollages.

[11]Beatriz Colomina, "Mies Not," Detlef Mertins, ed., *The Presence of Mies* (New York: Princeton Architectural Press, 1994), p. 213.

[12]For a review of Le Corbusier's pervasive efforts to achieve publicity, see: Beatriz Colomina, *Privacy and Publicity. Modern Architecture and the Mass Media* (Cambridge: MIT Press, 1994).

[13]Mies also was active in Werkbund poster design. See: Fritz Neumeyer, *The Artless Word. Mies van der Rohe on the Building Art* (Cambridge: MIT Press, 1991), pp. 14-19.

[14]Such examples are a legion. Mies (or his photographic assistants) removed an awkwardly visible domed building in his most-published photo of the Glass Skyscraper project, and even eliminated the background trees on some prints [Tegethoff, "From Obscurity . . .." *op. cit..* p. 43]. In a view of the

Barcelona Pavilion, he edited a turret projecting above his roofline from an adjacent building [compare photos in: Johnson, *op. cit..* p. 69; and Ignasi de Solà-Morales, Cristian Cirici, and Fernando Ramos, *Mies van der Rohe. Barcelona Pavilion* (Barcelona: Gustavo Gilli, 1993), p. 21], and purportedly removed shadows from the row of classical columns in front of the Pavilion in another view [see: Jose Quetglas, "Fear of Glass: The Barcelona Pavilion," Joan Ockman, ed., *Revisions 2. Architecturereproduction* (New York: Princeton Architectural Press, 1988), p. 148]. In his National Theater project for Mannheim, he went as far as to remove the flyloft of his own building in some reproductions [for an example of this, see the exhibition photograph in: Werner Blaser, *Mies van der Rohe. Less is More* (New York: Waser Verlag Zürich, 1986), p. 111].

[15]Hans M. Wingler, *The Bauhaus* (Cambridge: MIT Press, 1969), p. 182; Howard Dearstyne, *Inside the Bauhaus* (New York: Rizzoli, 1986), p. 216-217; and Marty Bax, *Bauhaus Lecture Notes. 1930-1933* (Amsterdam: Architectura & Natura Press, 1991), p. 57. For numerous examples of Peterhans's own work and of his students' work, see: Katherine C. Ware, "Photography at the Bauhaus," Jeannine Fiedler and Peter Feierabend, ed., *Bauhaus* (Cologne: Könemann, 1999), pp. 520-531.

[16]Schulze, *Biography . . . . op. cit..* Frontispiece.

[17]One could fairly well convey the broad outlines of Mies's *oeuvre* using only photocollages. The only phase that would truly suffer in such a 'photocollage' version of his development would be his period of early 'Mark Brandenburg' style villas in Berlin and Potsdam. No photocollages exist of these half-dozen residential works.

[18]The one instance of a photomontage made between these two phases was from a virtually unknown project, discussed only once in the Miesian literature. In 1924, Mies executed a project for a 'Traffic Control Tower' in tandem with Heinrich Kosina. Given the collaborative nature of this commission, Mies's precise responsibility for the result cannot be known. A small bronze model was made of the tower, and photographed both in isolation and in a photocollage setting of the street intersection. For documentation, see: Russell, *op. cit..* pp. 17& 42.

[19]Schulze notes that this project shows that "Mies was employing collage more than a decade before his well-known use of the technique in the early 1920's." Schulze, *Biography . . .. op. cit..* p. 51.

[20]For a discussion of Schinkel's general influence upon this project, see: Schulze, *Biography . . .. op. cit..* p. 51. For commentary and illustrations of the Bismarck collages, see: Arthur Drexler, *An Illustrated Catalogue of the Mies van der Rohe Drawings in the Museum of Modern Art* (New York: Garland, 1986), vol. 1, pp. 2-5. These photocollages are virtually never reproduced in studies of Mies. Two rare instances would be: Francesco Dal Co, "Excellence: The Culture of Mies as seen in his Notes and Books," John Zukowsky, ed., *Mies Reconsidered* (New York: Rizzoli, 1986), p. 73; and Arthur Drexler, *Ludwig Mies van der Rohe* (New York: Braziller, 1960), p. 13.

[21]Arthur Drexler [Drexler, *An Illustrated . . .. op. cit..* vol. 1, p. 2] speculates that the reason some imagery of this project survived for later inclusion into the MOMA archive is that the extant drawings were not sent to the jury. If so, odds would be that the one extant photocollage (the one depicting the building nearby from the hillside) never was sent. The fact that it is incomplete reinforces this notion. In contrast the second photocollage (depicting the proposal distantly, from river level) was finished, no longer exists, and may likely have been submitted to the jury along with several other purely hand-drawn images of the project. The extant view measures 30" x 40" (mounted).

[22]Tegethoff notes that Mies's assistant Werner Graeff wrote: ". . . Mies preferred to have photos made that showed the anticipated site from various positions . . . [H]e ordered huge enlargements of them, of which those parts had to be left blank which he intended to draw by using the same perspective. Even in the photographs, many of his early projects were thus placed in their proper neighborhood." Tegethoff, "From Obscurity . . .." *op. cit..* pp. 44-45.

[23]For an illustration of this collage, see: Franz Schulze, *Mies van der Rohe: Interior Spaces* (Chicago: The Arts Club of Chicago, 1982), p. 39.

[24]Establishing an absolute number here is futile given the existence of many collages in which Mies likely played no role other than as an inspiration: Mies's assistants and students made dozens of collages paralleling his work, especially during his court house phase immediately after his emigration to America. The estimate of over 80 is based on a thorough review of the Miesian literature and the MOMA Archive.

25These five projects have been strongly linked in a group ever since Philip Johnson's valorization of them in the first published monograph on Mies in 1947 [Johnson, op. cit., pp. 22-34]. Perhaps because these projects remained unrealized they formed no part of Johnson and Hitchcock's 1932 MOMA exhibition and book on the International Style.

26David Spaeth makes a very different reading, writing of these projects that: "In their originality and sensitivity to line, texture and value, Mies's drawings are like the buildings they represent. No disparity exists between the idea of the building and the technique used to represent it." David Spaeth, Mies van der Rohe (New York: Rizzoli, 1985), p. 35.

27For the most comprehensive overview of Renaissance techniques in representation, see: Henry A. Millon, The Renaissance from Brunelleschi to Michelangelo. The Representation of Architecture (New York: Rizzoli, 1994).

28Tegethoff, Villas . . .. op. cit., p. 38.

29See, for example: Yve-Alain Bois, "Axonometry, or Lissitzky's Mathematical Paradigm," Jan Debbaut, ed., El Lissitzky. 1890-1941. Architect. Painter. Photographer. Typographer (Eindhoven: Municipal Van Abbemuseum, 1990), pp. 27-33. For illustrations of additional axonometrics used as process drawings, see: Selim O. Khan-Magomedov, Pioneers of Soviet Architecture (New York: Rizzoli, 1987), pp. 249 & 254. As regards Mies and axonometric projections, according to Ludwig Glaeser, axo's "were never regarded by Mies as adequate to represent his architecture." Ludwig Glaeser, Ludwig Mies van der Rohe. Drawings in the Collection of the Museum of Modern Art (New York: The Museum of Modern Art, 1969), Introduction, unpaginated.

30For examples, see: S. Frederick Starr, Melnikov. Solo Architect in a Mass Society (Princeton: Princeton University Press, 1978), pp. 76, 141 & 177.

31I use the word realist here in its most direct, representational sense — in the manner of: "to give a truthful, objective and impartial representation of the real world based on a meticulous observation of contemporary life" [Linda Nicholson, Realism (London: Penguin Books, 1971), p. 13]. For a discussion of Weimar perspectives on realism in general, see: Peter G. Rowe, Civic Realism (Cambridge: MIT Press, 1997), pp. 89-92.

32The Friedrichstrasse Rendering was 68-1/4 inches high by 48 inches wide; the Concrete Office Building Rendering, 54-1/2 by 113-3/4.

33Glaeser offers this explanation for these drawings' size, and discusses their exhibition history [Glaeser, op. cit., Introduction, unpaginated].

34No models survive from the 'five projects.' Two other models in addition to the model of the Glass Skyscraper existed. One was of the Concrete County House, known from two photographs showing the building factually in its entirety from a slightly elevated perspective. This model, like the Glass Skyscraper example, rests on a large base, clearly contextualizing it as regards to its relationship with the ground plane. There is little that is innovative about its treatment as a representation or about the method of photographing it. The other model that existed from the 'five projects' was of the Concrete Office Building. It is visible in a single photograph, showing a portion of the model while sitting in an exhibit adjacent to (and apparently built to the same scale as) the model of the Glass Skyscraper. Like the Glass Skyscraper model, this Concrete Office Building model contains transparent material — likely Plexiglas. Beyond this, there is no innovation in representation methods here. The large base of the Glass Skyscraper's model can be seen in this photograph overhanging the stand on which it sits. For a reproduction, see: Dietrich Neumann, "Three Early Projects by Mies van der Rohe," Perspecta 27 (New York: Rizzoli, 1992), p. 85.

35A rare exception here would be one photograph of the Glass Skyscraper model, published only on a single occasion, which does show the model from a more close-up, fragmentary perspective, which emphasizes its height. See: Neumeyer, op. cit., p. 4. Mies always wished to see his buildings in their context. As Tegethoff notes, Mies's assistant Werner Graeff wrote: "Mies made a point of having the adjacent structures . . . scaled down to the model and placed next to it for investigation and for shooting pictures. At the time, he had them molded by a sculptor from contemporary Berlin streets. His [Mies's] comment was as follows: 'I want to know what my buildings really look like on the vacant lot in question, however hideous their vicinity may be. Others usually indicate the surroundings in heavily adjusted shapes.'" [Tegethoff, "From Obscurity . . .." op. cit., pp. 44-45.]

36As shown by El Lissitzky's Proun Space installation of 1923 [Nancy J. Troy, The De Stijl Environment (Cambridge: MIT Press, 1983), p. 125]; or by numerous other photos of de Stijl models [Carsten-Peter Warncke, De Stijl. 1917-1931 (Cologne: Taschen, 1991), p. 163].

37For example, student exercises in serial modeling at VKhUTEMAS [Christina Lodder, Russian Constructivism (New Haven: Yale University Press, 1983), p. 129]; or Malevitch's operable model of his own house [Starr, op. cit., p. 120].

38For examples, see: Khan-Magomedov, op. cit., pp. 305 & 417; and Debbaut, op. cit., pp. 61 & 192.

39Tegethoff, Villas . . .. op. cit., p. 50.

40Drexler refers to the orthographic elevations of Friedrichstrasse as "surprisingly abstract" and "almost entirely unintelligible." Drexler, An Illustrated . . . . op. cit., vol. 1, p. 46. One should note, though, that substantial components of the surrounding context are shown in Mies's elevation of the Glass Skyscraper project. Also, in another elevation variant of Friedrichstrasse (one which has, perplexingly, different proportions as a mass) context is shown. This was published as the title page of G. no. 3 (June 1924) [for illustration, see: Neumeyer, op. cit., p. 16].

41Debbaut, op. cit., pp. 22, 130 &182.

42Comparisons with Schinkel are the strongest, even down to the level of how Mies composed particular perspective views. Schinkel loved to turn one face of a mass more broadly toward the viewer, and then have space plunge precipitously into the deep distance along the second, much more radically foreshortened face [see, for example, his plates Entwurf für ein Gebäude der Singacademie in Berlin and Perspectivische Ansicht der Seitenfacade des Neuen Schauspielhauses]. This is precisely Mies's approach in the Friedrichstrasse & Concrete Office Building renderings.

43Tegethoff, "From Obscurity . . .," op. cit., p. 38. Tegethoff's is the only substantial attempt to relate the materials Mies produced for this project. I doubt Tegethoff's assertion that the rough perspective drawing in the MOMA Archive represents Mies's initial attempt at the second required competition view in perspective. The photocollages indicate the two much more different views in rendered perspective that I suspect Mies intended to make (and only one of which now survives or was ever made).

44Though of course their exact size can never be known for sure, the size of the strokes Mies used to indicate his building in each suggests a similar scale. For illustrations of these two, side-by-side, see: Russell, op. cit., p. 38. The fact that these two collages are lost (when so much else of the final scheme and presentation survives) further suggests that they were preliminary and not intended as part of the final scheme.

45Both of these photocollages show an identical extra recession in the glass skin immediately before it reaches its sharp apex in several of the triangular corners of the site. I suspect that Mies at one point just before the project reached its conclusion considered including this recession on all three lobes of the building to increase the number of reflections and the sense of multiple facets. In the end it was retained only on one lobe and even then in a slightly different geometry than that shown in these two photocollages (it was much more blunted and obtuse in form). The largely triangular Friedrichstrasse site had one slightly broader though awkwardly truncated corner (pointing North toward the Spree and away from the Friedrichstrasse Station), and this is where a recession akin to that shown in these photocollages was indeed ultimately shown in the final plan. Ironically, Mies's final charcoal rendering shows the building from this (truncated) corner and does not include the recession at all. In any case, the 'extra' recessions indicate that these two photomontages were done at the same time in the design process and that the design progressed beyond them to some degree. It is doubtful that they were ever viewed as 'final' images. They were 'tests' made by Mies as he began to look forward and consider the form of the final presentation.

46An experimental overlapping on the computer at the same scale of this third photocollage and the final rendering has confirmed their precise correspondence (cornice angles and locations, balcony projections, and even the precise geometry of the domed tower atop the structure to the extreme right). The only true difference was one of necessity. Mies removed the indications of the Spree Bridge construction in the foreground, and represented the new bridge as it was to be after the urban reconfiguration.

47Whether this third photocollage could have literally been an underlay is doubtful given the thickness of the cream paper of the final rendering. "Pinpricks" would of course have been an option, but none are visible on the rendering. There is a strange dark 'clouding' over the photographic print that roughly conforms to the cropped area of the 'final' rendering. Perhaps this stain somehow resulted from a process of transfer.

[48] This, if true, would necessitate that Mies had a real site in mind for the Concrete Office Building. Otherwise, no existing site photographs would have been available for him to make a photocollage from. I similarly suspect that the variants of his Concrete Country House 'hand' rendering were also made by tracing off of, or transferring from, huge photographic prints of the model he made of that project.

[49] For comments in this regard, see: Tegethoff, "From Obscurity . . .," op. cit.. pp. 57-65. There were, of course, glimpses of Mies's 'five projects' in his built work of the mid-20's, as in the resemblance of his series of 'Brick Villas' to the Brick Country House. Yet these realized brick houses possess little of the de Stijl pin-wheeling form and open, eroding massing of that canonical model. They contain rooms of wholly conventional configuration. In contrast, his Memorial to Rosa Luxemburg and Karl Liebknecht ably reinterprets — though only in exterior configuration — the spatial promise of the Brick Country House. Mies's realized Weissenhofsiedlung housing block comes closest to the revolutionary aesthetic and technical promise of the "five projects," and begins to transcend the relative conservatism of, for example, his Municipal Housing Development on the Afrikanische Strasse.

[50] For a review of the many publications, see: David A. Spaeth, Ludwig Mies van der Rohe. An Annotated Bibliography and Chronology (New York: Garland, 1979), pp. 5-12.

[51] Ludwig Mies van der Rohe, "Mies Speaks. 'I Do Not Design Buildings. I Develop Buildings.'" Architectural Review (144: p. 451-452 December, 1968).

[52] Drexler, An Illustrated . . .. op. cit.. vol. 1, p. 46. As Schulze notes, "Most of the other 145 submissions proposed solutions in which a main tower was set back from flanking wings or stepped back from low-rise elements." See: Schulze, Biography . . .. op. cit.. p. 96.

[53] Max Berg, "Hochhäuser im Stadtbild," Wasmuths Monatshefte für Baukunst 6 (1921/22): 101-20.

[54] Katherine C. Ware, "Photography at the Bauhaus," Fiedler, op. cit.. p. 506; and Eleanor M. Hight, Moholy-Nagy: Photography and Film in Weimar Germany (Wellessley: Wellesley College Museum, 1985), p. 138.

[55] Katherine C. Ware, "Photography at the Bauhaus," Fiedler, op. cit.. p. 506.

[56] Dawn Ades, Photomontage (London: Thames and Hudson, 1986), p. 19.

[57] For an overview of the period with a focus on Schwitters, see: Dorothea Dietrich, The Collages of Kurt Schwitters. Tradition and Innovation (Cambridge: Cambridge University Press, 1993), pp. 20-46. For Hannah Höch's political leanings, see: Maria Makela, "By Design: The Early Work of Hannah Höch in Context," Maria Makela and Peter Boswell, organizers, The Photomontages of Hannah Höch (Minneapolis: Walker Art Center, 1996), p. 60.

[58] Neumeyer, op. cit.. p. 18.

[59] Again, though the originals are mostly lost, the stroking Mies used on these photocollages indicates huge size. The surviving example (mounted on wood) of his Stuttgart Bank Building measures nearly 3 x 4 1/2 feet [Zukowsky, op. cit.. p. 116]. Mies made a small, likely preliminary model of his Alexanderplatz proposal that was inaccurate in some of the massing indications compared with the final scheme [for illustration, see: Tilmann Buddensieg, Berlin 1900-1933. Architecture and Design (New York: The Cooper-Hewitt Museum, 1987), p. 75]. A model of the Stuttgart Bank scheme showing a proposal for some advertising on the facade was also made [see: Schulze, Biography . . .. op. cit.. p. 149]. While the improbability of survival must especially be taken into account with models, models still were clearly not Mies's main presentation mode in these four projects. The orthographics of these schemes also were totally perfunctory in character and barely describe the overall character of the schemes.

[60] Ades, op. cit.. p. 15.

[61] Schulze notes that the four works "are not among his most compelling or original efforts" [Schulze, Biography . . .. op. cit.. p. 146].

[62] One of the four 'skin study' competition projects — the Stuttgart Bank Building — apparently required all competitors to make contextual photocollages of their schemes, and provided negatives. Many photocollages by the hands of other architects (all of various sizes from the same negatives) that directly parallel Mies's representational efforts in this competition still exist. It could be claimed, then, that this requirement 'reacquainted' Mies with his earlier tries and then forced him to bring photocollage into the public realm, where the method then rapidly flourished for him. But we cannot be sure that the Stuttgart Bank Competition came first out of the four 'skin study' schemes

(more likely it was second). The requirement that everyone work in photocollage in such a competition does show, however, how prevalent the new medium was becoming in Weimar Germany by the late 20's. For examples from the competition, see: Zukowsky, op. cit.. pp. 114-116. The precise dating and order of these four 'skin study' competition projects has led to considerable confusion in the Miesian literature, and questions still remain [Schulze, Biography . . .. op. cit.. p. 147; and Arthur Drexler [?] Illustrated . . .. op. cit.. vol. 2, p. 212]. Mies was in written contact with the clients of the Adam Building by early July of 1928, though this of course does not establish that the photocollage of that project was in process by then [Schulze, Biography . . .. op. cit.. p. 147]. The Stuttgart Bank and Office Building Competition ran from late August to December of 1928 [Zukowsky, op. cit.. p. 114]. The Alexanderplatz Competition was apparently launched in February of 1929 [Vittorio Magnago Lampugnani, "Modernism and the Metropolis: Plans for Central Berlin 1910-41," Josef Paul Kleihues and Christina Rathgeber, eds., Berlin-New York. Like and Unlike (New York: Rizzoli, 1993), p. 258]. Mies's project, however, was published in February of 1929 in Das Neue Berlin 4 (1929), p. 41; and Ludwig Hilberseimer was already vigorously defending Mies's completed project even earlier in 1929 in Das Neue Berlin 2 (1929), pp. 39-41. Both these publications suggest that the competition was initiated earlier. The second Friedrichstrasse Competition dates from 1929 [Drexler, An Illustrated . . .. op. cit.. vol. 2, p. 540].

[63] The original site for the Glass Skyscraper project of 1922, the precise property profiles of which are visible in Mies's tentatively drafted plans, has been a matter of speculation for years [see: Tegethoff, Villas . . .. op. cit.. p. 17, note #9; Schulze, Biography . . .. op. cit.. p. 100]. It was likely in Berlin, though attempts to locate an actual site configuration matching these profiles have so far been unsuccessful [Tegethoff, "From Obscurity. . . ," op. cit.. p. 44]. Some assume it to have been an imaginary site [Russell, op. cit.. p. 40], yet the specificity and constancy of the drafted site profiles throughout the several sketch plans make this unlikely. The site for the first version of the curvilinear project, if indeed real, was clearly not the Friedrichstrasse site since the profiles that Mies shows bear no relation to that actual competition's site. Tentatively, I suggest that the 1928 rework of the Glass Skyscraper project relocated the proposal, through photomontage, on the Friedrichstrasse site instead of its original site. This argument rests on specific contextual conditions faintly visible in the exceedingly grainy photomontage of 1928. Visible in the clearest recent reproduction of this later image [Mertins, op. cit.. p. 57] is a large horizontally striated mass passing behind the skyscraper which is highly reminiscent of the low, multi-roofed volume of the Friedrichstrasse train station. The raised train-bridge of the existing station crossing over the street to the extreme left-hand side of the image is also visible. Further, the low, apparently rounded volume standing in front of the skyscraper (crowned with the advertising sign "Haller Revue") likely is a portion of the amusement park that occupied the Friedrichstrasse site at the time of the competition, which possessed several volumes of this type at its front corner [for an aerial photograph of the site, see: Tegethoff, "From Obscurity. . . ," op. cit.. p. 38]. The foreground of Mies's 1928 image also suggests a bridge, a feature consistent with the Friedrichstrasse site when seen from this side. All this is not to suggest that Mies originally, in 1922, intended the Glass Skyscraper project for the Friedrichstrasse site; rather I suspect he simply appropriated one of that competition's remaining photos for use in this reworking. By 1929, of course, he was busily engaged once again on the Friedrichstrasse site in preparing his second competition project. Since the rationale for the 1928 dating of the rework of the Glass Skyscraper project is not stated explicitly anywhere in the Miesian literature [for example, see: Sandra Honey, "Mies in Germany," Russell, op. cit.. p. 22], its accuracy is unknown. Perhaps this rework actually represents Mies's first thoughts on the second competition for the Friedrichstrasse site, which would require re-dating the rework to 1929.

[64] See, for example: Ludwig Hilberseimer, "Eine Würdigung des Projektes Mies van der Rohe für die Umbauung des Alexanderplatzes," Das Neue Berlin (Vol. 2: pp. 39-41, 1929); Wilhelm Lotz, "Wettbewerb für ein Bürohaus am Hindenburgplatz in Stuttgart," Die Form (Vol. 6: pp. 151-153, March 15th, 1929); and "Mies van der Rohe: Wettbewerbsentwurf für ein Verwaltungsgebäude in Stuttgart," Das Kunstblatt (Vol. 13: pp. 190-191, June 1929).

[65] Schulze, Biography . . .. op. cit.. p. 148.

[66]For the 1933 Reichsbank Competition, a contest begun after the Nazis had come to power, Mies did not make any photocollages, but instead used hand perspectives again. These, too, were also prominently featured in Johnson's book.

[67]Matthew Teitelbaum, "Preface," Teitelbaum, *op. cit.,* p. 8.

[68]Illustrations in: Ades, *op. cit.,* pp. 98 & 104.

[69]Peter Bürger, *Theory of the Avant-Garde,* Michael Shaw, trans. (Minneapolis: University of Minnesota Press, 1984), pp. 73-81. While Bürger, differing from Adorno, rightly points out that montage was used by art movements without express political intent (by the Italian Futurists, for example), the overall character of Bürger's emphasis on the avant-garde's attack on art "as an institution" makes Bürger's fundamentally political understanding of montage stridently apparent. Paul Mann critiques this claim for montage's ability to project an image of society's chaos by ironically noting that: "The collocation of fragments produces a coherent picture of fragmentation." Art's own aesthetic mediation specifically undercuts the montagists' basic goal. Mann, *op. cit.,* p. 105.

[70]Bürger, *op. cit.,* pp. 68-69.

[71]Ades, *op. cit.,* pp. 13-15.

[72]K. Michael Hays, *Modernism and the Posthumanist Subject. The Architecture of Hannes Meyer and Ludwig Hilberseimer* (Cambridge: MIT Press, 1992), p. 170. For Hays's views on Bürger, see: pp. 122-124.

[73]Even amongst the montagists (especially in the Soviet Union), an ongoing debate constantly erupted about whether montage effects (i.e.: fragmentation) or realism (i.e.: non-fragmentation as seen as a means of achieving direct communication with the general public) would best accomplish their goals [Margarita Tupitsyn, "From the Politics of Montage to the Montage of Politics, Soviet Practice 1919 Through 1937," Teitelbaum, *op. cit.,* pp. 83-127].

[74]Mann, *op. cit.,* p. 19. For a further critique of Bürger's approach, see: Jeffrey Weiss, *The Popular Culture of Modern Art. Picasso. Duchamp. and Avant-Gardism* (New Haven: Yale University Press, 1994), p. xvi.

[75]Christopher Phillips, "Introduction," Matthew Teitelbaum, *op. cit.,* p. 28.

[76]Peter Bürger, *op. cit.,* p. 70.

[77]K. Michael Hays, "Critical Architecture, Between Culture and Form," *Perspecta 21*(Cambridge: MIT Press, 1984), p. 26.

[78]For further comments by Hays on Weimar photomontage, see: K. Michael Hays, "Photomontage and Its Audiences, Berlin circa 1922," *Harvard Architecture Review 6* (1987), pp. 18-31. For a critique of Hays's work on photocollage, see: Christian Hubert, "In Response to Michael Hays: Pre-Scripts for Post-Moderns?," Ockman, *op. cit.,* pp. 217-222.

[79]Hays, "Critical . . .," *op. cit.,* p. 26.

[80]Theodor Adorno, *Aesthetic Theory,* trans. C. Lenhart, (London: Routledge, 1984), p. 223.

[81]Hays notes: "Mies's achievement was to open up a clearing of implacable silence in the chaos of the nervous metropolis." Hays, "Critical . . .," *op. cit.* p. 22.

[82]Bürger, *op. cit.,* p. 78.

[83]Hays immediately adds: "But the repudiation [by Mies] of a priori formal logic as the primary locus of meaning is precisely what is at issue . . ." [Hays, "Critical . . .," *op. cit.,* pp. 21-22]. Several years later, Hays seems to retreat from this view of Mies's late-Weimar works, reserving these views only for Mies's 'five projects' skyscraper works of the early 20's, where these views have (in my opinion) greater applicability [see: Hays, *Modernism . . . , op. cit.,* note #9, p. 315].

[84]Hays. *Modernism . . . . op. cit.,* pp. 172-178.

[85]Hays, "Critical . . .," *op. cit.,* p. 21. Hilberseimer's 'Friedrichstadt District' proposal of 1928 lets the historical pattern of street access and views permeate the project (as did Mies at the Alexanderplatz), but wholly ignores any aspects of the urban spatial hierarchy. For example, the raw, extruded ends of Hilberseimer's unrelentingly and mechanistically repetitive blocks come up against Berlin's major avenue, Unter den Linden, as if it were a mere side street. The scheme runs past the side of one of the city's major cultural plazas, the Gendarmenmarkt, ignoring all its axes. This is truly, in Richard Pommer's words, "destructive of the mesh of the city" [for illustration and commentary, see: Richard Pommer, "'More a Necropolis than a Metropolis,' Ludwig Hilberseimer's Highrise City and Modern City Planning," Richard Pommer, David Spaeth, and Kevin Harrington, *In the Shadow of Mies: Ludwig Hilberseimer. Architect. Educator. and Urban Planner* (Chicago: The Art Institute of Chicago, 1988), p. 37]. This attitude of Hilberseimer's is distinct from Mies's.

[86]For a selection of other examples from the competition, see: Kleihues, *op. cit.,* p. 259; and Pommer. *op. cit.,* p 36.

[87]Hays himself makes this point (using the word "conciliation") in his criticism of El Lissitzky's montages. See: Hays, "Photomontage and . . .," *op. cit.,* pp. 25-29.

[88]For example, in his Adam Proposal, Mies raises a portion of the mass one level at the street corner of the site. While hardly a round turret, this has no other purpose than as a mediating gesture to the conventional typology of handling street corners in dense urban settings. See: Drexler, *An Illustrated . . .. op. cit.,* vol. 1, p. XXIV. Also in his Adam Proposal, Mies carefully brackets his round-cornered glass volume at the site's two partywall conditions through the use of setbacks and wing walls. This is a conventional approach to bringing an object-like mass onto a tight city site. See: Drexler, *An Illustrated . . .. op. cit.,* vol. 1, p. 213. This prefigures Mies's use of reentrant volumes and lower masses at the rear of Seagram to 'situate' his object-like form (with its four identical corners) adjacent to the lower buildings behind it. Mies's second Friedrichstrasse Project's curving, triangular form obviously derives from an act of 'idealizing' the general site configuration — hardly a gesture of urban negation.

[89]Quoted in Ades, *op. cit.,* p. 63.

[90]For Mies's persistent flirtations with the Nazis, see: Elaine S. Hochman, *Architects of Fortune. Mies van der Rohe and the Third Reich* (New York: Weidenfeld and Nicholson, 1989).

[91]Drexler, *An Illustrated . . .. op. cit.,* vol. 2, pp. 540-551.

[92]Barbara Miller Lane, *Architecture and Politics in Germany. 1918-1945* (Cambridge: Harvard University Press, 1968), p. 135.

[93]Kenneth Frampton, "Modernism and Tradition in the Work of Mies van der Rohe, 1920-1968," Zukowsky, *op. cit.,* pp. 35-53.

[94]Colin Rowe, "Neo-'Classicism' and Modern Architecture II," *The Mathematics of the Ideal Villa and Other Essays* (Cambridge: MIT Press, 1976), p. 150.

[95]Mann. *op. cit.,* p. 18.