THE INVENTED EYE LOOKS AT ARCHITECTURE

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by Ashish Hazra Bachelor of Architecture, Centre for Environmental Planning and Technology, Ahmedabad, India Submitted in partial fulfillment of the requirements for the degree of Master of Science in Architecture Studies at the MASSACHUSETTS INSTITUTE OF TECHNOLOGY June, 1988 © Ashish Hazra 1988 The author hereby grants to M.I.T. the permission to reproduce and distribute publicly copies of this thesis document in whole or in part Signature of Author:_____ Ashish Hazra 13 May, 1988 Department of Architecture Certified by :_____ William Porter Thesis Supervisor, Professor of Architecture

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LOOKS AT ARCHITECTURE
by Ashish Hazra
Submitted to the
Department of Architecture
on May 13, 1988
in partial fulfillment
of the requirement of the
Degree of Master of Science in
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ABSTRACT

Architecture and photography are two aspects of our shared visual culture. The influence exerted by photography on architecture is in a large part due to the power insisting upon "actuality" of what has to be seen in the image. Architectural image expresses the "external" (appearance) but only by its implication it conveys the "internal" (spatial aspects). Photographs then beyond their role as documents and like other works of arts are interpretive.

With that as a strong belief, the inquiry looks at images as an "expression" which is linked to the "ideas and issues" of the creative activity of its time. The most eventful phase of that creative activity was the turn of the century-the 1920s. The architectural images presumed a way of seeing that often went beyond the real experience of the building itself. By examining the images of that period, one explores a dominant aesthetic tradition, its meaning and how it is transmitted by a photographic style, which corresponds to the various dimensions of the contemporary thoughts of the time. The images are seen as an effect of the changes in both society and technology.

With that as a background the inquiry reflects into a awareness of architecture by means of photographic transcription.

Thesis Supervisor: William Porter Title: Professor of Architecture

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PREFACE

During the last few years it has become increasingly apparent, that, inspite of the vast use of photography there has not been a corresponding acknowledgement and inquiry into its transcription. My concerns have been further reinforced by provocative questions raised in some of the recent writings relating to the medium as to why, how and what an image represents. Photography has permeated virtually every aspect of the twentieth century culture. This has caused individuals from various disciplines to analyse a vast, often, confusing medium that, despite its comparative recent invention, is inextricably linked with the phenomena of contemporary life.

For me, a personal response and appreciation of photographs was necessary for an understanding which came with a sense of possibilities within the medium. Assisting Prof. Nishan Bichajian with architectural photography, made me intimately appreciate the utility of the medium and the enjoyment of looking at the larger world. And with that experience I began discussing with my colleagues. Many of my friends listened patiently to my ideas and views; Prof. William Porter was the first to hear of it; Prof. Stan Anderson, Prof. Ann Wagner, Prof Julian Beinart, Prof. David Freedman and Prof Clive Dilnot posed queries that have led me to significant understanding. Snehanshu, Valeria, Aida, Biresh, Solly, Floris, Ahmereen, Paula, Shraddha and Vishnu gave all encompassing support at every phase of the study. However none of these ideas were pursued with any discipline until Prof. Porter responded to my wandering but persistent queries and helped me to given them a semblance of order. Purnima and Eswaran were of great help in bringing a consistency to my writings and thoughts. Kazuo came up with some incredible help at the last moment that I just can't forget. And finally my parents who gave me encouragement to keep up with the belief in a concern.

I thank them all.

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INTRODUCTION

"The images gathered here should above all entertain, which is the only sure way of understanding,"

wrote Man Ray at the beginning of his book 'Object of Affection'. Architects are all accustomed to leafing through pages of photographs with the goal of understanding architecture. This path of viewing and developing an awareness of architecture by photographs is the theme of the study. In certain ways we are approaching what Andre Malraux anticipated in 'la psychologie de l'Art', in 1947, when he hypothesized the coming of a generation that would look at art and architecture mainly, if not solely through photographic reproduction. In this evolution of the relationship between photography and architecture, we have arrived, perhaps at a moment of reflection, to reconsider what is really involved in the awareness of architecture by means of its photographic transcription. The immediate questions that come to my mind are:

What is a photograph?
What does a photograph mean?
How can a photograph be used?

Such questions, have, in fact, been asked since the invention of camera (1839), and remain unanswered even today.

Photographs as documentation of architecture are a valuable source of knowledge and like other works of art are interpretive. Architectural photography is the closest means to describe a building appearance and because of this an enormous discipline has grown up around its use. Often, one's ideas and reactions come not from the actual building, but from a photograph of it. Sometimes the photograph will shape, reinforce or even negate images, which one has constructed from his/her own direct impression of architecture. At other times, the photograph is the sole visual communicator of architecture - all one knows is what the photograph tells. In the process, the photograph makes a profound impact on the knowledge and opinions concerning the building and the implications of visual experience. The influence of photography on architecture is in large part due to the ability of the photograph to insist upon the actuality of what is to be seen in the image. While it is almost impossible to qualify how this occurs and to what degree, the fact that it occurs is perhaps worth keeping in mind when determining the purpose and the effect of photography.

My intention is to show that even in a photographic image, a single meaning cannot simply be identified with the subject. Rather the meanings of the image arise out of the ways in which the subject is actually presented. An image can express the "external" but only by its implications can it convey the "internal" or the spatial aspects. It must, inevitably, be confined to expressing three dimensions on a two dimensional surface.

As G.K. Chesterton remarked,

"Art is a limitation; the essence of every picture is the frame"

Thus the premise of this inquiry is to acknowledge the role of the photographer, to look at architecture through his/her eye, and to examine ways in which an image is constructed. It is often through these images that our own ideas are formed.

While undertaking such a study one also realizes the limitations of photography for architectural recording, as well as the important difference between the two media, architecture and photography as disciplines of form making. An architectural photograph with its restricted vision cannot record what a building is really like because it cannot convey the effect of being there. It can, however, help one to feel the experience of being there. It creates the illusion of reality as opposed to creating reality itself.

This study advances three ideas. First, alternative ways of depicting buildings are apparent; one stresses the "factual" component of the picture, and the other, their "experiential" content, both being expressive devices. Second, photographers consciously capitalize on the significant relationship between two or more subjects in order to make an "representative" or "abstract" statement about that relationship. Third, photographers "transforms" a subject, to a new meaning, to be read or interpreted by the viewer.

These ways of showing a subject allow photographers to inflect their statements which can become an index of the style of the individual or the generation. This study is undertaken with an understanding that modern photography, as "artistic" expression, reveals its important connections to the vast reservoir of "ideas" at the heart of creative activity of its time. And the most eventful phase of that creative activity was the turn of the 20th century-the 1920s, when the "idea of the new" with its utopian visions laid the basis for a massive movement that was to follow in all forms of visual arts including photography. During this time, photography achieved a new communicative value, both, politically and economically, through the growing cultural needs of society.

My inquiry is limited to "an image of architecture" that set up a dialogue with its contemporary times. The study shows how photography, an evolving "medium of representation", with its own design, provided a culturally relevant ingredient in consolidating the "language" of Modernism. The photographic image presumed a "way of seeing" in order to read and perhaps to use, architecture, that often, went beyond the real experience of the building itself. In the 1920s photographers were identified by what they showed in their picture, capturing what had never been taken before as their contemporaries, the International Style architects. This relationship with modern architecture was a major artistic act which became an index of style of the 1920s.

By reproduction in specialized and general periodicals, innovative photographs served as a conduit for the dissemination of not only the new concept of space and time, but also personal responses such as memories and social injustice. It is in this context that the works of this era got energized by a sense of connection to the "spirit of time".

While each photographer had his/her particular pursuits, the real miracle was that a common language - shared by the professionals and amateurs alike asserted itself, as if the event itself had generated the talent and inspired the eye which recorded them.

Studying these images made with this "new vision" by dozens of free-spirited photographers, we can put together in our mind a kind of "montage" of life and thought of the time. In discussing issues that seem to be central to photography of the 1920s, one has to see it in the light of twentieth century art as well. As a result, it seems clear that one of the best ways to understand the theory and happenings behind both the modern movement in architecture and the pioneering efforts in avant-garde photography is to investigate the aesthetic and the critical intellectual issues of the period. The purpose of the study is to discuss these issues within the context of the chosen images with a strong belief that the visual arts could be associated with social change.

Looking at these images one must realize that the viewer approaches them today from a far greater distance, altered by time and the current technical modes of representation. These photographs conjure up events which are part of an already distant history, yet one which is still haunting us today. For this reason, we cannot approach them dispassionately, instead, we must look at them "objectively" while giving them free rein of our unconfessed "subjective" responses. In the outcome they may as well be works of art, but to take this as the starting point would be to misunderstand them completely, for it runs entirely counter to the motives which inspired the photographs.

To quote Kurt Tucholsky,

"Because an image says more than a thousands words, every propagandist knows the value of a tendencious photograph from advertising to political posters. A photograph if properly chosen, punches, boxes, whistles, grips the heart, and conveys the one and only new truth".

By analyzing the photography of 1920s, this study intends to show how styles in architectural photography have changed with changing notions of the photographer's role in depiction. This changed with the expectation of the viewer, while architectural styles changed.

The study is divided into three sections:

Section I looks at the social and technical aspects of a *style*. What was this "idea of the new", which lead to an "objective" approach by all artists, creating a new objectivity in photography as well new direction in architecture. It explores a dominant aesthetic tradition of modernism, its meaning and how it is transmitted by a style, which corresponds to the various dimensions of the contemporary thoughts of the time.

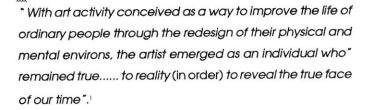
Section II examines the *nature* of an image in relation to the photographer, the subject and the viewer. It looks into the "process" of transcription of a building and sees how closely it comes to the "visual experience" it purports to reproduce.

Section III is the *outcome* of the first two sections, in which the "photographic image" is understood in terms of the presumed background of the society during the 1920s. The image is seen as an "effect" of the changes in both society and technology in relation to other visual arts. The explanations are based on several factors, from the increasing influence of the photographer, to "themes" from the existing artistic modes of the times, and how the use of the medium reflects that concern.

SECTION 1

1.1

THE NEW REALISM TECHNOLOGY AND UTOPIA





Each moment in history has its own form of "artistic expression", one that reflects the political climate, the intellectual concerns and the taste of the period. "Taste" is not an inexplicable whim. It is the product of well-defined conditions that characterize the social structure at each stage of its evolution. The first two decades of the 20th century witnessed both political and intellectual revolutions that very much changed the civilization in Europe. Most of the theoretical roots were laid in the 1920s, marking many fundamental changes and, thus, a diversion from the conventions of the time. Freud's 'Die Traumdeutung' appeared in 1899. Einstein's 'Theory of Relativity' had been formulated by 1905. Picasso and Braque were investigating the first stage of 'Cubism' during the same decade, and by 1917, World War I and the social upheavals which followed in its wake dramatically affected both politics and the economic structure of the entire subcontinent (Fig. 1).

¹ Gustav Hartlaub quoted in Peter Selz," The Artist as Social Critic," German Realization of the Twenties, Minneapolis, Minn., 1980, p. 32.

Freud altered humanity's understanding of the subconscious mind; Einstein changed the concept of universe,² Cubism was one of the most important artistic revolution since the Renaissance³ (Fig. 2); and the World War I, in that it represented not only a rearrangement of political boundaries, but the decline of the leadership of the aristocracy and the end of European hegemony, marked both the end of an old era and the beginning of a new one.⁴

For a generation that matured during the 1920s, the taste possessed a metaphysical dimension (Fig.3). It put a complete end to the aspirations of the past. At least 20 million Europeans had died for principles that could no longer be believed. All the "big words" were lost. Yet although Europe was in ruins, many survivors of the war were optimistic about the future. The present and the immediate future were searched for ideas. That which was new or had a veneer for newness became, for psychological reasons, very much in vogue. The world was to be made over, made new and made perfect. A violent distortion of the society caused by the conflict between the "ideas" and the "new technology" in the 19th century would be ended.

"The grave dissociation of the past and the present is the generic fact of our time and any remains of the traditional spirit has evaporated. We have to solve our problems without any active collaboration of the past." ⁵





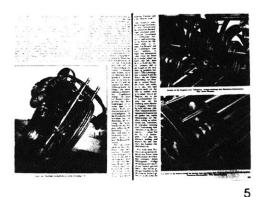
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² For a clear discussion of the ideas of both Einstein and Freud and the impact on modern society, see Barra Clough, An Introduction to Contemporary History, Baltimore, 1968, pp. 233-68.

³ John Goldring, A History and Analysis 1907-1914, New York, 1959, p. 15. Robert Rosenblum, Cubism and Twentieth Century Art, New York, p. 9.

⁴ Fritz Stern, The Failure of Illiberalism, New York, 1972, p. 120.

⁵ Jose Ortega y Gasset, The Revolt of the Masses, London, 1932, pp. 39-40



The world of visuals, together with all aspects of the world of science and technology, were called into service as a means creating a new order for a torn society (Fig.4). At the root of this approach was the hope of arriving at some understanding of the composition of this world, which would be reconstructed in such a fashion as to produce an art that was not only pure and permanent but also one that was in no way dependent on history or tradition. It implied a post historical age -"The Modern" - which was to modify mankind and create a new order.

The technological achievements since the Industrial revolution, and the democratization that accompanied those achievements, had eliminated traditional patronage of arts and removed the artists from the society. Many of the "avant garde" looked to technology as a means of breaking the confines of the tradition in art, and the machine began to be approached as a force of liberation from such confines. This attitude gave rise to experimentation in a wide range of artistic endeavors. Objects, mass produced items, and the elements that had been gleaned from mass media publications were all enthusiastically accepted into the realm of art (Fig 5). It called for designers, who would give form to buildings, industrial productions and mass communication through their control of form, thereby literally remaking the world.

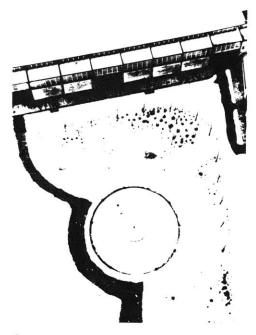
⁶ The term Avant-garde implies a cohesive group of artists who have strong commitment to iconoclastic aesthetic values and who reject both popular culture and middle class life.

With the birth of "Dada", in Zurich in 1916, Tristan Tzara had expressed the philosophy of the movement when he proclaimed that,

"there is a great negative work of destruction to be accomplished." 8

The influences exerted by Dadaism should be mentioned here. The social conditions of the time are reflected in this trend; not the possibility of the new scientific discoveries, of which man could justifiably have been proud, but rather the in describable horror of the war. Among those who were associated with Constructivism^o - the Constructivist in Russia and the De-Stijl group in Holland were oriented toward reconstruction. The Dadaist had provided the "tabula rasa" on which the new visual could grow, and the artist of the International Constructivists met the challenge with a vision that was unabashedly optimistic(Fig 6). It was a break that was irrevocable, not only in regard to the culture in general, but in regard to the tradition of the visual arts. This attitude was based primarily on the intention of freeing art from the confines of the existing structure, so that it could be recovered on a higher and nearly perfect level. In 1921, Moholy-Nagy demanded on the part of avant-garde artists,

"the regeneration of art because it is the art that is the expression of the forces of an epoch and which therefore must be the expression of our own time." ¹⁰



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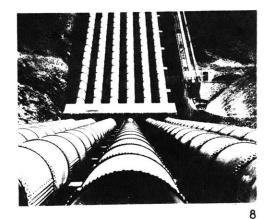
⁷ A group of artists whose work attacked the institution of art itself on the grounds that modernist art, as a result of its preoccupation with formal aesthetic issues, had ceases to comment on its social environment.

⁸ Tristan Tzara, "Manifeste Dada 1918 in Sept Manifestes DadaParis, 1924; translated by Ralph Mannheim as the "Dada Manifesto 1918" in The Dada Painters and Poets, ed Robert Motherwell, New York, 1951, p. 81.

⁹ Stephan Bann, The Tradition of Constructivism, New York, 1947, pp. 32-33. The term "International Constructivism" is one used by him to refer to both De Stijl movement in Holland and the Constructivist movement in Russia.

¹⁰ Laszlo Moholy-Nagy, Autruf zur Elementaren Kunst, 1921.

This break with the tradition that was an important part of the art and architecture of the postwar period gave rise to a series of experimentation in a wide range of fields, and the avant-garde consistently introduced new media and new material in their work.



"In all the arts there is a physical component which can no longer be considered or treated as it used to be, which cannot remain unaffected by our modern knowledge and power. For the last twenty years neither matter nor space nor time has been what it was from time immemorial. We expect great innovations to transform the entire technique of the arts, thereby affecting artistic inventions itself and perhaps even bringing about an amazing change in our very notion of art" 11 (Fig 7).



There was this search for art that would be free from the oppression of history and tradition. The "new art" could not spring from the decadent past. It had to be built out of the raw material of the present age. Discoveries would lead to hypothesis about perceptual phenomena which would eventually give rise to theory of form that would integrate arts, science and revolutionize design (Fig 8).

The goal was the creation of a metaphysical basis for the form - a search for the new "Gestaltung." The dream of a universal form was finally to be realized in both social and political terms, through a wholesale onslaught against the customary. This required a cultural struggle for the determinate structure of experiences, feelings, and the character of human actions.......the fixed forms of daily routines (Fig 9).

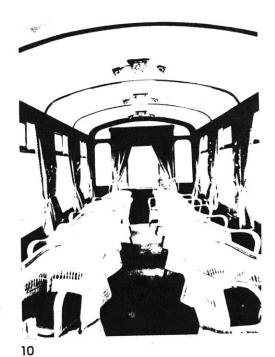
¹¹ Paul Valery, Aesthetics, The Conquest of Ubiquity, translated by Ralph Manheim, New York, Pantheon Books, Bolligen Series, p. 225.

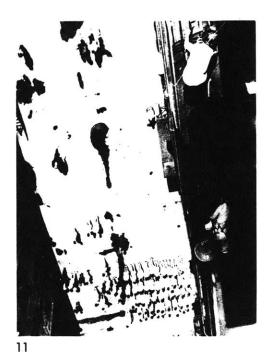
¹² This was a concept which meant going "beyond the significance of shaping, forming and thinking," a word that in its fullest philosophical meaning expresses the the prexisting form.

In each activity the designer would give form to unspecific facts, metaphors and meanings through their media's unique vocabulary and transmit the result to a universal audience. This commitment to an "objective" approach to both design and life arose out of a determination to serve only "collective" necessity of which Meyer wrote,

"The standardization of our requirement is shown by: the bowler hat, bobbed hair, the tango, jazz, the co-op product, the DIN standard size, etc......trade unions, co-operative, Ltd, Inc., cartel, trust, and the League of Nations are the forms in which today's social conglomerations find expression, and the radio and the rotary press are their media of communication. Co-operation rules the world. The community rules the individual". 13 (Fig 10)

This search required first a wholehearted abandonment of all preconception and a conscious intention of learning from all things, particularly things generated by the present technology and not the past. In 'The German Ideology', Marx explores the ways in which man rethinks his ideas concerning human nature, how to picture consciousness as "an ensemble of social relations" rather than as an historically given "essence", and how to relate this picture to the rest of the material life. This led to radically new ideas concerning the ways in which "representations" of the world may shape consciousness and, perhaps, change it (Fig 11).







These complex attitudes constituted a powerful methodology for probing the possibilities of the "newness", that would free man from his pride and past. Besides, a realization of the post-historical absolute in which art, society and technology would be intregated to form a "new era".

Thus for the new artist, the visible world no longer existed as the model of reality. It forced the artist and particularly the photographer to reevaluate their medium and its relationship to the world around them. (Fig 12) It forced the photographer to develop an aesthetic that was both unique to photography and congruent to modern art.

SECTION 1

1.2

THE NEW OBJECTIVITY

IN PHOTOGRAPHY



"Photography is a reflection of the problem that exists between the inventions of technology and the limitation and the aspirations of man. In a photograph there is the the evidence of how we see ourselves and how we would like to be seen". \textsuperior \textsuperior

With the "idea of the new" engendering fundamental changes in the creation and the use of visual arts, photography gave new opportunities for the artists. With a passionate belief in the "new realism", many felt that photography, itself a child of scientific and technological process, was a natural medium of expression of the industrial world. Responding to the greater economic opportunities in the medium and involved in the intense intellectual, political and cultural ferments that followed the First World War, many photographers became specifically conscious of the effect of new forces - technology - urbanization - cinema and the graphic arts on the "expressions" generated by the camera (Fig 13).

The photographic medium now matched the photographer's creative demands. The medium began to function creatively in Germany and Russia in a variety of new areas such as advertising, marketing, and the popular press, areas inherently attuned to the new manufacturing and distributing system that had evolved (Fig 14). The photographers who devoted themselves to the "new objectivity" concentrated in their images on the sharpness of the section of the reality; thus they could also emphasize the interesting variety of everyday thing, which went unnoticed in the hustle and bustle of modern living. This fast pace of life fostered new approaches to photography as a "language" (Fig 15). A new relationship to reality was apparent in photography, which was stimulated by the acceptance of the technical possibilities of the medium. Photography did not merely chronicle the new age. New forms of representationwas to be found which could call into question the ways in which we view the world, on the grounds that subject - matter should not be abstracted from those of formal significance Walter Benjamin's celebrated description of Brecht"s claim that,

"less than at any time does a simple reproduction of reality tell us anything about the reality".2

Therefore something had actually to be constructed, something artificial set up. This predisposition to experiment with "new", especially if it was a machine, articulated a mass response to intrigue a whole range of visual intellect, leading to a surge of creativity.

MAKING HUMAN JUNK

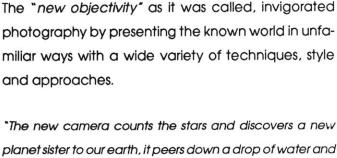


SHALL INDUSTRY BE ALLOWED TO PUT
THIS COST ON SOCIETY?

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"The new camera counts the stars and discovers a new planet sister to our earth, it peers down a drop of water and discovers microcosms. The camera searches out the texture of the flower petals and moth wings as well as surface of concrete. It has things to reveal about the curve of a girls cheek and the internal structure of the steel." (Fig 16)

The photographers returned to an acknowledgement of the specific and the ungeneralized character of their subject and at the same time retaining some of the artistic goals of the prewar period. But now the "experimental" quality of the image was often tempered by the "new objectivity" and by an emphasis on the "formal" traits of the subject. The possibilities and the boundaries of this new vision lay in the broad spectrum of all grades of highlights This photographic "truth" became a provocative argument at the time of the 'Neue Sachlichkeit'.4. Thus, photography was widely understood as having a revelatory function; human motivation could be studied by means of pictures and hence society could be understood better (Fig 17). This was the view of Walter Benjamin in 1931. He refers to photography as disclosing,



"the optical unconscious, just as psychoanalysis discloses the instinctual unconscious" ⁵

³ Egmont Arens quoted in W.G. Briggs, The Camera in Advertising and Industry, London, 1939, p 5

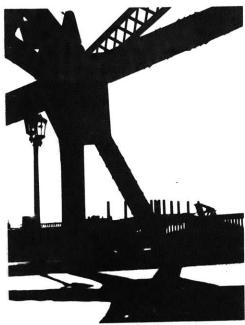
⁴ See Wilhelm Kastner, Photographie der Gegenwart, Essen, in Photographische Rundschau, Heft 5, 1929, pp. 93-94

⁵ Walter Benjamin, A Short History of Photographs, 1931

For those who were seriously committed to the potentials of photography as a creative art, the fundamental stumbling block seemed to be the mediums uncompromising specificity. If allowed to follow the natural bent, the camera described not man but men, not nature but countless and precise biological facts. This tendency was not in harmony with the "spirit of the time", which preferred an "idealized" view. The photographers adopted a style that was more disinterested and analytical; disinterested in that, though they presented their subjects as specific ones, feelings associated with particular places or times of the day played no roles in their picture; analytical in the sense that in these images they often showed forms as functional or as abiding by a desirable geometry (Fig 18).

Thus photography grew out of a heightened awareness of the aesthetic possibilities of geometric forms, either those related to the machine or to new architecture (Fig 19). The new photography avoided totalities and confined itself to details. Mainstream photography turned the strategies of "defamiliarization" into a style, a new pictorialism, consisting largely of subject-matter and camera techniques, dissolving into the general modernist need for constant stylistic innovation (Fig 20).

In all its manifestations, the "new objectivity" was hostile to all that was customary, that is, to all fixed forms of habits and taste, that was somehow intimately related to the physical act of seeing. It took as its 'sine qua non' a series of dualistic oppositions reality / illusions, consciousness / unconsciousness, freedom / oppression-which summed up-the grand metaphor of the "new objectivity".



18







The new vision was thus a revelation of what the unaided eye could not see but which has always existed. In addition the 'isms' of the prewar avant-garde, especially Cubism, the aesthetic concepts associated with Constructivism, Dadism, and Surrealism inspired a climate of experimentation, with photomontage, photogram, non-objective forms, unusual angles and extreme closeups, that marked the photographic "expression of the era".

By developing "pictorial forms", the photographer sought to raise his medium to the level of general experience of the modern city dweller. One aspect of the new approach was the substitution of the vertical for the horizontal perspectives. In common with other visual artists, photographers also took note of 'Freudian and other related theories' of psyche and of the part that image might play in the social and political struggle of the time. "Reflections" now offered them a means to explore the expressive possibilities of industrially produced refractive surfaces (Fig 21). "Distorted reflections" provided a device that might serve to mimic the formal experiments of the Cubist painters as well as to express disturbing personal or social realities (Fig 22). Photographers, especially influenced by Surrealism, sought to express intuitive perception through "found" symbols as well as "accidental" reflections. Perhaps the most striking characteristic is the predominance of the unconventional vantage points. Coburn observed,

"photographers need to throw off the shackles of the conventional expression, fresh point of view, unhackneyed themes, geometry and sharp definition is required". 8

⁶ A composite image made by joining together portions(or all) of more than one photograph to synthesize an image not found in reality. The term was first used by the German Dadaists in the early 1920s

A photographic image made without a camera by placing objects on a sensitized surface-paper or film-that is exposed to a moving or stationary source.of light, or simply by directing light onto the material.

⁸ Alvin Lanngdon Coburn," The Future of Pictorial Photgraphy," Photograms of the Year, 12, 1916

Another hallmark of the new vision was the "closeup", to call attention to patterns, texture and structure that might pass unnoticed with emphasis on the material surface and abstract structures (Fig 23). Reflecting the advances of the "times", for the photographer the close-up was regarded as one of the means for the "objective presentation of the fact" (Fig 24). Thus photography came to be seen as the realization of the general artistic ideals of objectivity and detachment. The possibilities and boundaries of photography lay in a broad spectrum of all grades of highlights and shadows, lines, planes and spaces. To achieve the living and formal creation of these phenomena, the photographer had natural and artificial light, optics, negative and printing material, processing chemicals, his eyes and his own photographic taste. These means opened up for him numerous stylistic possibilities - within the limits of technology. The use of a machine to lay down lines and the reliance on the natural laws of refraction and chemical change to create a picture are viewed as a decisive difference leading critic Andre Bazin to proclaim,

"...... the essential factor in the transition from the Baroque to photography is not the perfecting of a physical process......rather does it lie in a psychological fact, to wit, in completely satisfying our appetite for illusion by a mechanical reproduction in the making of which man plays no part. The solution is not to be found in the result achieved but in the way of achieving it."

Having looked at the "new objectivity" which invigorated the medium of photography, the next step would be to look at an equally emerging medium of architecture.





SECTION I

1.3

A QUEST FOR FORM

IN MODERN ARCHITECTURE



Modern architecture was the first intellectual and practical medium, to demonstrate that a "new era" had risen. From that era, ironically, modern architecture derived its origin and development. It sprang from the scientific and industrial development, aiming to meet the requirements of collective development of the society, which arose with the consciousness of new discoveries in all fields. Architecture was seen as a coordination, balance, unity, and the synthesis of all the aspects of a building (Fig 25). This conception of a new collective life, the vision of the architect as a "worker" in the design process, among other workers evolved from the very structure of the contemporary society. The task of the modern architect was almost staggering. New economic, social and structural problems, in addition to the problem of design had to be achieved on a collective basis.

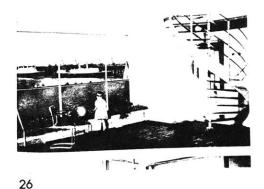
Gropius, speaking of the relation between design and industry, did not give an architectural explanation, but only tried to point out that,

"modern architecture, consciously recognizing, reflecting, and expressing this characteristic of the new era had a historical necessity".

Rather than borrowing or imitating in order to elicit a fresh rationale, Gropius promoted the conception of an integrated future for architecture and art. He stressed the importance of merging economic and the aesthetic needs in a single unit and the desirability of building to represent an efficient harmony of the structure and design; self contained with a life of its own (Fig 26). This commitment to an objective approach to both building and life arose out of a determination to serve only the collective necessity of which Martin Stam writes,

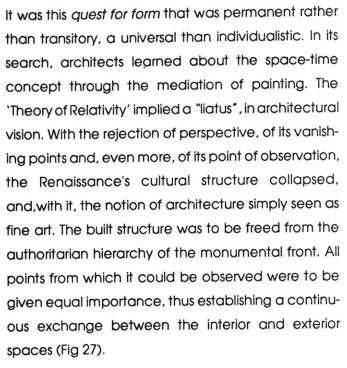
"The dualistic view of life - heaven and earth, good and the evil - the idea that there is an external inner conflict, has thrown the emphasis on the individual and drawn him away from the society...The individual"s isolation has led him to be dominated by his emotions. But the modern outlook......sees life as the single reaching out of a single force. This means that what is special and individual must also yield to what is common to all."

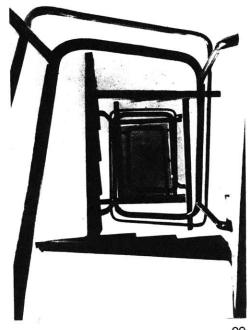
For the architect of the period, the search for the form demanded, particularly, that the phenomenon of the visual world be studied, and then be reduced to its component elements.











In creating such a language, the architects focused on the problem itself, the salient aspects of their architectural "thoughts". Their conception of "form" was translated through the problems of "compositions" into meaningful images that were made up of discrete elements encompassing the new visual language devised expressively for the purpose (Fig 28). Space and mass were conceived as the "basic" language of an "ordered" architectural form. A new morphology and syntax were developed to facilitate the rational organization of the new form. The aim of this new language was to articulate the expressive qualities of both the form itself and its encompassing spatial environment in a way that is visually lucid and perceptually clear.

The concept of a free and dynamic space that evolved was stimulated by the psychological investigations into the phenomena of space "per sec" by the objects in their spatial relationships to each other and to the observer (Fig 29.)

"Our relation to space finds in architecture its direct expression. Architecture arouses in us not merely the idea of possibility of movement, but a definite feeling of space; instead of having to orient ourself, as we often do when confronted with nature, we are saved in that effort by having before us a space that has already been definitely articulated, space itself, in the sense, of actual form, is converted into a visual impression." (Fig 30)

The concern for developing and approaching an expressive language of architecture emphasized the "formal" aspects of the problem, with an accompanying concern for the social value of architecture as well. That concern was rooted in the conviction that this new language of architecture had provided the basis for establishing a new standard of vision and the spatial cognition by which man could orient himself to his immediate environment. This new evolving form had to be propagandized both in terms of availability and the quality of information (Fig 31). The medium of photography with its innovative photographs provided a culturally relevant ingredient in consolidating the new form of architecture.

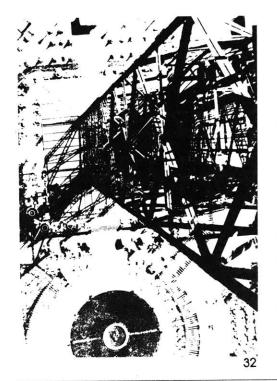




SECTION I

1.4

A SYMBIOTIC RELATIONSHIP MODERN ARCHITECTURE AND PHOTOGRAPHY



"The two fields in which the spirit of our age has achieved its most definite manifestations are photography and architecture. Did modern photography beget modern architecture, or the converse? It is an interesting point. But since their logical development was simultaneous, and their interaction considerable, it hardly matters much.......... Without modern photography modern architecture could never have been put across. In the early 19th century an architectural photograph was unimaginatively true to "life" and the conventional perspective as any other sort of photography . Men with cultural equipment walked around buildings at a respectful distance like police men on the beat flashing the lantern on the impeccably obvious. But the new sort of architects had their buildings taken by the new sort of photographers. A revolution in the technique of architectural photography resulted, which has revolutionized architectural criticism.

Photography, "a new and vital medium of expression", typical of the day introduced new attitudes towards an simultaneously emerging modern architecture. This relationship was stimulated by the acceptance of the technological possibilities of the time (Fig 32).

As "modes of representation" with their own designs, the two media achieved new communicative values The "new vision" quickly evolved into a definable stylistic approach which caused a radical change both in the availability and the quality of the information of the buildings. It was applied not only to the new architecture, but the theoretical reappraisal that had been introduced by the new architectural principles. The images of the buildings during this time came to adore hard lines that moved in and out of the picture surface (Fig 33). Upward and downward views of familiar buildings revealed patterns and forms unseen by the casual eye (Fig 34). They came to use architecture not for itself, but as a means of making images about ambiance or texture or form (Fig 35). The subject was there and what the photographer elected to do with it, was their accomplishment and reflected their "style". They came to be identified by what they showed in their picture, capturing what had never been taken before much as their contempories, the International Style architects were doing with their buildings. The creators of our skyscrapers had no precedents, and the photographer needed to create a new expression to vitalize these innovations in architecture (Fig 36).

This connection between the new architecture and photography was varied and complex. In 1927, Ranger-Patzsch and Moholy-Nagy published their views of the new photography in the first issue of 'Deutsches Lichtbild', a photgraphic journal.











While Moholy was primarily interested in photography as a means of extending visual knowledge particularly through experimentation, Patzsch, in contrast, advocated the virtues of direct and unmodified representation. The two attitudes though markedly different, are in fact compatible because both photographers were formalists with primary concern for the structure.

That modern architecture and photography share a number of characteristics substantiates the "synthetic view" of the new objectivity. The medium of architecture is not material, but light and space. The connection is particularly close when one considers the way architectural forms are generated and the graphic process the architect is engaged with envisaging planes in space. This was precisely the view point of the formalist photographer of the 1920s.

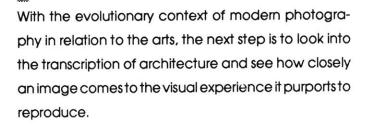
"Through photography, too, we can participate in new expression of space, and in even greater measure through films. With their help, and that of new school of architects we have attained an enlargement and sublimation of our appreciation of space........Thanks to the photographer, humanity has acquired power of perceiving the surroundings, and its very existence, with new eyes. In photography we must learn to seek, not the "picture", not the aesthetic of the tradition but the ideal instrument of expression, the self sufficient vehicle of education". ²

SECTION II

2.1

PERCEPTION

AND ARCHITECTURAL IMAGE



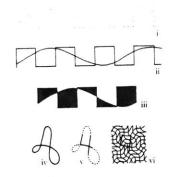
Percepts are formed and tested in everyday encounters for various purposes. We use an image to create, qualify, and modify our understanding of architecture. This cycle of perception and thinking is what brings about a change in the building. Precepts and concepts turn as one, spinning the fabric of experience, looking constantly ahead as well as backwards. This process of understanding visual phenomena characterizes both the experience of the architecture and new experiences (Fig 37).

"Both are ways of "seeing as" or seeing metaphorically in order to understand and communicate."

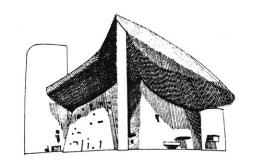


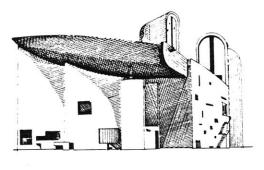
The "Early Gestalt psychologists" describes a method for exploring the mind's response to sensation by focusing on "part" as a means of understanding the "whole" (Fig 38). The physical, biological and the psychological responses to the stimuli are integrated in such a way that the parts of the structure cannot be isolated without affecting the configuration of the whole. This method provided a rational basis for the common roots of a visual language of the 1920s and described a way of experiencing the new architecture. This "object duality" in visual perception is characterized by the psychologist, J.J Gibson² as both "literal" and "schematic". Literal perception is one's direct sensory response to the pattern in the image which is made up of visual elements such as texture, motion, depth, and so on (Fig 39). These phenomena are primarily perceived mainly through feeling or instinct. Schematic perception, in contrast, depends on previous knowledge and describes the meaning or the representative content of the pattern, relying on experience for perceptual understanding. Schematic perception, because of its dependence on previous experience, has a tendency to discourage perceptual abstraction and to reduce the sense of immediate feeling. For the photographer in 1920s, the visual phenomena and technique were two different means of expressing the literal nature of the image.

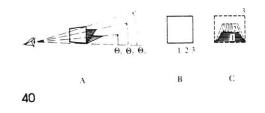
So manipulating these phenomenon was considered to be the most effective way to inspire insight (Fig 40). Images as a means of shaping patterns, highlighted the literal aspects of the perceptual response.



3

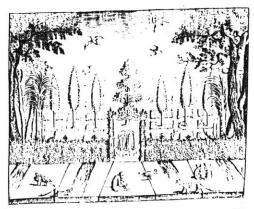






² J.J. Gibson, The Senses Considered as Perceptual System, Boston : Houghton Clifflin, 1966.

³ Visual Phenomena may be considered the 'fact' in the organization of the material that illuminate the visual effect of the image.







The two dimensional image offered multiple readings within a limited context where abstraction was relatively easy, encouraging the interplay between schematic and literal interpretation. The representative image of the building and the literal pattern of the picture often simultaneously revealed the intended perceptual experience. It was the literal content of the image, in the placement and patterns of marks, that carried, either consciously, or unconsciously, the perceptual and the emotive content of the building. The desire was to strip the building of individual differences of technique and makes it's expressive impact more accessible to the viewer 5 (Fig 41). The image defined and articulated the surface of a building, suggesting, in its action, the possibilities beyond the facade, while giving dimension to the content as a whole.

⁵ The garden of Eden is an idealized dream. The device of shifting from perspective space outside to the narrative frontal space inside supports the ideal image of the garden within / Garden of Eden, as illustrated in L'Adamo of Andreini, Milan, 1617.

SECTION II

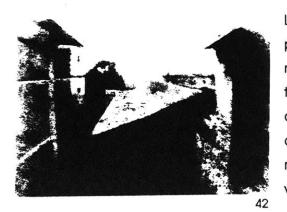
2.2

THE NATURE

OF AN ARCHITECTURAL IMAGE

Having looked at the perceptual qualities of an image, the next step is to look at what constitutes "an architectural image". In 1839, the editor of a photography magazine, Lewis Gaylord Clark enthused on the daguerreotypes¹ which he had seen in Paris (Fig.42).

"Mark the minute light and shade; the perfect clearness of every object....The shade of a shadow is frequently reflected in the river...The very trees are taken with the shimmering created by the breeze-a segment of time has been allowed to trace its movement across the surface of a photograph, enough for us to bear witness to the energy and flux of life."²



Looking back at the reaction to the invention of photography, one finds an immediate response to a new way of "picturing" the world. This can offer insight to the "nature" of an image. Temporarily abandoning our understanding of what a photographic image conveys to us, and accepting that it may involve more than what appears on the surface, let us explore what an image might be capable of conveying.

¹ The first practical photographic process, in which an image is formed on copper plate. Following exposure the latent image is developed resulting in a unique image on metal that cannot be used as a negative for replication.

² New York Monthly Magazine, December. 1839

Looking at a photograph, one first sees its outer covering, a shell that offers an immediate aesthetic gratification. Then, searching further, one finds detail, the particulars of which mark not only its deeper significance, but are also subject to one's perceptual sophistication. Thus, a photograph works not on several levels but uniquely to each persons interpretation. and to reach the "core" one must ask more of an image than might be discerned at first glance (Fig 43).

Central to this interpretation is the image. It is an appearance or a set of appearances, which has been detached from place and time. Every image embodies "a way of seeing", which is patterned perception; it organizes and structures the sight that makes the image readable. The sight is always perceived relative to two senses: the image contains an internal relation and the image is always simultaneously read both in relation to a viewer and in relation to the context of production.

The viewer enters into a dialogue with the image before him/her, and discovers, argues, formulates ideas from his/her experience. In general, he/she operates and often struggles to come to terms with the tension aroused (Fig 44).

"Realistic representation.......depends not upon imitations or illusions or information but upon inculcation. Almost any picture may represent almost anything; that is,a given picture is usually a system of represtation, a plan of correlation, under which the picture represents the object."





³ Nelson Goodman, Language of Art & Approach to a Theory of Symbols, New York, 1968, p. 68.

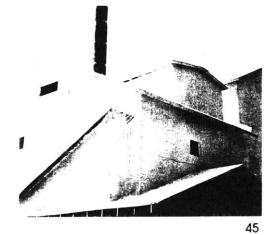
To any viewer looking at the building for instance, the shapes are delivered entirely by the physical object. In a photograph, the shapes are selected partially transformed, and treated by the photographer and his/her camera (Fig 45). Thus, in order to make sense of photographs, one must look at them as encounters between "physical reality" and the "creative mind of a man" - not simply as a reflection of that reality in the mind, but as middle ground on which the two formative powers, man and the building, meet as equal antagonists and partners, each contributing their particular resources. We look at photographic images not as invented by man but as replicas of things and actions that existed somewhere in time and space.

The conviction that images are generated by a camera and not made by hand profoundly influences one's ways of viewing and using them. This point has been stressed by the film critic, Andre Brazin. He suggests that the essence of photography,

"is not to be found in the result achieved but in the way of achieving it".4

Siegfried Kracauer, who based his 'Theory of Film' on the observation that the photographic image,

"is a product of the cooperation between physical reality as it impresses its own optical image on the film and the picture maker"s ability to select, shape, and organize the raw material"



⁴ Andre Brazin, "The Ontology of the Photobraphic Image," in What is Cinema ?, Berkeley, Univ. of California Press, 1967.

⁵ Siegfried Kracauer, Theory of Film, New York, Oxford Univ. Press, 1960.

While a photograph is being composed and later, viewed a clear relationship develops in an interaction between the subject, the photographer and viewer. This relationship is central to the process of communication underlying the process of transcribing the image, is discussed in the next section.

SECTION II

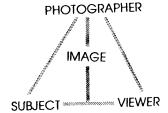
2.3

THE RELATIONSHIP

PHOTOGRAPHER-SUBJECT-VIEWER

The threefway relationship in photography involves the following: the subject (architecture), the medium (photography), and the viewer (interpretation). While the primary concern of photographer is evident in an architectural image, it is not possible to ignore its purpose defined by the expository link between the subject and the viewer. Its success can only be judged by how well it fulfills this link (Fig 46).

The primary role of the photographer is to communicate, To do this he/she must first understand the subject is and the statement it represents. He/she has to interpret through his/her camera a substitute for experiencing the building visually. His/her primary concern is to obtain an impression for the viewer that will be significant. This is, however, the photographer's point of view. When he/she makes a visual statement in relation to a point of view, the emphasis is not placed on the photographic image, but on the aspect of the image photographed.



Before photographing, what, how and why are the primary questions that he/she asks. In turn, these form the basis for the viewer's consideration of a image. The photographer extracts, selectively, a rectangle from the complex structures of the building. The nature of the statement, therefore, will be a reflection of the view of the building which the viewer is capable of responding to. Accordingly, the photographer must be able to perceive, articulate, and extend his/her own capabilities as a maker of such statements. If he/she understands creative expression to be a generative process, his/her attention must be directed toward perception which extends or challenges that which he/she already knows.

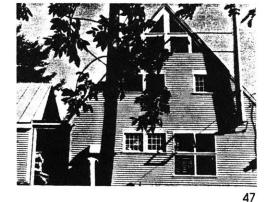
The purpose of photographing a building then is not simply to record. Rather the images act like a treatise, clarifying and elucidating not only the physical facts of a building but its less material truth as well. To capture volume is an essential attribute of a successful architectural image. Volume, in this context, is an understanding of the space of a building, and the solidity of its materials.

The photographer must give a sense of the mass of the subject portrayed and the essence of what it is like to move in and around a building. For the viewer, careful consideration of the image should make it possible to understand of what it is to like to stand in that particular space. The experience should be analogous to being in the presence of the building itself.

An architectural image is dependent on the above threeway relationship. The key attributes of the relationship can be elaborated in terms of the subject, detail, frame, time and the vantage point.

Subject

Central to architectural image is the subject itself (Fig 47). The photographer has the advantage of dealing with the actual situation and his/her task is to transmit that actuality through his/her own perception and devices. By way of perception, he/she learns that architecture is an "art" of incomparable inventiveness. To recognize it, to anticipate it, to clarify it and to selectively consign an aspect of it to permanence requires acute and supple intelligence. Included is the realization that the "factuality" of his/her image no matter how convincing is different from the subject (building) itself.



Detail

The photographer is tied to the "fact" of the building, and it is his/her problem to convey these facts to the viewer. By isolating a fragment of a building he/she claims for it a special significance, a discovered meaning (Fig 48). This involves a skill reflecting very personal and individual perceptions. As a result, the photographer looks for unique detail to record the characteristics and creates a new awareness. It is a result of a conscious act of the photographer to imbue a detail with a universal meaning. The fragment he/she selects is symbolic of the "whole"-the building.



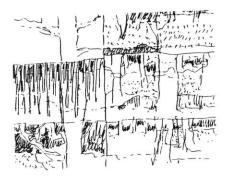
Frame

Individual parts of an image are never conceived but "selected". The selection involves examining the way that framing is used. A building poses a specific challenge to converting the physical three-dimensional reality into a two-dimensional frame. Architecture, cannot be wholly self-contained. The edges of the film demarcate what the photographer thinks is important but the frame extends beyond (Fig 49). The photographer's central act central of choosing and eliminating forces a concentration on the picture edge - the lines that demarcate the "included aspects" and the shape that is created by it. Meaning can also be conveyed by that which is not included The image edge defines the "content". By enclosing the architectural subject, within its frame, the image creates a relationship between the individual parts of the image.



Time

An image captures a "discrete" moment of time. A photograph preserves a moment of a time by isolating the appearance of a building. A photograph can only acquire meaning insofar as the viewer can read into "time" extending beyond the moment. A photographer, chooses an instant which persuades the viewer to lend it an appropriate past, present and future (Fig 50).



Vantage point

The photographer chooses a specific point of view for different reasons. Basically, a photographer cannot move a building but he can move his/her camera. To see the building clearly he/she shoots from above, or below, or from a close angle or far angle or from behind, often inverting the order of the building. Vantage point involves selection-to reinforce or to mitigate the photographer"s perception of the subject. As such the selection of the "vantage" point can give clarity or obscure the viewer's ability to see from the "unfamiliar" vantage points above or below eye level (Fig 51).

While the relationship between the subject, the photographer and the viewer has changed over time, the outcome of this relationship shows more interesting nuances in the representation of reality. The discussion on the outcome of the process is presented next.



SECTION III
3.1

OUTCOME

A RECAPITULATION

The lack of a sophisticated methodology for analyzing photographic intent has inhibited critics and historians in their search for photographic expression of the cultural values. As Carl F. Schorshe notes,

"The weaker the social consciousness of it"s creator, the greater need for specialized internal analysis on the part of the social - historical interpreter."

A photographer chooses and constructs images in a context which forces the viewer to reread and review the characteristics of a space. We stand before three important elements which characterize the specificity and potential of photographic transcription. In this transcription, the three critical elements are:

The first element is the voyage of the viewer to a particular point in space and time. Secondl is the choice of the various qualities chosen by the photographer in the creation of the image where certain relationships are established between the various elements of the image. Finally, and perhaps most important is the redefinition of the context created by the image.

¹ Carl F. Schorshe, Fin-de Siede Vienna, New York, 1981, Vintage Books, p.21.

I will focus on these elements not only because they pertain to the creative task, but also, because they help to explain the transformation of our approach architecture. The relationship between the frame and what is inside that frame provides the beginning of a possible verbalization of the image - the outcome.

The images presented here forces one to think about their implications, for they represent the internal as well as external lives in 1920s. The power of these images cannot be realized without turning to the intimate history that lies behind them. This "formalist era" idea evolved in response to the newly emerging technical and conceptual innovations taking place in the 1920s. Together these needs brought photography into consonance with modernism's "historical" imperatives. I would like to emphasize photography's seriousness as a medium of aesthetic expression, especially in relation to the other, less mechanical visual arts. Through "exploration" I shall try to understand and present photography's tremendous capabilities.

The images included here are arranged in two sections -expression and abstraction. This arrangement is designed to illustrate a critical thesis which may offer a simple perspective on the bewildering range of technical, aesthetic, functional, and political philosophies that characterize photography's colloquium of 1920s.

It must be emphasized that the distinction proposed here between a direct representation -expression and indirect abstraction - exploration modes of artistic response, is not intended as a method of dividing photography into two discrete elements. On the contrary, it suggests a continuum of two elements simultaneously coexisting in the image, a single axis with two poles.

The message incorporated in a single photograph can often be multifaceted. The co-existence of the different tendencies in a single work asserts that photography in the 1920s like any other artistic mode of its time, was not a "closed" system.

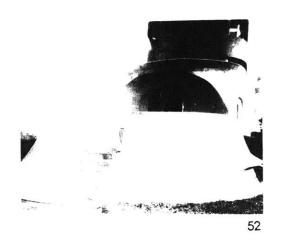
For the sake of a clearer understanding of these two aspects, I have analyzed the images as expressions and explorations to ease the path between perception on the one hand - what was in front of the camera-and the image the photographer conveyed on the other. It is important to note that throughout this period, there developed a coherent, though flexible, model of photographic practice. Its position derived from a wide range of suppositions about seeing, representing and knowing.

Expressionism

In this aesthetic approach, the camera's ability to record exact images with rich texture and great detail is used to interpret the world without losing contact with reality. The final image is characteristically "previsualized". This technique is the realization of the image (Fig. 52),

" Our images are not made to be measured, but rather to be contemplated by our eye. It is the eye, that, at the end decides the quality."²

The representational image can be further catagorized into "factual" and "experiantial".

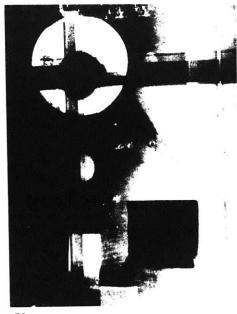


Experimentation

This approach to the image embodiesis restless search for a means of isolate and organize forms for their own sake. New challenging forms and space relationships are recognized in the final product by a vision highly conditioned by the abstract painting. The photograph is rarely considered as a mere representational tool for vision but as a medium of communicating a "vision" that a photographer perceives in an object or a set of objects. This approach can be seen in the "photograms" and the "photomontages".

"The aim was no longer the reproduction of objects in the search for resemblance of life......but the establishment of relations of the volume, materials, mass, shape, direction, position and light "3" (Fig.53),

While examining the photographs, I will briefly describe them, its salient features and analyse them from the various viewpoints.



³ Laszlo Moholy Nagy, Vision in Motion, London: Paul Theobold Company, 1965.

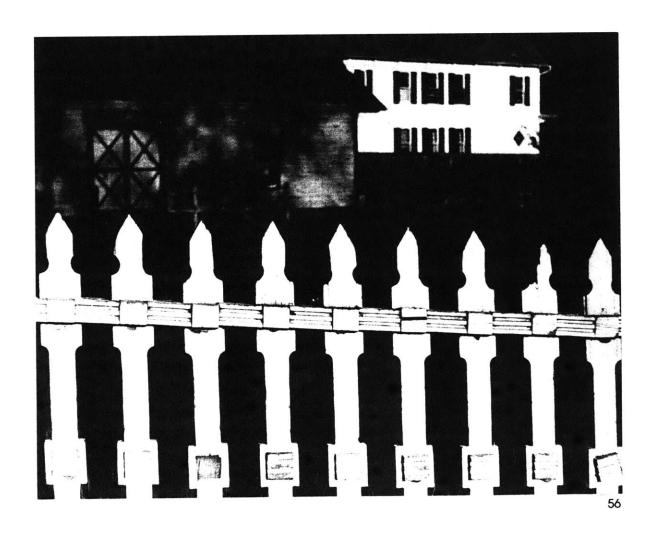
SECTION III 3.2.1

FACTUAL EXPRESSIONS

As described in the last section this method of representation emphasizes the need for a new creative elements that encourage and stress visual sensation.

In Paul Strand's "Porch Shadows", (Fig 54, 55) the rhythmic repetition of light and shadow construct a lyrical composition that shows a delight in the object and the mind's ability to perceive form. What is seen is a clairvoyance of the relationships that exist between the shadow and object creating an image. The image deals with the immediate, revealing it's design and formal organization, a keen comprehension of the modern art of the time. This conscious exploration into the expressive potential of photographic detail, a fragment that could represent the whole produced a new simplicity in the image. A tight relationship of the "picture" and the "frame" is seen in the image which was fundamental to the contemporary print-making aesthetics of the time.

"The White Fence", (Fig 56) also by Paul Strand, shows a combination of direct photography with a formalist concern for the "existing" object- a concern that might be traced to the avant-garde of the 1920s. The diamond patterns in the door of the barn exactly extend to the lines of the picket fence. The patterns of square blocks along the lower edge of the printed image, and the slope of the upper line of the fence makes a vigorous diagonal downward from the left to right.



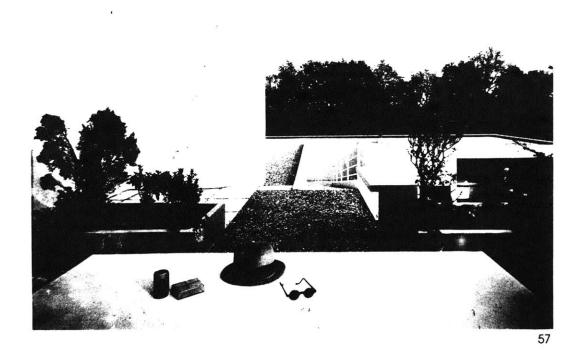
The image is a self-conscious "formalization" of the subject, the fence and the barn are used as a means to create tension. The subject of this photograph is really Strand's perception and not merely the fence surrounding the barn. The photographer demonstrates a formal coherence within the image which suggests a new meaning. What the "inner eye" conceives rather than what the "external eye" perceives defines subject. The barn and the fence, while being the "material" of the image, are not what the photographer is trying to convey. They become a medium through which the photographer employs his /her unique ability to "create" a new relationship which provides a new visual experience. To quote the photographer himself,

"it is in the organization......that the photographer's point of view towards life enters in, and where a formal conception born of emotions, the intellect, or both, is as in evitably necessary for him, before an exposure is made, as for the painter before he puts his brush."

Strand did not aim at this specific artistic conception by chance, but by a very clear estimation of the nature of photography which according to him was the full exploitation of the medium associated in a pure way to be used. In America, where Strand came from, the transition to "objectivity" gradually took place as a consequence of experiences gained from "direct" photography, which had already stressed image sharpness and the representation of a detail. The descisive step is taken when the subject was freed from being represented picturesquely.



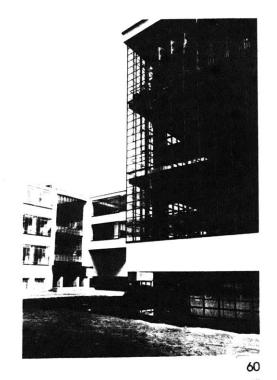
. 55

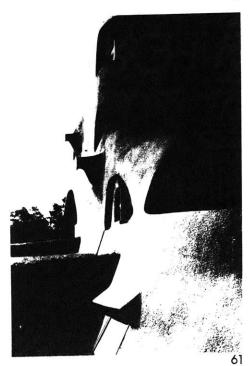












In "Villa Savoye" (Fig 57) by Claude Gravot, the camera was set up outside an unglazed window opening onto the terrace level looking outward through the building on to the trees beyond. It looks across a table surface upon which several objects are placed that play a larger role in order to make the building look "inhabited". The image suggests to look beyond the house as the frame simultaneously extends into an external relationship beyond the visible frame. To photograph this building from outside did pose problem to the photographer as the facade presents a continuos appearance (Fig 58, 59).

"The Bauhaus" (Fig 60) by Lucia Moholy-Nagy (1926) illustrates the structure of the workshop wing and its curtain walls. It shows the reflection and the transparency of the building's glass but the image "core" is an automobile parked in the shadow. This car provides a focal point and a feeling of potential energy to the picture. If the photographer intentionally included the car, it was probably to imply that the road through the building was functional street.

Arthur Koster's iconic image of the "Einstein Tower" (Fig 61) shows the building's stuccoed brick surface which extends toward the viewer. This was probably done to make the building's message single minded by showing a fragment of it. The image proves significant in part because it is "artistic" and in part because it sums up the building's spirit in a way that more general views would not.

Thus, what one sees is a new poetic ellipse in the medium's approach to the significant content within the image. This allowed the photographer to use the camera directly and realistically to suggest how the building could be seen and used.









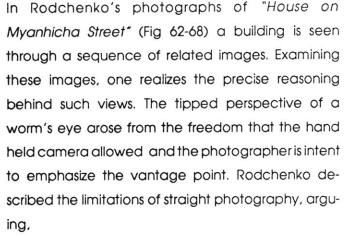
62-68

SECTION III 3.2.2

EXPERIENTIAL

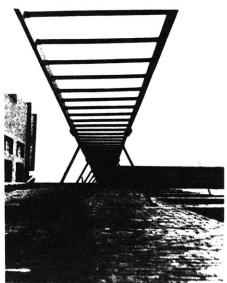
EXPRESSIONS







"the photograph of a newly constructed factory should not be the photograph of the building but repeated experimentation in the shooting of stills of the building from various angles."

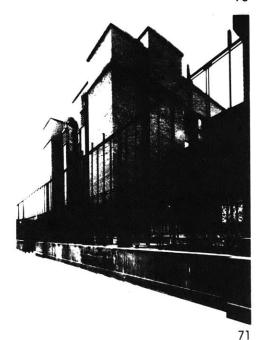


This was in response to the banal and archaic conventions of the beauty which had shaped art for so long. By presenting hitherto "unvisualized" view of the building the photographer sought to "free" the viewer from his preconception of a vision of a building. A broader position was held by Franz Roh, who says,

"man in the jog-trot of conventional life generally conceives but a conventional impression, and rarely actually experiences the object"²

quoted from A.B. Nakov, Back to the Material: Rodchenko's Photographic Ideology, Art Forum, Oct. 1977.
 Franz Roh, Mechanism and Expression: The Essense and Value of Photography(1928), in Photo-Eye,ed.Roh and Jan Tschichold, Thames and Hudson, London, 1974.





In the double exposure of the "Empire State Building" (Fig69) by Steichen in 1932 is a "tipped worm's" view directly across the street and a subsequent threequarter view from the corner of another street "untipped". This arose from the problem of photographing new buildings which were too high and cramped by the neighboring building to be taken in traditional perspective with parallel vertical. One obvious solution is seen in giving up the traditional perspective and to point the camera up at the building from the street below. Such a view also served to bridge the gap between a overall view and the picture of the building's details. The photographer's desire to express his position on an emerging architecture with unconventional views was a position that the architects had taken with their medium. One sees these images as expressions which came about because of the physical inadequacies of the human eye. The camera, as a part of technology was regarded as a direct extension of natural vision (Fig 70).

The photograph of Frank Lloyd Wright's "Larkin Administration Building" (Fig 71) by Clarence Fuermann is taken from the sidewalk in which a camera is put close to a metal fence in front of the building. This gives us a sense of experiential immediacy. Though the building loses its information, what is important is a special quality that is made with a confidence. It shows the act of the photographer, his arbitriness, his willfulness, inpite of the loss of view of the subject. The success of this image comes from a palpable act of the photographer.







The photograph by Walker Evans (1931) shows a "vernacular wooden building" (Fig 72) which appears "head-on". The front of the house is a Ford Model T. It was clearly the juxtapostion of the car to house that supplied the occasion for the photograph. The point of the image is in large part, the formal resemblance between the house and the car, neither playing a dominant role. The image suggests two frames- one which holds the tree, house and the car-the porch and the car

The second photograph by Ken Hedrich is of Albert Kahn's "Dodge Half-Ton Truck Plant" (Fig 73) in Detriot. It shows a facade obliquely, the perspective gives the building a more dynamic air and emphasis the glassiness of the facade. We are presented here with an experience of a building, not just facts about it. In the left fore- ground is a Dodge automobile whose purpose is partly to enliven the space in front of the factory and partly to serve as a metaphor: the car is the latest in the streamlined design for one purpose, the building is a comparably exciting and contemporary for another purpose. The image tells us how to interpret the picture and how to think of the building.

Thus within expressionism, there are two different attitudes and by the juxtapositioning of its various parts, the split is made evident. What is common is the juxtaposition of the cars which do more than provide a foreground and scale to the images.

These two images suggest functionalism and modernity. Such practice of including an "object" outside the building shaped the viewers attitude towards the image. Thus one sees the experiential quality of an image through its vantage point which characterizes the modern vision - a new way of seeing architecture encouraged by the new hand held camera.

SECTION III 3.3.1

PHOTOGRAM EXPLORATIONS

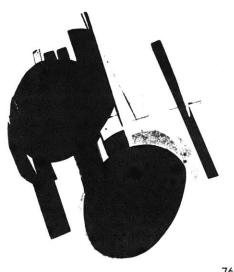


A photogram is a image made without a camera by placing objects on a sensitized surface-paper or film - that is exposed to a moving or stationary light, or simply by directing light onto the material. The very basis of the photogram is the use of certain light effects and certain material to produce different texture and gradations of shadow. Thus, the two major aspects of a photogram are its close connection with elemental forms and its basic relationship to the qualities of material (Fig 74). When investigating a photogram, the point of departure must be an analysis of its various component parts-light, space, time and material- also elements of a building.



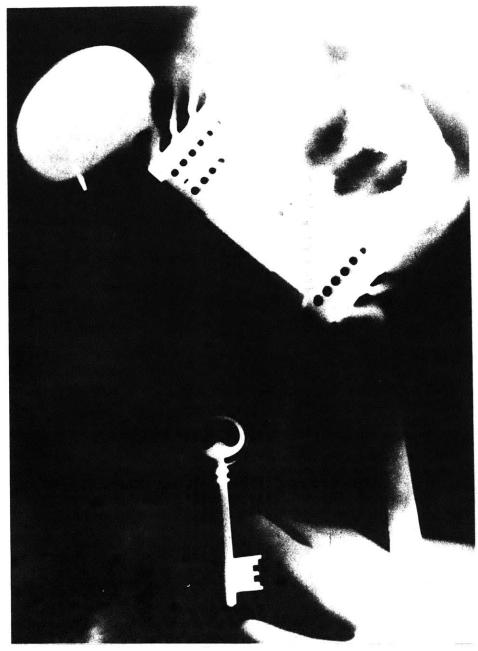






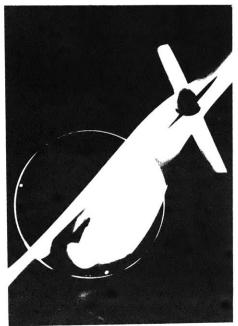
In the photogram by Laszlo Moholy-Nagy, "Silhouette" (Fig 75), we see a hand with the intersection of spatial lines. The open hand is shown as inactive, in an imploring gesture and without holding any tools. The image shows an automatic process of creation. Looking further into the image, one sees that it no longer aimed at establishing a mere relationship between existing objects but introduces new entities to create an image and its creative content lies in the composition. It is devoted to the intuitive state of being and the "chance" effect which the image seeks. The image can also be seen as an artistic "outlet" for the extensive visual "inputs" that were there in the photographer's mind during his time. The combination of art and science appears to be an important determinant of the artistic urge of the time. It is only in the development of such abstract art that directs the eye from the "ornamental" to the "elemental" qualities of a form (Fig 76).

A photogram has no base plane, the light plane floats in space. This creates a relationship in depth which cannot be measured and therefore offers an opportunity for enlarging the sense of the space-time relationship. Einstein's "theory of relativity" helped to make possible the notion of light being treated as a "substance" with form. This enabled light to be considered as actual "material means" for the manipulation. Moholy-Nagy began with a principle that photography is based on light. From this assumption he advanced that the essential tool of the photographic process is not the camera but the light sensitive layer. The contrasts between the differentially shaded merging grey tones produces an immediate visual result, which can be experienced by anyone without reference to the object (Fig 77).



Such a manipulation was an attempt to awaken a sensitivity to the rich and differentiated values of forms and tones through the use of light. From this, one could gain "material" for a "reconstruction" of perception (Fig 78).

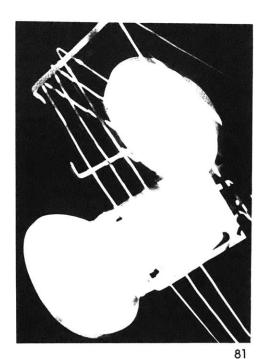




Such a "visual experiment", through technology, seemed necessary at that time because perception since time immemorial had oriented itself by looking primarily at nature. With the contemporary times, rapid changes had occurred in the industrial, commercial and living environment. Man had to adjust to these changes in his environment. In such a situation, the photogram is seen as the basis of an art with a dilemma of wanting to collaborate in the creative work of its own time with up to date means of technological achievements. The photogram offers a unique opportunity to link progress in arts with progress in the technical means of production. Its logic lies in the "process" of its creating and not merely in its end product. In the image, the endeavor was a disciplined organization of technical procedure with artistically productive manipulation (Fig 79). Its achievement lay in the dissolving of the automated character of the technological process of production. By this very act of the photographer, technology entered into a new dimension.

The image can be seen as the "objectization" of the subjective-expressionist desire for self-expression in an image bombarded by new technologies. This desire was realized by a systematic breakdown of the traditional means of expression through such efforts as a photogram that integrated the phenomena of modern technical developments with the inherent "artistic" urge in the human mind (Fig 80).





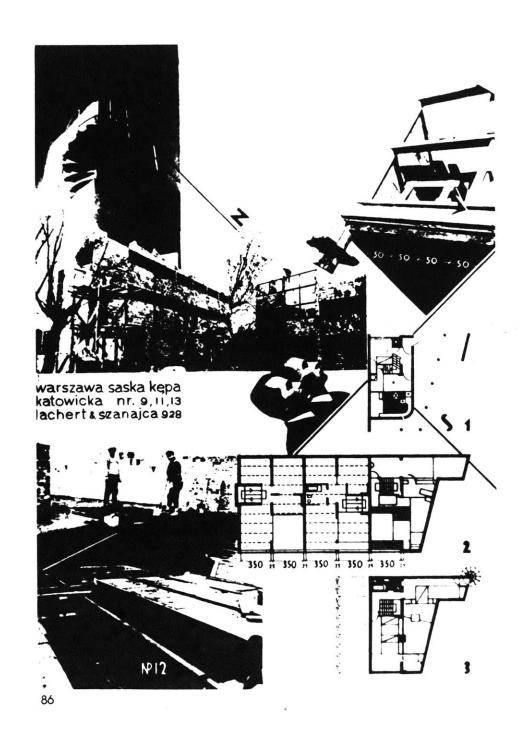
Such manipulations of the photographic technique can be seen as a series of experimental applications in an overall context of the ideological premises and basic propositions of the 1920s. The photograms tested the translation of these premises and propositions into visual explorations which finally resulted in a utopian projection of art on the basis of experimental experience (Fig 81). These abstract or non objective works, must then be viewed as images that formed a premilinary basis. In other words, the formal and ideological foundation on the basis of which the artistic development can be understood (Fig 82).



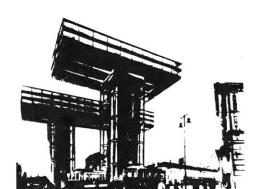
PHOTOMONTAGE EXPLORATIONS

Photomontage is a term used for a composite image made by joining portions (or all) of more than one photograph to synthesize an image not found in reality. Today, the use of photomontages by architects in building plans and projections is a commonplace. It has a practical use for example, in showing the relationship between the existing environment and the projected building. In the 1920s, it was used in a more personal way. At a time when new concepts and ideas were overtaking the thoughts about evolving cities, these photomontages maybe looked upon as a "visual commentary" on the terrorical and fantastic images of the city. Briefly let us look at such few images.

The "Metropolis" (Fig 83) by Citroen is seen as an impression of dizzying space. The bird's-eye view of a street racing away into the distance in the center of the montage is surrounded by steeply angled perspectives of buildings which stretch far as the eye can see. The montage has been built up in ordered square, each one complete by itself yet as a composition when read together. Within the vertical-horizontal grid, reminiscent of Mondrian's paintings, each squares opens up with a view of its own. There is a sense of exhilaration in the very dominance of the mammoth structure but also the beginnings of a panic with the realization that the city with it's buildings and machines can no longer be experienced as an extension of man's space.







A photomontage of a similar theme can be seen in Citroen's other work "The City" (Fig 84). Citroen's work is perhaps an inspiration for Fritz Lang's film of the same title, a nightmare moral fable of a future society where only the rich live above the ground (Fig 85).

The "Wolkenbugel" photomontage (Fig 86) by El Lissitzsky, shows the building from the point of view of a man walking on the street. The artist rendering of the futuristic towers are superimposed on an existing photograph in Nikitsky Square, Moscow. Lissitzsky's aim was to bridge the gap between the functional group of artists and architects. This image, while a "fantasy" of an artist suggests a certain faith in the ability of technology to make such a futuristic realization. This image is startlingly realistic, making the visionary project almost look "actual". His concern was the problem of suspending a building clear of earth. In 1929, he wrote in "Russland",

"our ideas for the future is to minimize the foundation that link to the earth." $^{^{\prime }1}$

The photomontage by the Polish Constructivist architects Lachert and Szanajea, "Design and Construction of a House, Warsaw," (Fig 87) takes the concept of such representation one step further by adapting it to the everyday vocabulary of an architect"s drawing. It is an abstracted drawing presenting conceptual and constructional aspects of a building. It shows an advanced construction method for its time with photographs of the two architects and with the house under construction.













Photomontage introduces the element of time and through different images taken at different times, it is collaged into a unity, and presented simultaneously (Fig 88). Moholy-Nagy writes,

"The photomontage allows a simultaneous presentation of events whose effect is of the real space, originally unrelated space and time elements, juxtaposed and fused into unity."²

In these images, one sees a change in scale and simultaneous perceptions of different things implicit in the vision of a city. They successfully disrupt one's perception of the normal world and create probabilistic images (Fig 89). By juxtaposing elements by nature strange to one another, hallucinatory images are formed. Commonplace objects become enigmatic when moved to a new environment (Fig 90). One's immediate perception is unable to encompass them and is baffled (Fig 91). New notions are developed. New possibilities, conceptual as well as real, are revealed.

The creation of this new visual entity from the existing materials appealed to the avant-garde artists because it was a technique employed by naive people to create images and in part because it used mass-produced photographs and therefore did not carry the aura of an "elitest" activity. These artists felt that juxtaposing unlikely images might serve to arouse feelings that conventional photographic views no longer had the power to evoke in the viewer (Fig 92).



Besides, photomontage promised to be extremely amenable to the expression of both political concerns and private dreams and visions.

Describing a photomontage. Rodenchenko writes,

"deformation of a photograph in which straight camera images taken from unusual angles or from extreme closeups communicate new realities."³

Moholoy-Nagy saw photomontages having a central meaning and a picture nucleus, so that the conception could be clearly viewed as an entity, although it often consisted of different visual and intellectual superimpositions. The idea of Bauhaus is also embodied in this theory, for it aimed at firm constructional principles in all spheres of art (Fig 93) Artists inspired by the aesthetics of Cubism used this technique to control texture, form, and tonality to achieve nuanced formal effects which were used to describe the emerging interests in urbanism, energy and movement.

This relation of images created interplay of information, attitudes, and effects that, along with the related enterprises of advertising and publicity, revolutionized the role of photographer, the nature of images, and the manner in which the public received news and ideas (Fig 94) The adaptability of montage led artists to consider it.

"a direct and successful way of achieving the mammoth task of educating, informing, and persuading people."



³ Dawn Ades, Photomontage, pp.15-16

⁴ Dawn Ades, Photomontage, New York, 1976, p.16.



Photomontage thus became one of many techniques by which it was able to bridge the gap between great different in contrast, and to achieve an unusually large depth of field (Fig 95). The photomontage demonstrate that with its help the photographer was capable not only of formally structuring the image, but also of giving freevent to his imagination, in order to express certain ideas in the picture of his/her time.

"a photographer who wishes to grasp the social significance of a phenomenon will seek for methods to underline the essential features, thus correcting the objectivity of camera, which regards with indifference the just and the unjust"

CONCLUSION

Through the "outcome", one sees the twenty years between the two wars representing the "idea" of an entire generation of artists, architects and photographers. They shared a tremendous optimistic belief that the future of a culture dominated by logic and reason could be a fundamentally positive one, a belief buttressed by a faith in the inevitability of human progress.

Thus one sees the photographic images in works of abstraction and representation as having their own domain within the artistic continuum. Each was essential for the other. The photographic image searched for a simultaneity in perception and information while representing architecture. It made use of the developments in mass communication, and above all, an image that would depend on a most precise form of objective representation. The importance of the "new objectivity" lay in its detailed depiction of the surface structure. This made it a geniune artistic movement. Its discoveries opened up new ways for the development of the medium, since they greatly futhered an increased "consciousness" of the nature of photography.

In the images examined one sees not the translation of a building's appearance but statements emanating from it. The images are no longer concerned with the transcription of the building's appearance. The statements are:

- 1) Ideological: It treats the positivist evidence of a photograph as it represents the ultimate and only truth.
- 2) Popular: It cherishes a photograph to substantiate a subjective feeling.

The two approaches, expressionism and exploration, led to two different images. What they had in common was a concern for formal values, for shapes and a gestalt. In a abstracted image, the aim was to get at the "objectivity of form" while in representation, it used that "objectivity of form" to express a preconceived idea in order to convey an emotion. The first is fixing of an actual state of form while the other is the expression of the "objectivity of form", subordinated to a system of representation.

The first is seen as a free and impersonal research while the second is systematic and personal. One sees through the images that the appearance of the building no longer mattered. What mattered was the differentiation between the elements that constituted the building rather than its visual appearance. The "new vision" with its clear, sharp, and precise reproduction, shot from unusual angles: close-ups or from great distance, emphasized the material surface and abstract structure. All these contributed to an aesthetically fragmented perception, an attitude, held by most of the photographer. The visible (building) was deprived of it's existence and was reduced to the area of aesthetics of perceptions as they affected an individual's feeling.

During this period, photography was hailed as the visual medium most in harmony with the conditions

and the culture of modern life Factories, machine tools, assembly lines, buildings, and mechanized vehicles (in short, the technology that dominates all industrialized societies) attracted photographers who believed that the camera was best suited to deal with these forms and textures. Along with the ideologies of the photographers, the images reveal a compelling respect for clarity, for clean crisp lines, and for precise geometrical volumes in the product of machine culture. All photographs in the new style were dominated by a rhythm of standardized objects and the ornamental accumulation of identical shapes. Buildings were made interesting and surprising by multiple exploitation of the cameras technical possibilities.

The advertising value of such photographs was influenced by the fact that architecture was not presented functionally but contained a promise of mysterious meaning above its ordinary value.

In 1928, Rodchenko emphasized the correlation between modern photography and urban-industrial conditions of life,

In the 1920s, these barriers between the media were broken. This breakdown affected all artists, including the photographer. It lead to experiences which provoked achievements, trances, dreams, passion, crucial ethical decisions, music,...to name a few. The artists insisted in the elimination of all other views of history, save their own, which was to be a part of that progress. They proposed was that man could make his own history.

These images illustrate a "style" because of a concurrence of judgement about their value and significance. Very few were made as "art". Most of them were made for reason. The "photographic realism" was a conscious effort which resulted in a "standard of art" directed to the society at large.

The "new objectivity" was seen in the context of it's economic and social function along with an historical context which clarifies the notion of "new realism". Modern architecture was shown by the photographer as a component of aesthetics. This aesthetic laid an emphasis on the formal qualities of the Building. Writing in Camera Work, Sadakichi Hartman, said,

Climatic and sociological conditions and the normal appreciation of the appearances of contemporary life, will lead the camera workers unconsciously to the most advantageous and characteristic way of seeing things......

lems.....

difficulty. Scenes of traffic, or crowds in a street, in a public building, or on a sea shore, docks and canal, bridge and tunnel, steam engine and trolley, will throw up new prob-

The most important factors in these discoveries will be those qualities that are most characteristic of photography as a medium of expression. The facility of producing details and the differentiation of textures, the depth and solid appearance of dark planes, the ease with which forms can be lost in shadows, the production of lines solely by tonal gradations and the beautiful suggestion of shimmering light, all theses qualities must be accepted as a fundamental ele-

ments of new development. Photographic representation, no doubt, will become addicted more and more to space composition, to the balancing of different tonal planes and the reciprocal relation of spaces.²

The relationship between exploration and expressions was of mutual interdependence. The abstractions were rooted in an attempt to create balance and equilibrium in the same architecture that the work of representations projected, which depended upon a similar structure.

Thus the photographers accepted the contemporary views of architecture and were clearly sympathetic towards it. They worked very much in the spirit of new architecture. The medium established a canon of technique and subject matter that was accepted by a wide audience. It reflected upon newly emerging ideas and solutions and fulfilled the destiny of modern art. It was not the "quest for form" nor merely the "new objectivity" alone that announced a fresh direction. The key factor was a "new attitude". It was this willingness to pursue a new way of thinking and a new means of image making that characterized the photographic style of the 1920s.

POSTSCRIPT

"......photography, from being merely another way of procuring or making images of things already seen by our eyes, has become a means of ocular awareness of things that our eyes can never see directly......it has in the effected a very complete revolution in the way we use our eyes and......in the kind of things our minds permit our eyes to tell us."

That ours has been a century of architectural achievements is not news. From the drama of the early modern style of architecture, to the more restrained buildings following the World War II, to the current colorful and lively debates between the modern and post-modern aesthetics, the architectural styles of the 20th century have been provocative, inventive and aspiring. With the interest they provoke and the controversies they arouse, they are, as evident in the printed page. Works in architecture have been interpreted, perhaps misinterpreted, as more benign and nostalgic but photography has also offered a needed antidote to the most sterile orthodoxies of the architecture.

It seems that the medium of photography, which has long provided an increasingly articulate language in describing architecture, today, appears to have reverted back to qualities of light more than architecture. Looking back, one can point out that at least twice before in almost a century and a half of photography, the photographer had placed a primary emphasis on the qualities of light. It happened not only in the decades before World War I, but also in the earliest days of photography. Just as the later of these two period was followed by a 'new awareness', the earlier one was followed by a visual discovery. It is certainly likely that the photographer will again take a fresh, hard, objective look at architecture.

Photography is essentially the recording of light. The photographer creates a latent image. This illusion of actuality is immense and within it's limit is incontrovertible. The image, is placed like a fact in an explicit or implicit manner. It may be used in an investigation as 'information' or in the media as a means of 'communication'. The two uses are different, but they are both assumed to be reliable as evidence. When a photograph is used in an investigation, its unquestionable evidence is an aid in coming to a conclusion: it provides information within the conceptual framework of the investigation. But as soon as a photograph is used as a means of communication, the nature of the image becomes propagandizing.

Because we haven't reached a theoretical distinction between photographs as evidence and photographs as means of communication, it seems likely that the denial of the inherent ambiguity of the photograph is closely connected with the denial of the function of subjectivity of the image. The function of the photograph, that is, the way it works, is one way of classifying it. Other classifications are also possible. It may be studied and classified almost without regard to the image contained as a commodity, an item or a source of information.

A photograph made for a given purpose cannot responsibly be judged by other standards. A documentary photograph, for example cannot be judged by aesthetic standards. It exists, because it gives certain information. The aesthetic judgement, formal evaluation and historical placement, as well as personal understanding becomes important in it's discussion.

Thus, a photograph can be viewed as irrefutable evidence, but weak in meaning. When we look at an image, our eyes become nurtured both in the two-dimensional image and the illusion of reality beyond, created by that two dimensional surface. And if this is recognized and accepted as such, it could offer photography a 'unique means of expression'. This ambiguity also offers and suggests another 'way of seeing or telling'.

Looking back, one's thinking changes towards the images and also attempts to justify it. Simultaneously, other influences have been my own work as a photographer-architect. The intellectual discipline of analysis has returned me to the photography itself-to a love of this unique, misunderstood but fantastic medium. Finally, my thesis is, when a camera records, it creates an image from the visible reality. It proposes that if something is visible it is a fact. And that fact is contained in the image.

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