

ENVIRONMENTAL KODALITHS

by

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on May 11, 1979, in partial fulfillment
of the requirements for the degree of
Master of Science in Visual Studies

ABSTRACT

It is the intention of this thesis to present a pictorial and written analysis of the human visual image in the context of its historical, sociological and environmental place in the Western world. This investigation begins with "the severed head" of the pre-Christian Celtic world and continues to follow the motif of the head through the most humanistic period of all - the twelfth century Gothic (particularly at Chartres) and into the world of the photographic image and the environmental kodalith.

This study is made in relation to my own work with the photographic image prior to "Faces," the Stairway Seven project and continues past it.

It illustrates my concerns with light, the visual image in its environment, and Man's place in this environment.

Thesis supervisor *[Handwritten signature]*

Professor Otto Piene

Title: Director, Center for
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"The Celts, from whom so many of the later European peoples were descended were, like other northern peoples, headhunters. But apart from cutting off the heads of their enemies in battle they worshiped the severed head, and believed it to be imbued with every divine power - prophecy, fertility, speech, song and hospitality and, perhaps more than anything else, the power of averting evil."¹

The Severed Head

My first reaction was one of shock, then fascination, abhorrence and finally dismay, when recently at an airport and directly confronting me was a very large woman wearing a necklace of many dangling heads glinting on her bosom. "Heads," I thought to myself, "Why is she wearing heads?" They were flat, and gold, and each depicted a childish silhouette, either a boy's or a girl's (as differentiated by having short hair or shorter hair) and bearing a first name and date (presumably the birthdate of the child). This was the grandmother by all indications, and she was wearing a type of popular commercial jewelry decoration. But severed heads!!! I was sorry not to have recorded this image photographically, but even more dismayed at the flatness, the stamped out identity of a presumably cherished visual image. Its only personal identity was in the engraved labeling.

We are all of us not so far from our ancestors' cult of the head - the human head is an endless source of fascination. We bear I.D. cards and driver's licenses and passports with our photographic images to prove who we claim to be, and those photographic images are the combination of reflected light waves and chemistry that can reproduce the "true" institutionally accepted "YOU". "Photographs furnish instant history, instant sociology,

instant participation. But there is something anodyne about these new forms of packaging reality."²

The pre-Christian Celts worshipped the human head, and made images of it in naturalistic and non-naturalistic ways - but it is always an easily recognizable image.

"Image-making at its origins, when it was a practical, magical activity was a means of appropriating or gaining power over something. The further back we go in history, as E. H. Gombrich has observed, the less sharp is the distinction between images and real things; in primitive societies, the thing and its image were simply two different, that is, physically distinct, manifestations of the same energy or spirit. Hence, the supposed efficacy of images in propitiating and gaining control over powerful presences. Those powers, those presences were present in THEM."³

These images moved from pagan worship into the Christian churches and cathedrals all over Europe with the ease of adoption that the specific spirituality of the site embodied, and the early Christian church wisely wove into the texture of its theology that which it could not eradicate.

The early pagan deities retained a visible and tangible presence. The sun and the moon have always had their place in divine imagery, and the early Gothic

churches embodied the very complicities of light in the relief and modeling of stone images and in the very physical presence of their interior and exterior architecture.

Chartres was built over a pagan Celtic shrine that was known to be the central annual meeting place of the Druids. Chartres Cathedral is one of the three most fascinating places I have been privileged to visit. (The others are Stonehenge and Antonio Gaudi's Temolo Expiatorio de la Sagrada Familia in Barcelona.) The infinite layerings of mystery and light since the earliest habitation of Man to our present time have endowed this sacred place with an energy that is indescribable.

"Just as the Greek Temple is simple both in form and in function, so the Gothic cathedral seems to proclaim the complexity of mankind and of the world. Like the celestial Jerusalem of which it is the terrestrial image, it contains in its bosom many mansions, which is the mission of architecture to arrange in a clear order and to bind together within broad perimeters: for the cathedral summons men from far and wide, with its belfries, its facades, and the manifold approaches of its portals. Its very shape seems to be modeled on the movement of the crowds whose steps and glances it holds in focus; and the vast space it encloses is fully defined only by

the sonorous volume of its organ and the songs that echo in its depths. Without its ritual and its people, the cathedral would lose much of its significance; yet it would retain its cosmic quality, its rich quality of meditation upon the facts of the universe. For with masterful skill it exploits and organizes substance and weight, space and light, just as it does the masses of humanity; and in the multiplicity of the rhythms with which it links them, in the movements that it combines and blends together, it seems to identify itself with the fundamental impulses of the mind and nature."⁴

The human expression, the human appeal, the human landscape pervades the entire being of Chartres. My own endeavors seem closely allied to the thirteenth century. In the Gothic carvings a likeness to life is brought forth from the very contradictory demands of stone, and light is the source of that life. By way of the photographic human image and the effect of environmental light in my work with kodaliths my concerns appear to parallel a fragment of that amazing century. I am striving for a more intense reality of the human image by way of the technology of my century.

Susan Sontag, in her vehement dissertation "On Photography", states:

"In the past, a discontent with reality expressed itself as a longing for ANOTHER world. In modern society, a discontent with reality expresses itself forcefully and most hauntingly by the longing to reproduce THIS one. As if only by looking at reality in the form of an object - through the fix of the photograph - is it really real, that is, surreal."⁵

Susan Sontag's book is an endless source of searing psychological studies on photography in our society. No matter how my opinions may differ from hers in various other attitudes, I must sadly acknowledge her view of "the chronic self-destruct quality of American experience" that Bernice Abbott's book of 1939, Changing New York, so aptly illustrated. "Bernice Abbott's purpose ('I wanted to record it before it changed completely') sounds like that of Atget, who spent the years between 1898 and his death in 1927 patiently, furtively documenting a small scale, time worn Paris that was vanishing. But Abbott is setting down something even more fantastic: the ceaseless replacement of the new. The New York of the thirties was very different from Paris: 'not so much beauty and tradition as native fantasia emerging from accelerated greed.' Abbott's book is aptly titled, for she is not so much memorializing the past as simply documenting ten years of the chronic self-destruct quality of American

experience, in which even the recent past is constantly being used up, swept away, torn down, thrown out, traded in. Fewer and fewer Americans possess objects that have a patina, old furniture, grandparents' pots and pans - the used things, warm with generations of human touch, that Rilke celebrated in The Duino Elegies as being essential to the human landscape."⁶

In 1905 Henry Adams published his great book Mont-Saint-Michel and Chartres, and in 1957 Francis Henry Taylor wrote the following in the introduction to the new edition:

"When I first read Mont-Saint-Michel and Chartres more than thirty-five years ago I was teaching English at the lycee in Chartres. There I had the opportunity to spend the better part of a year studying the cathedral from top to bottom. The gardiens, Etienne Houvet and Robert Batais, had given me the freedom of the cathedral and also had entrusted me with keys that would admit to the triphorium gallery, to the crypt, and to the external galleries on the roof. There was scarcely a stone or piece of glass with which in the course of my sojourn I was not intimately acquainted.

"I had been given the book by my family as a sort of consolation prize for being stationed in what seemed to them a remote provincial French town. From it I got my first introduction to the Middle Ages, to the life of the

thirteenth century, to the historical circumstances, especially the cult of the Virgin, which had brought about the erection of these great cathedrals. I learned from it also about the guilds and corporations and of the royal and princely donors who had given the windows and statues which in their ensemble have made the cathedral such a perfect work of art Mont-Saint-Michel and Chartres, I discovered, was something of a Baedeker to the topography and daily life of another epoch. I was obsessed and excited by its imagination and its scholarship

"What I did not understand, for I was only twenty-one at the time, was that Mont-Saint-Michel and Chartres was a protest against the world in which Henry Adams found himself. Superficially it is an essay on the Middle Ages. Only since I have become more mature have I understood the basis for the unhappiness and the inner conflict of the man who wrote it."⁷

Francis Henry Taylor goes on to speak of Adams's Mont-Saint-Michel and Chartres as a "flight from reality - from the encroachment of the materialistic determinism of the industrial revolution - Henry Adams's medievalism was likewise an escape from the inexorable disasters of the twentieth century which as a philosopher and historian he foretold. He linked the White House of his illustrious

ancestors with his own existence and that of his contemporaries. Already as a young secretary in his father's legation in London in the Civil War, he felt that his world was lost, and he sought consolation in the wonders of the past"8

"The idea of Mont-Saint-Michel and Chartres originated in the trip to Europe which followed the tragic events surrounding his wife's suicide in 1885. He plunged into a new world and it is not too much to say that Henry Adams lost himself in the Middle Ages deliberately. His personal unhappiness and the collapse of the world to which he had been brought up, the panics of 1873 and 1893, and the consequences of the War of 1870 in France, bore down upon him heavily. . . ."9

"This mood was to persist, and some years later writing to his friend Charles Milnes Gaskell from Paris he says -

. . . The Normandy trip turned out well: charming weather; easy journeys; a new world of architecture; and to me a new variety of scenery and people. I bagged a dozen new churches, and a few castles and chateaux besides Mont-Saint-Michel and Chartres

"I am sure that in the eleventh century the majority of me was Norman, - peasant or prince matters nothing, for all felt the same motives, - and that by some chance I did not share the actual movement of the world but became a

retarded development, and unable to find a place. Going back now to the old associates seems to me as easy as drinking champagne. All is natural, reasonable, complete, and satisfactory. Coustances and St. Michel show neither extravagance nor want of practical sense. They are noble both in spirit and execution, but they are not, like the later Gothic, self-conscious or assuming. They knew their own force perfectly well; measured it to a hair; gave to the ideal all it had a right to expect, and looked out for the actual with a perfectly cool head

"Undoubtedly you and I were there which accounts for us. I rather think that most of me were vassals of the Church; respectable farmers, doing military service for their fiefs. They also helped to build the churches of Coustances, and Bayeux and Caen, and did it with satisfaction. They liked architecture. . . ."10

"The following year Adams wrote to his niece, Elizabeth Cameron:

'. . . Sunday afternoon I passed at Chartres, in the cathedral, with the glass and the afternoon service. In my sublimated fancy, the combination of the glass and the Gothic is the highest ideal ever yet reached by men; higher than the Mosaics and Byzantine of Ravenna, which was itself higher, as a religious conception, than the temples of the Greeks or Egyptians. Our age is too thor-

oughly brutalized to approach any of these creations of an imagination which is dead. I am myself somewhat like a monkey looking through a telescope at the stars; but I can see at least that it must have been great'

"This tallies with the argument of the book. His recent biographer, Emily Stevenson, has stated that the book, written with 'an unflinching vivacity of color and manner, might seem on first reading to be cheerful, even gay, certainly bright. Yet it rests upon a bedrock of somber prepossessions. Its premises might be stated as follows:

- 'a. The universe is unintelligible and inimical to man.
- 'b. Society is a fiction - an attempt to make the universe intelligible and bearable.
- 'c. There are various possible fictions on which society may rest.
- 'd. The fiction of the twelfth century was one of the best.
- 'e. It too failed - life is tragic'."¹¹

What better place to be then, than the twelfth century for Henry Adams. And perhaps twentieth century society would benefit from taking a closer look at the twelfth century as well.

The blank windowless walls of our popular local

architecture negates the existence of natural light altogether - its interior is claustrophobic and without character. It could be anywhere at all it is so anonymous, so unrelated to its physical environment, and its exterior is a blind brick expanse in an immense parking lot? We are reduced to an isolation that is augmented by the great god "Car" - why is it necessary to have two drive-in blank-walled banks within seventy feet of one another in Newton Centre, I wonder, when what was once an adjacent town green has already been eaten up as a parking lot. If this distressing construction of blank, solid-walled type building continues (and its implications for violence are staggering) how "quaint" will be viewed our few remaining wooden structures with their naive little architectural salutes to the sun.

The twelfth century is looking better and better.

"Despite the inevitable overstatement involved in such simplifications, it can be said that the Gothic cathedral sums up a whole epoch of humanity; that in these cathedrals a social structure, a theological mode of thought, together with a long tradition of craftsmanship and sensibility, found their most beautiful and most human expression. And this explains the fascination they have for the soul of modern man."¹²

It is an exceptional experience to come upon the

spires of Chartres from across the great expanse of wheat fields, and to feel so large in comparison to those distant tiny spires. You come closer and closer until suddenly it is large and you are tiny. Its figured exterior, eloquent with life and ever changing and dazzling light, exudes a human warmth. And moving from that living energy into the interior and darker space, one passes into a deeper radiance. Most things written about the windows are of a more scholarly nature: the sociological stories they tell, the original stained glass remaining nearly wholly intact, and of course their monumental tribute to the outstanding craftsmanship in the Gothic period. But what is most exhilarating of all to me, is physically moving through that colored light. What it must be like to watch it in its travels every day!

Joseph Nicephore Niepce (1765-1833) was the inventor of what we call photography. He and his brother were the first "collaborators of the sun" as photographers later came to be called.

Heliography (sun writing) was Niepce's name for the process whereby the image appeared on the plate. In July 1839 Daguerre's achievement in perfecting this process (he did not invent it) created an astounding excitement in Paris. The "Mirror with a Memory" it was called: "A mirror made of a silvered copper polished to a perfect

finish. Making a daguerreotype involved a complicated series of operations: the plate had to be sensitized with iodine vapour before exposure, and the image, invisible at first, was developed with mercury, so that it appeared as a delicate incrustation on the surface of the mirror."¹³

Everyone wanted one . . . until the next photographic process came along, one that could be reproduced.

"The daguerreotype was abandoned, and I think wrongly. The accusations against it were that it was insufficiently sensitive and that it produced mirrorlike pictures which could only be seen when the light fell on them at a certain angle. This was all true; but if, instead of transferring their attention to the paper print, photographers had persevered with the daguerreotype, they might have obtained results even more remarkable than those obtained with glass and paper. Even the best motion pictures do not give the almost hallucinatory feeling of presence that we experience looking at a daguerreotype. In the strange sepulchral light, at once luminous and flat, which is so characteristic of daguerreotypes, the features take on a supernatural relief. Eyes blaze beneath jutting brows, lips seem to move . . . There is a daguerreotype of Balzac, in the Musee Balzac, which is quite extraordinary. It brings one face to face with him better than any painting or any

photograph. He is there before one, about to open his mouth and hold forth on one of those chimerical schemes of his - and then a sunbeam is displaced and he is dead again. That leonine mask is now nothing but an elusive pattern of pearly surfaces."¹⁴

I have tried to capture the presence of this luminous and yet flat silvery "other" image in the daguerreotype here reproduced. Included are the best two of several attempts; but these images are not comparable in any way to the natural clarity and magical essence of this "other" image obtained from the daguerreotype itself.

The daguerreotype attracts me because of its social interest, the visual human image (the head usually), and its three-dimensional quality. I too regret that the daguerreotype was abandoned so rapidly when the polished copper plate was displaced by glass and a transparent paper negative.

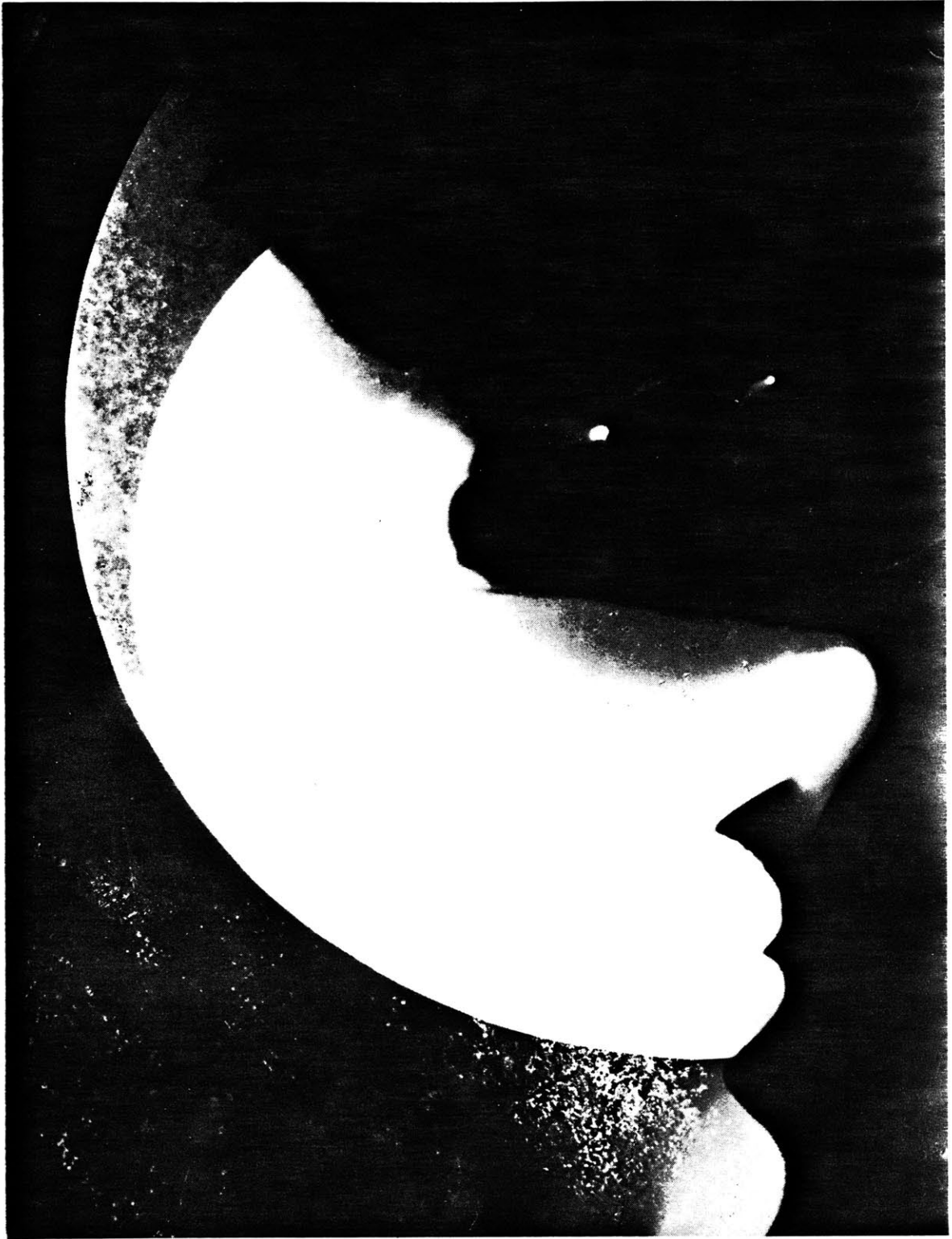






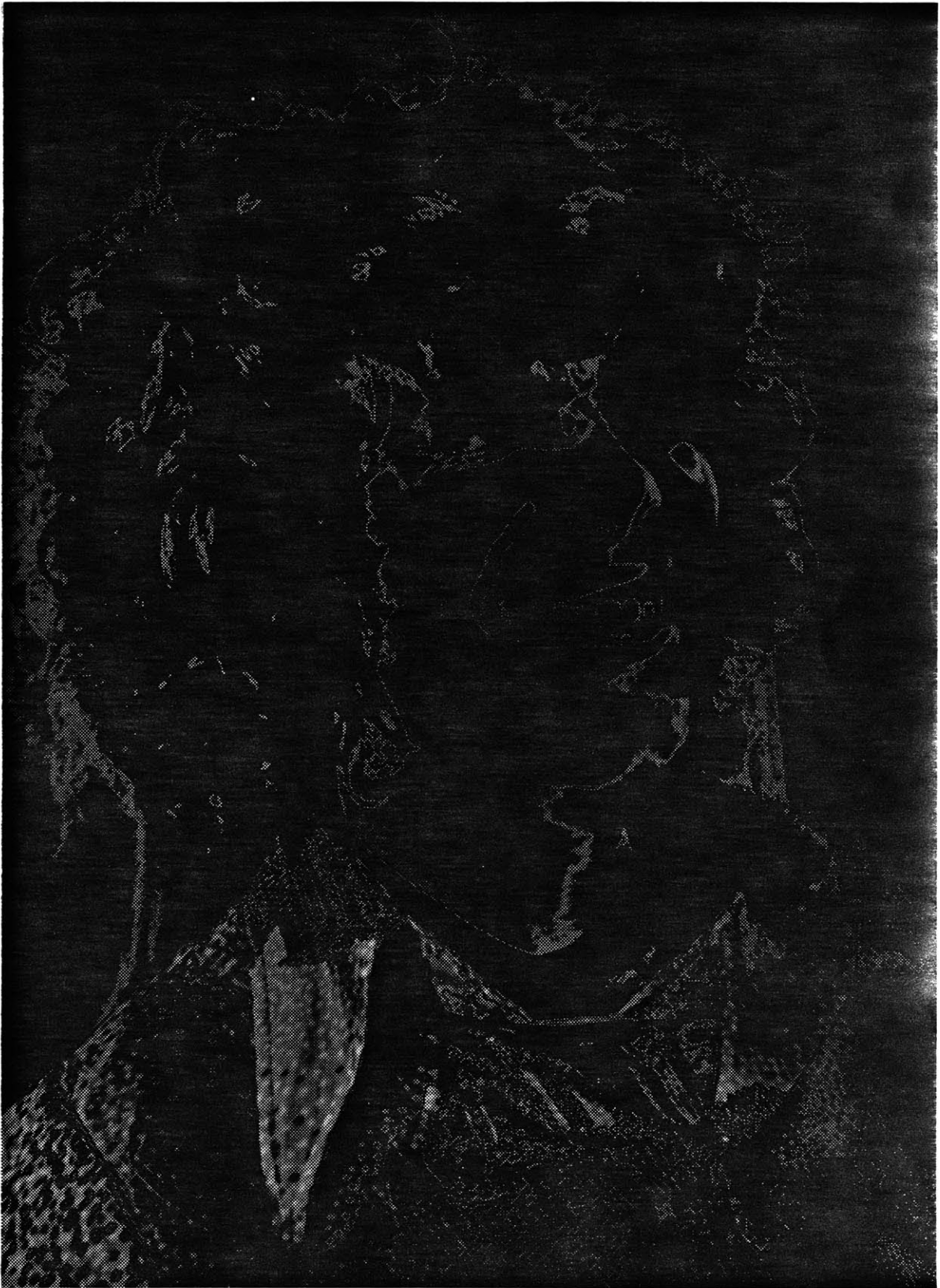


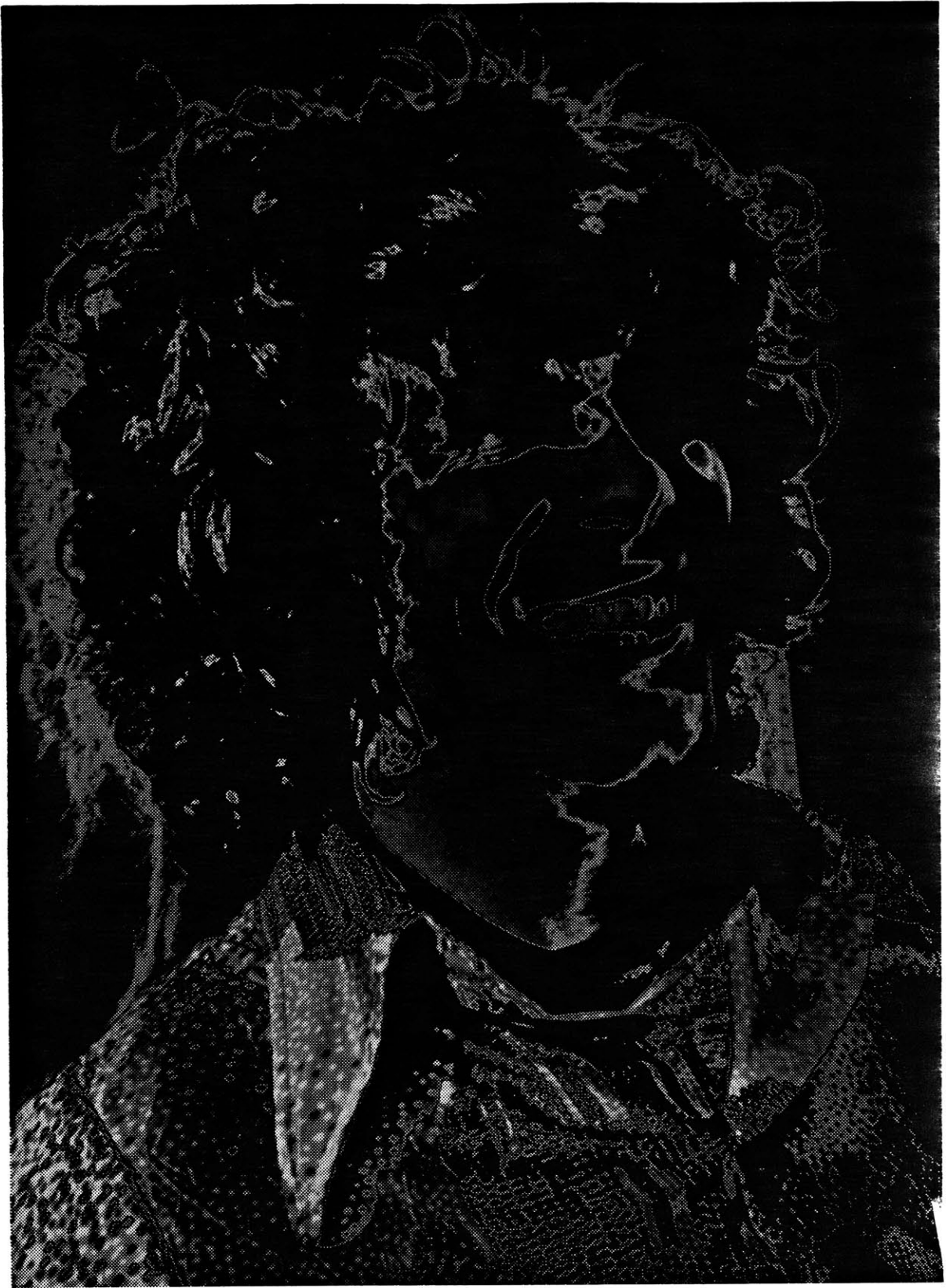




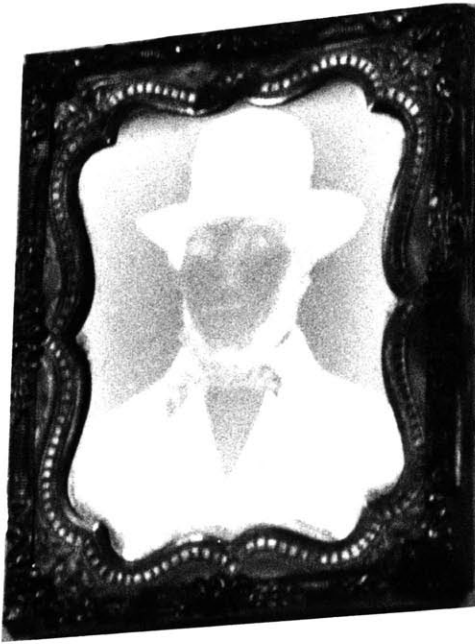


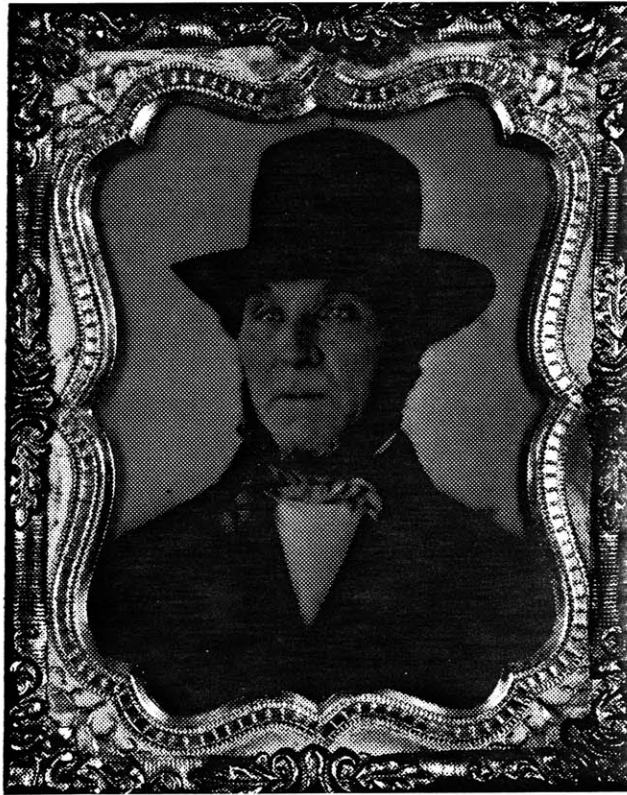








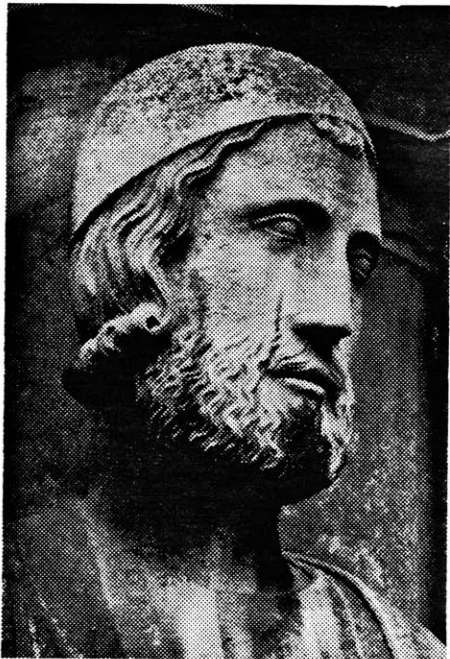




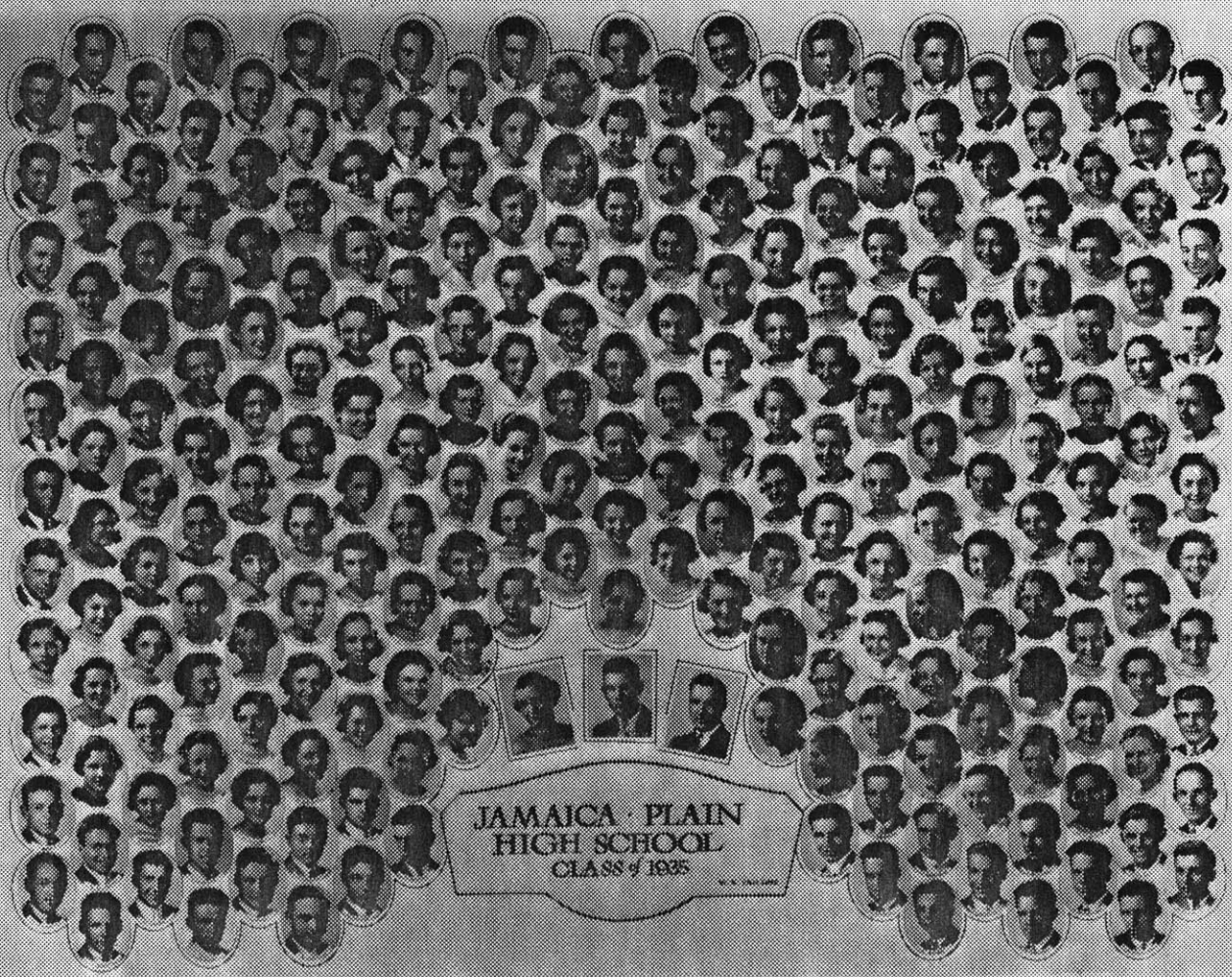


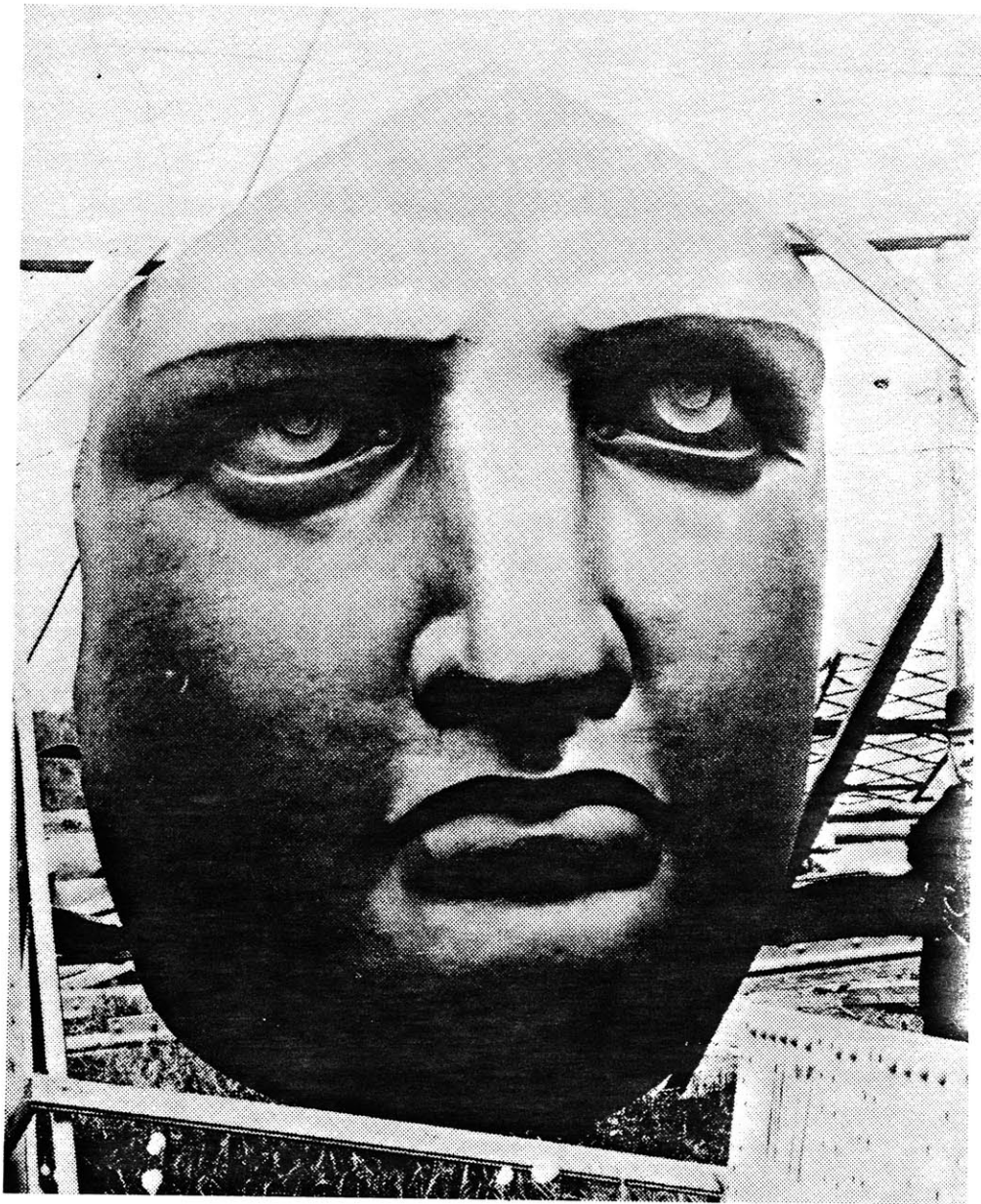


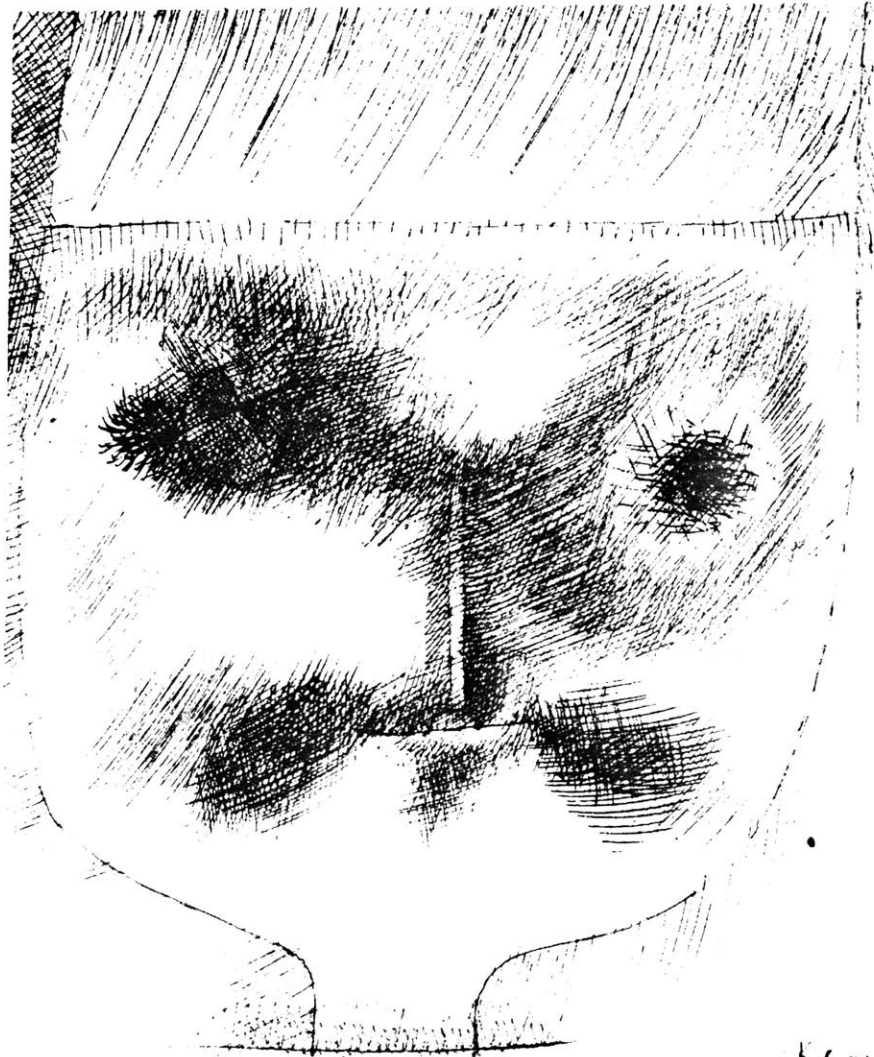




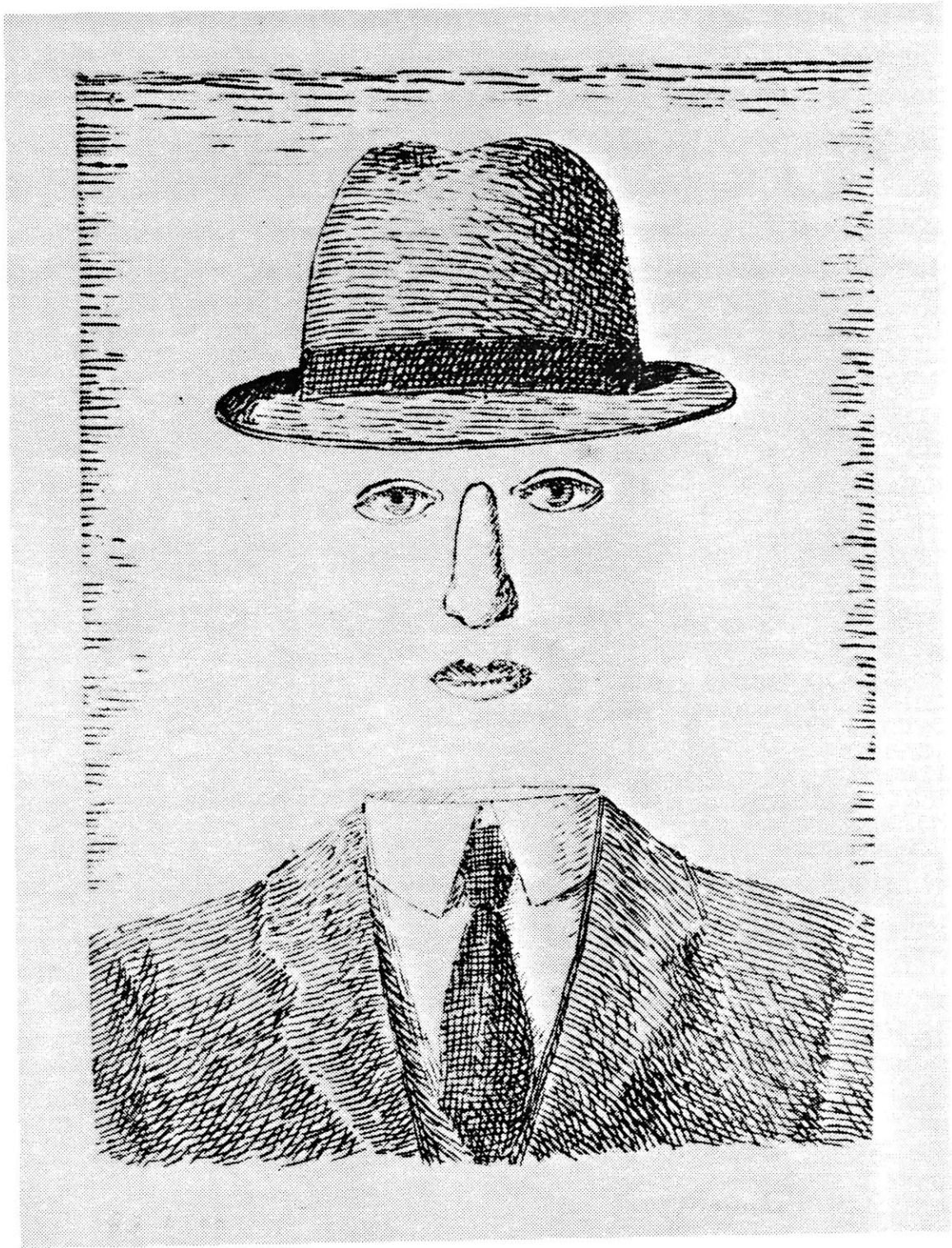






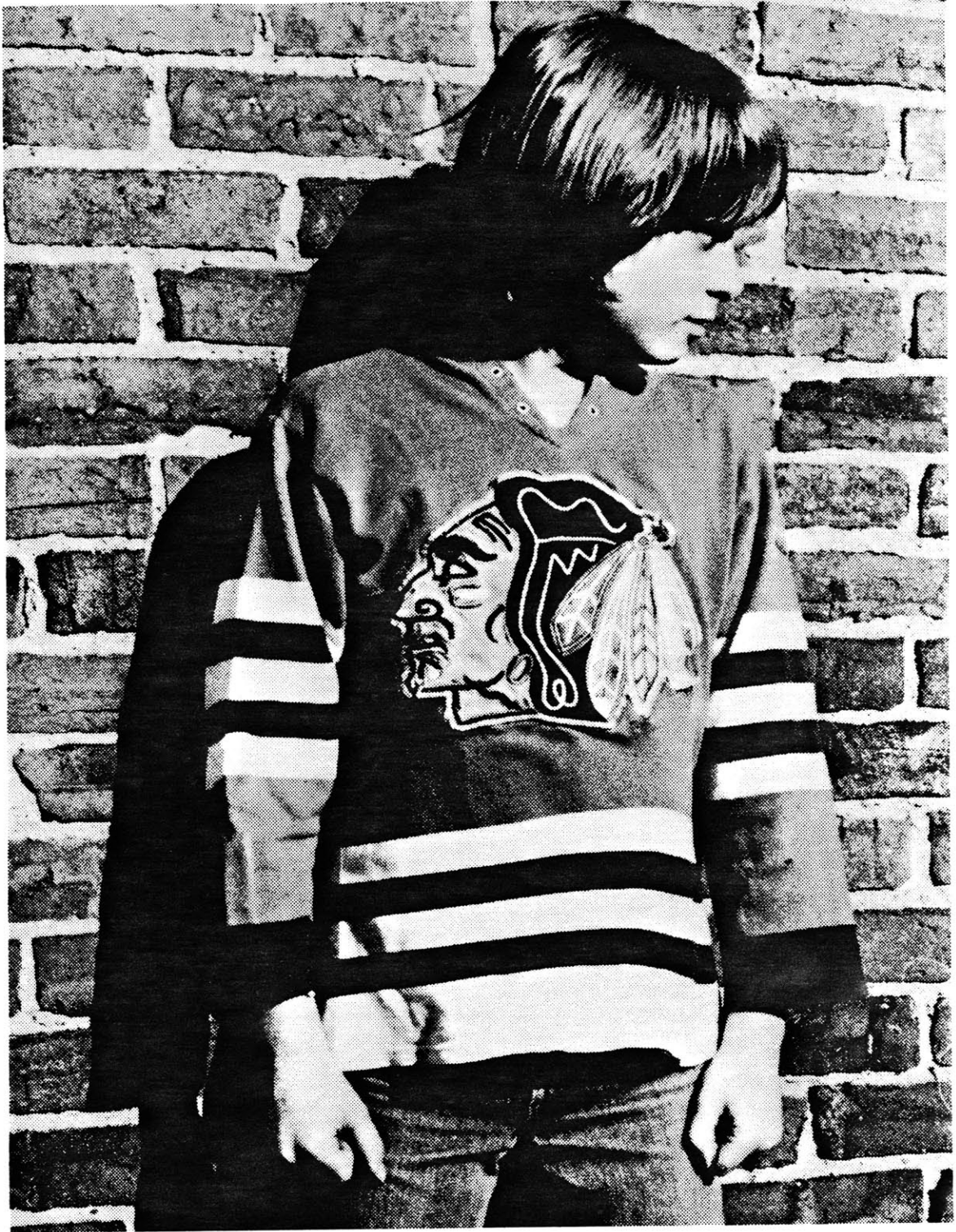


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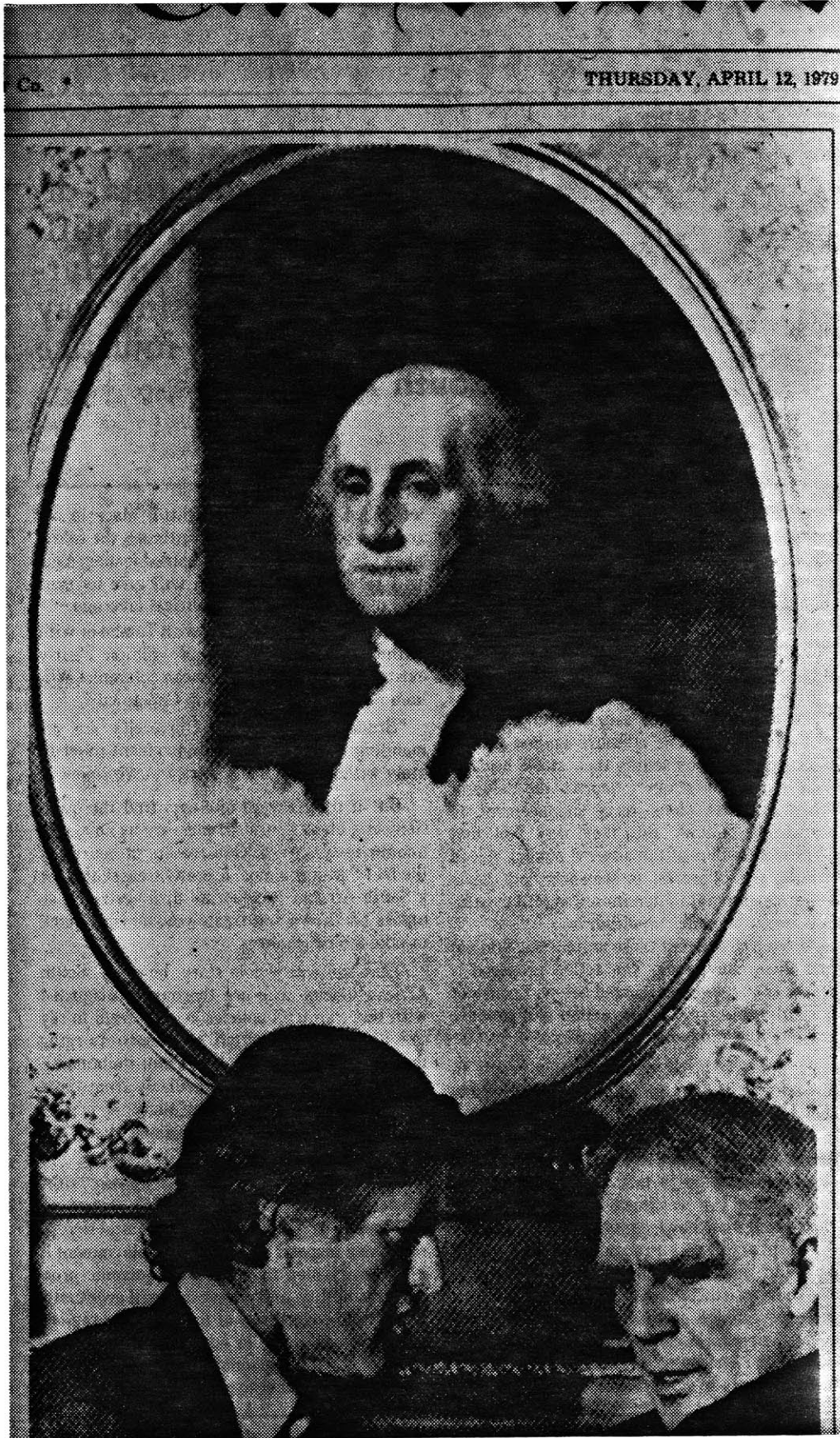




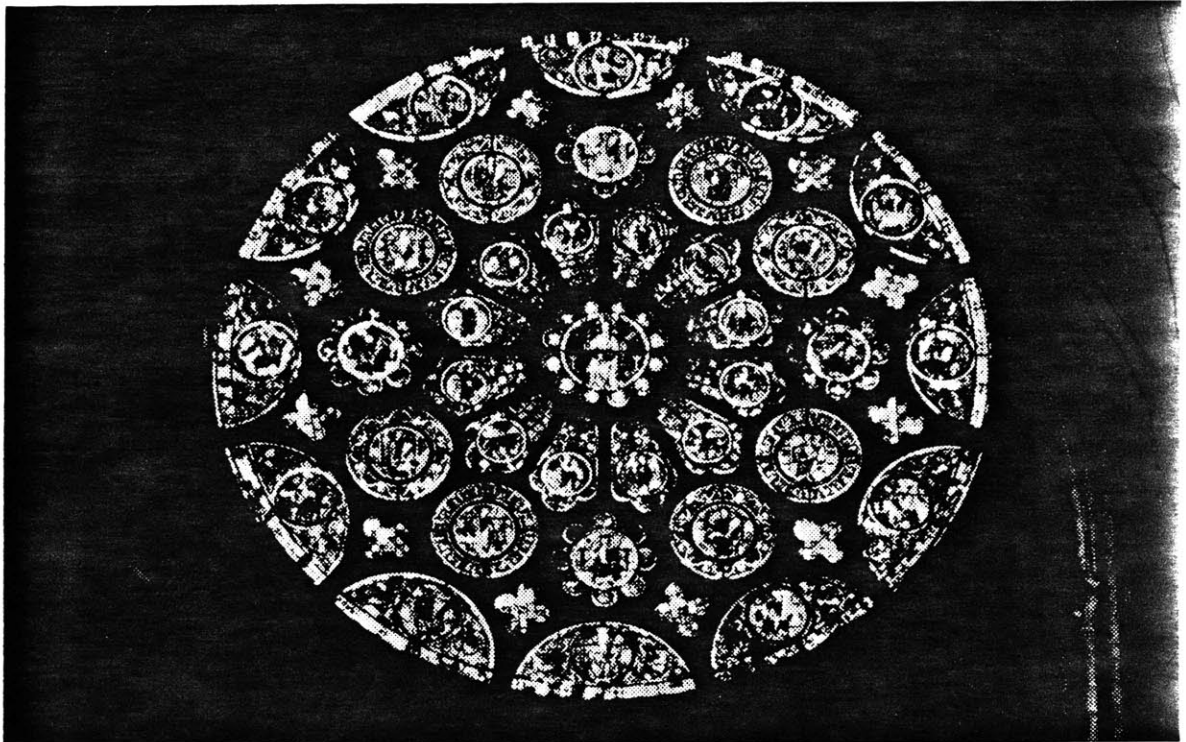
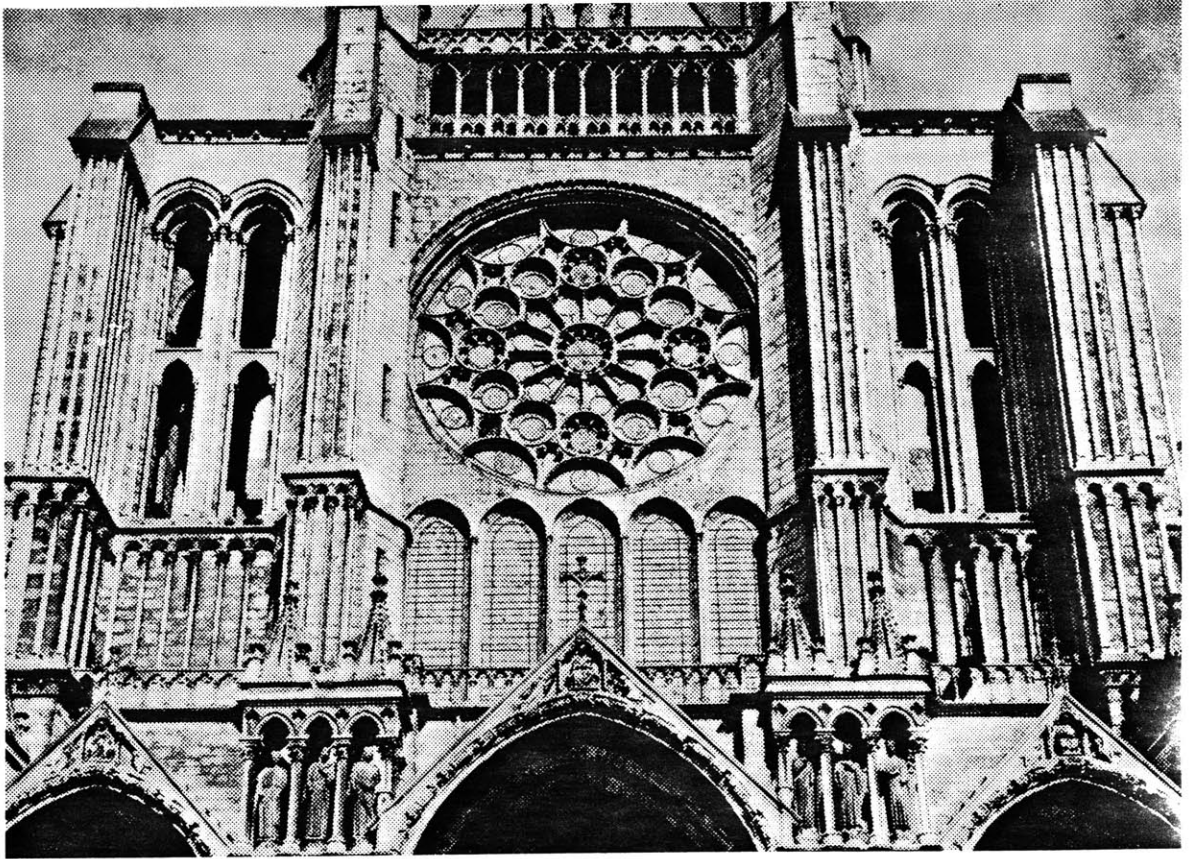




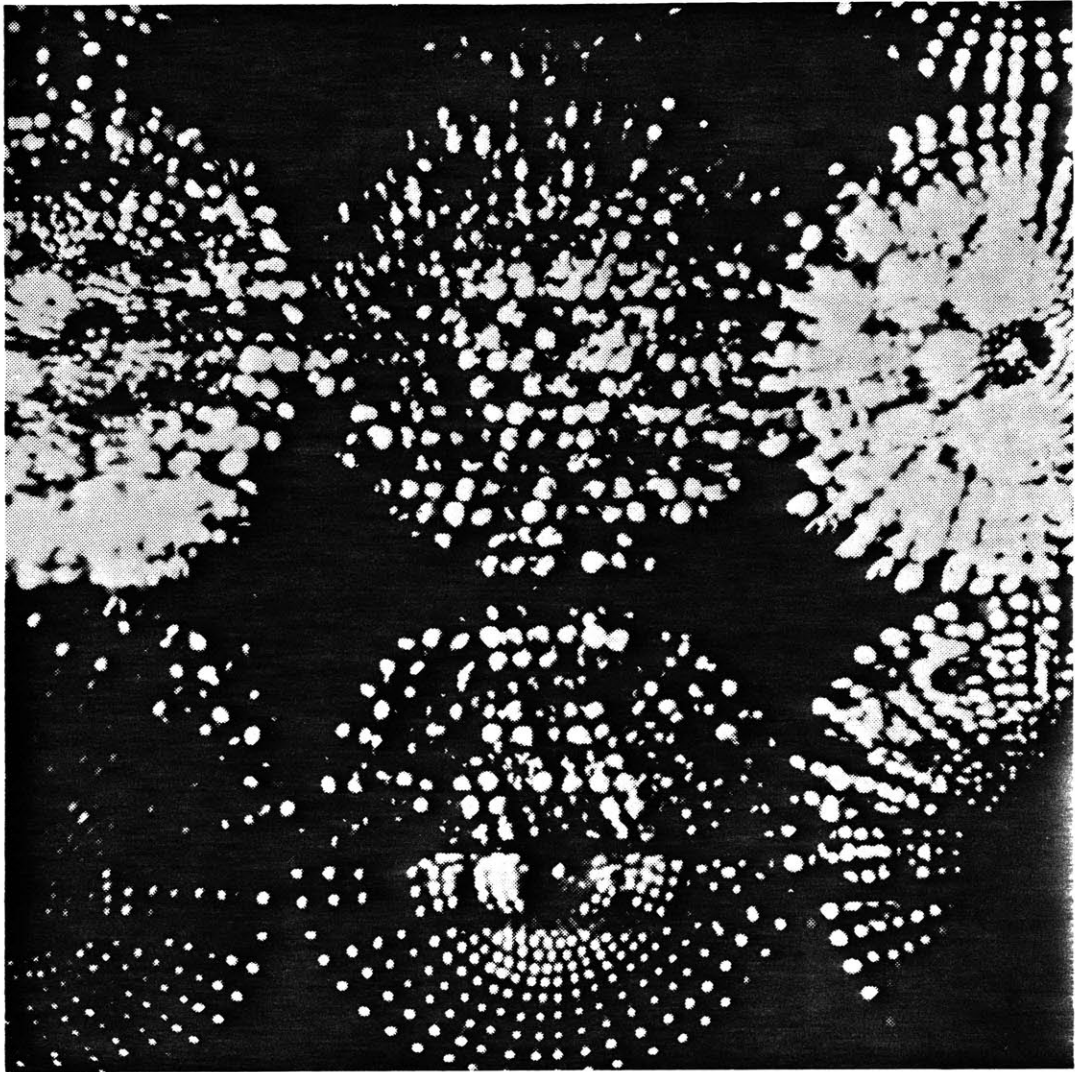




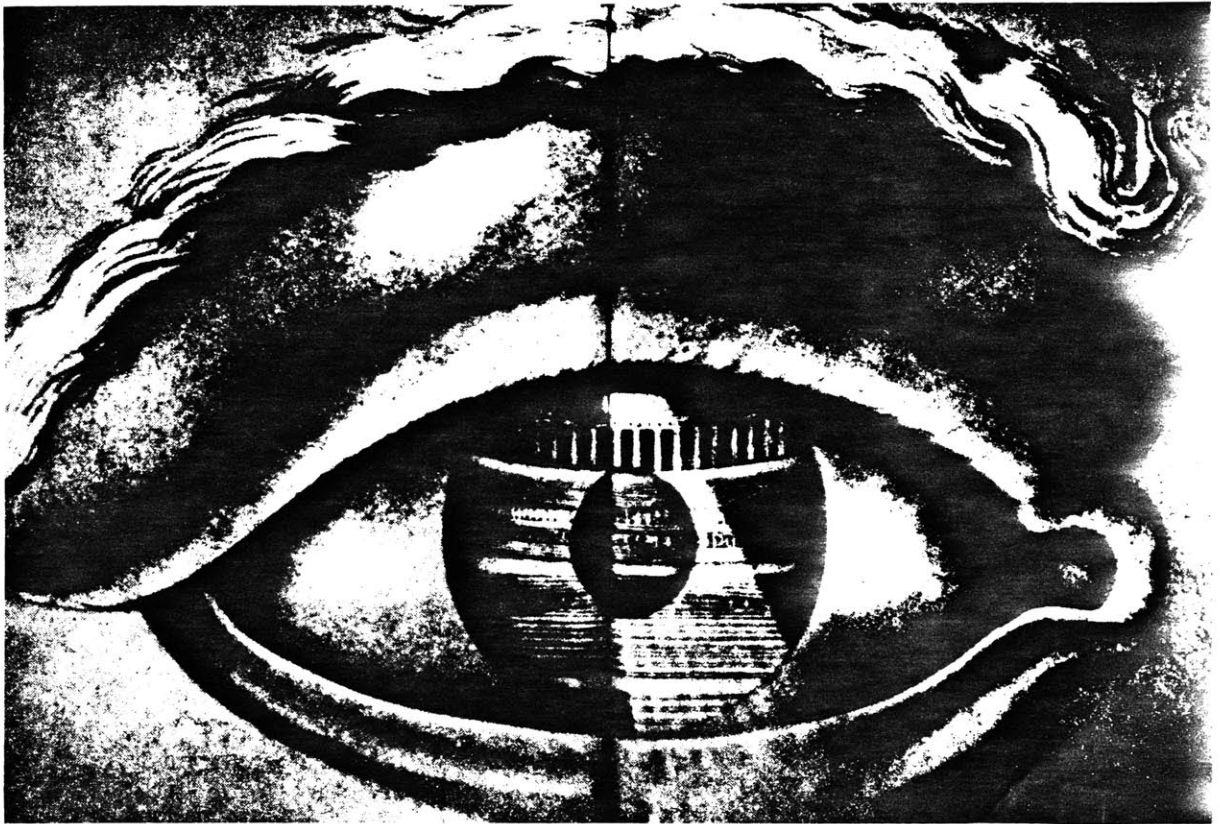
LIGHT



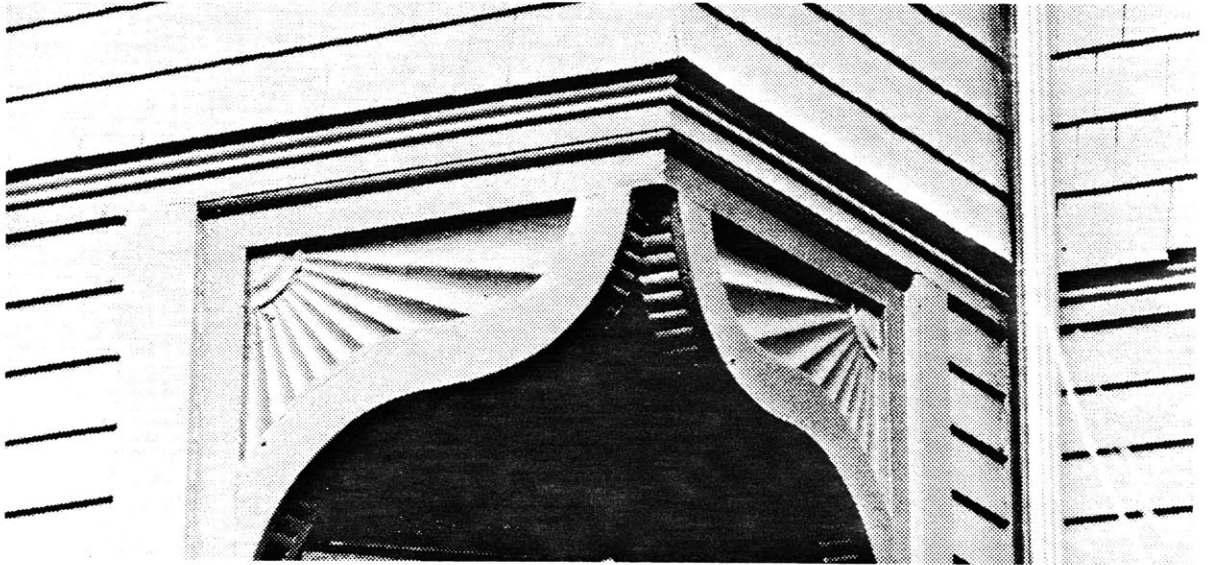




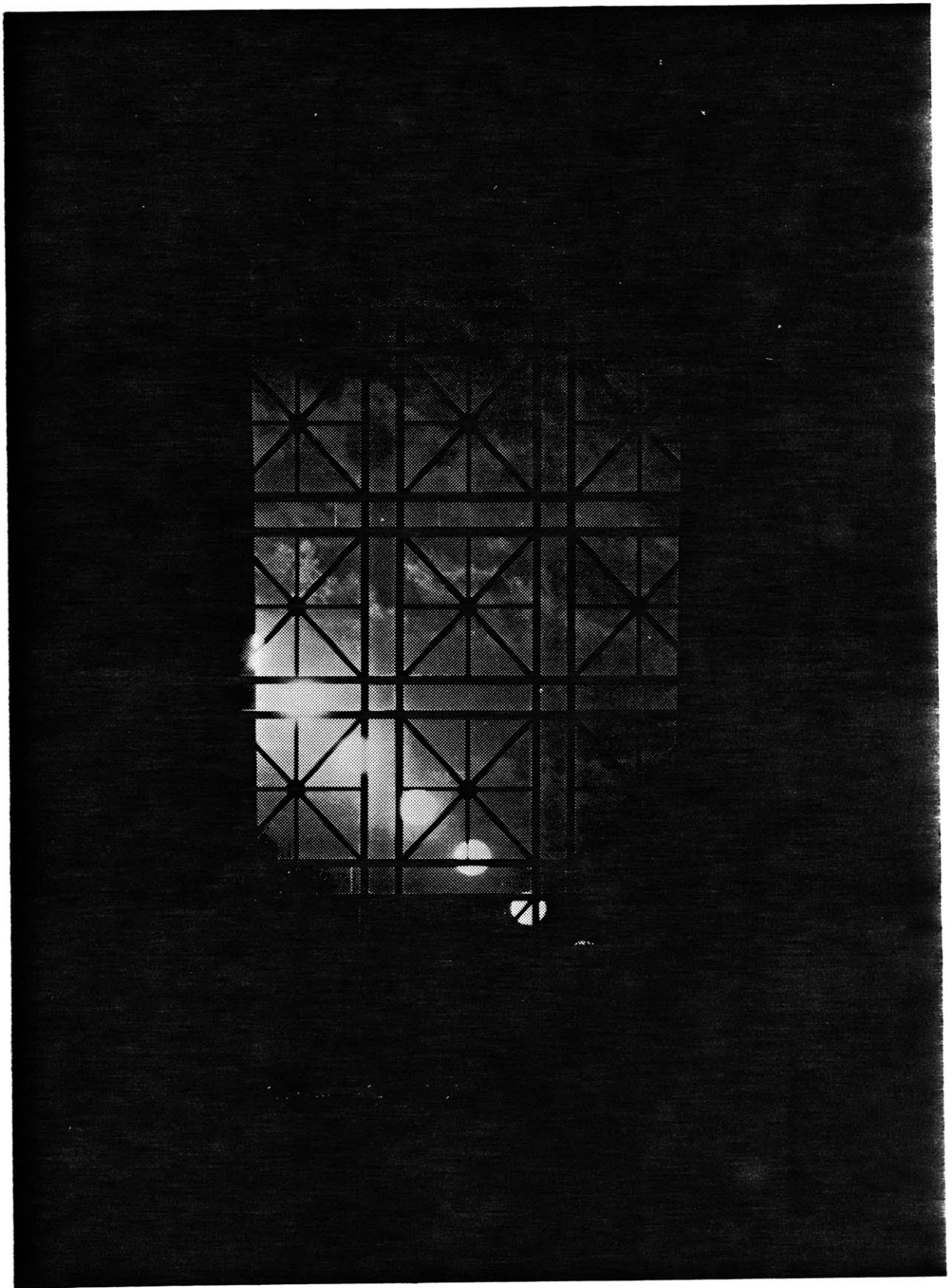












CONTE DU GRAAL

Et leans avait luminaire
Si grant con l'an le porrait faire
De chandoiles a un ostel.
Que qu'il parloient d'un et d'el,
Uns vallez d'une chambre vint
Qui une blanche lance tint
Ampoignee par le mi lieu.
Si passa par endroit le feu
Et cil qui al feu se seoient,
Et tuit cil de leans veoient
La lance blanche et le fer blanc.

And, within, the hall was bright
As any hall could be with light
Of candles in a house at night.
So, while of this and that they talked,
A squire from a chamber walked,
Bearing a white lance in his hand,
Grasped by the middle, like a wand;
And, as he passed the chimney wide,
Those seated by the fireside,
And all the others, caught a glance
Of the white steel and the white lance.

Christian of Troyes, 1175



"When everything that is called art was well and truly riddled with rheumatism, the photographer lit the thousands of candles whose power is contained in his flame, and the sensitive paper absorbed by degrees the blackness cut out of some ordinary object. He had invented a fresh and tender flash of lightning."¹⁵

Tristan Tzara 1922

"The Small Beginning"

"There exists, by now an enormous store of material, the accumulations of centuries of imagery; we have machines at our disposal which permit us to capture the most insignificant, most fleeting image.

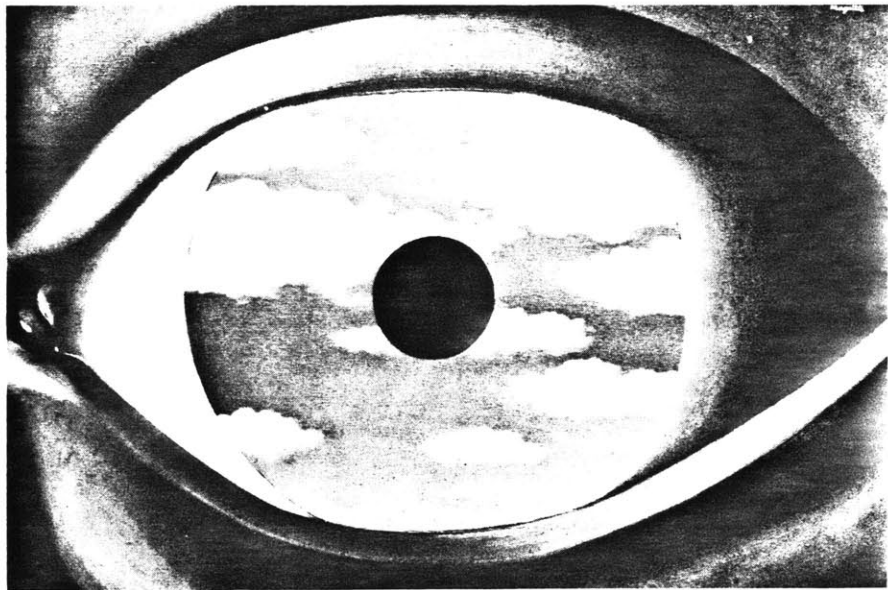
A camera counts for more than a paintbrush.

Each day, science makes some fresh discovery; already, the laser beam has introduced the principle that something may be real yet intangible. We can begin to get light headed. The magnet, the motor, the neon tube are just a small beginning."¹⁶

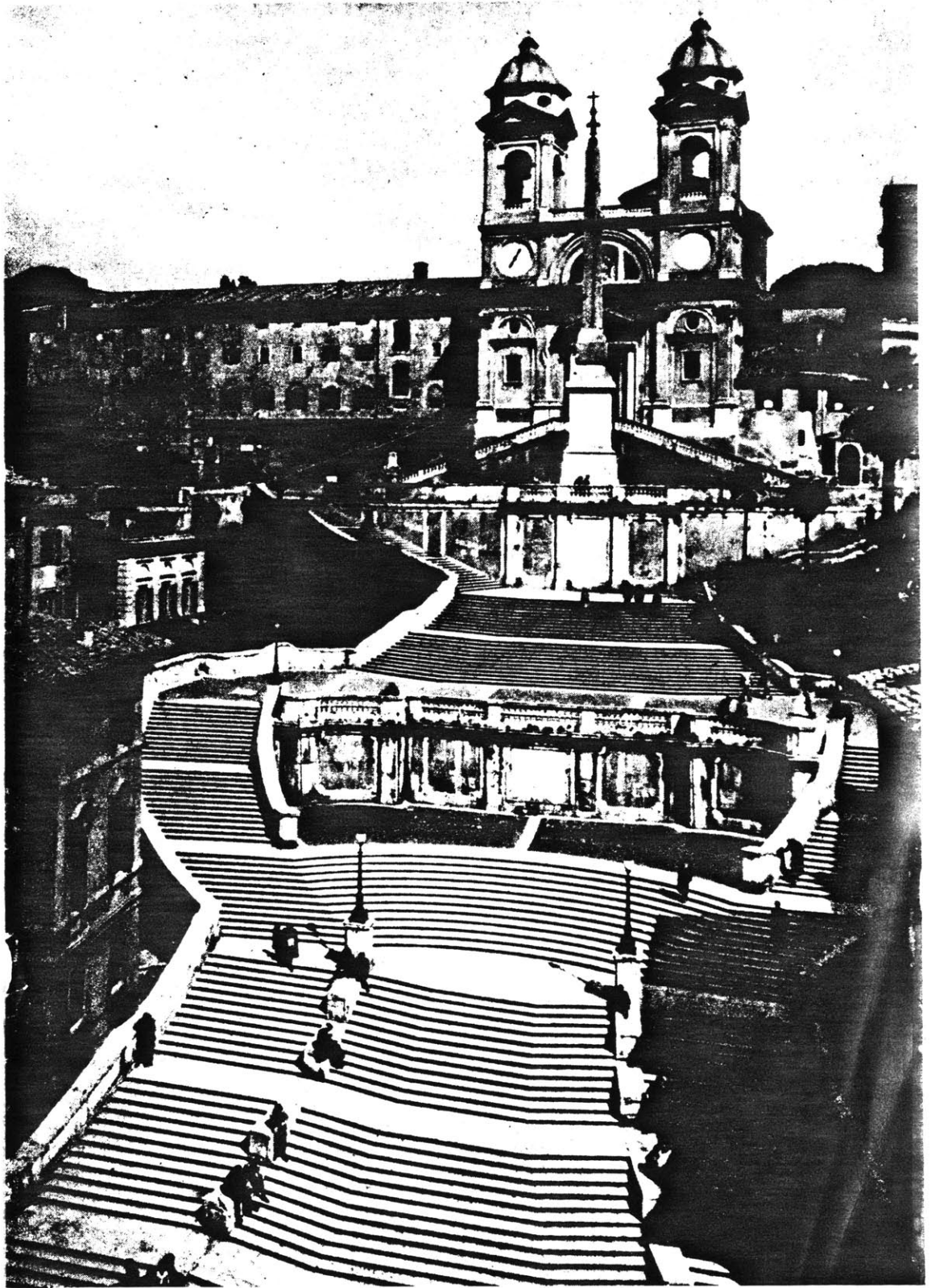
Pol Bury

"We make a map of our experience patterns,
an inner model of the outer world, and we use this
to organize our lives. Our natural "environment"
- whatever impinges on us from outside - becomes
our human "landscape" - a segment of nature
fathomed by us and made our home."

Gyorgy Kepes¹⁷



THE COLLAPSE OF THE BAROQUE WORLD



"Modern architecture is a product of Western civilization. It began to take shape during the later eighteenth century, with the democratic and industrial revolutions that formed the modern age. Like all architecture, it has attempted to create a special environment for human life and to image the thoughts and actions of human beings as they have wished to believe themselves to be. In these two fundamental attempts the modern man has faced psychic difficulties unparalleled in the West since the time of the breakup of Rome. The old, Christian, preindustrial, predemocratic way of life has progressively broken away around him so that he has come to stand in a place no human beings have ever quite occupied before. He has become at once a tiny atom in a vast sea of humanity and an individual who recognizes himself as being utterly alone. He has therefore vacillated between a frantic desire to find something comprehensible to belong to and an equally consuming passion to express his own individuality and to act on his own. Modern architecture has mirrored the tensions of this state of mind and has itself embodied the character of the age that produced them. It has acted as much more than a simple reflection of its society. Like all art, it has revealed some of the basic truths of the human condition and, again like all art, has played a part in changing and reforming that condition

itself. From its first beginnings it has shown us to ourselves as modern men and told us what we are and want to be.

"The 'we' though dangerous methodologically for the historian, is necessary in speaking of modern architecture, as is the present tense, because it is an image we can recognize as ourselves that we must seek as we attempt to define the beginning of an art that is our own. First, we might travel backward in time until we reach a chronological point where we can no longer identify the architecture as an image of the modern world. This point occurs, not at nineteen or even eighteen, hundred, but about the middle of the eighteenth century. For example, the Spanish Stairs in Rome, of 1721-1725, embody the character of the Baroque, not the Modern, age. They create an active but totally controlled environment within an ancient European city. They are spacious and swelling and present an open invitation to the drama of movement. At the same time, their spaces, which seem so free, are in fact symmetrically focused by the solid shaft of the obelisk above them, behind which the church towers themselves can move for the pedestrian's eye. This may roughly be taken for an image of the Late Baroque architecture as a whole. All movement is around fixed points. It is a union of the opposites of order and

freedom. The order is absolutely firm, but against it an illusion of freedom is played. Secondly, for all the sculptural plasticity and humanistic imagery of the solids, it is in fact the space that governs the design, and the solids are entirely at the service of its dramatization. It is therefore an architecture that is intended to enclose and shelter human beings in a psychic sense, to order them absolutely so that they can always find a known conclusion at the end of any journey, but finally to let them play at freedom and action all the while."¹⁸

With the collapse of the Baroque world "Men became small in a threatening environment of terrible masses, and that vertical element, the column, against which they had been accustomed to test their size and uprightness, now disappeared. It is already the end of the old, humanist, man-centered world with its fixed values - and the beginning of the mass age of modern history, with its huge environments and rushing continuities."¹⁹

Faces
The Stairway Seven Project
in
Environmental Kodaliths



The most important considerations in the Stairway Seven project at M.I.T. were -

- 1 - the shape of the architectural space
- 2 - the traffic patterns of that space
- 3 - who were the people using the space
- 4 - the quality of environmental light

The architectural space itself is high and wide and generally not unpleasant except for its blankness. The people who most often use the space are of course students ascending and descending; the quality of light I found most interesting.

There is a very large window made up of opaque, rippled glass blocks, each a foot square, combining nine across and fourteen high to an area of one hundred twenty-six feet. Each step past or toward this glass produces a very subtle change in its pattern, and the intensity of this quality depends upon the existent environmental light. The ever-changing perceptual effects caused by this light and the people who used this space were my prime considerations.

Kodalith is another word for copy film - large or small sheets of film that is generally used in its positive form (after being exposed to a negative) to transmit typographical or visual information to a plate for reproductive printing on paper. My interests lie solely in

the transmission of visual information from a thirty-five millimeter negative to the kodalith, and its environmental context.

I chose at random, and with their permission, ninety people who happened to be using that stairway at various times throughout the day, and took their photographs. Their human participation in an otherwise totally impersonal space, combined with the existing quality of light, was my way of communicating what already existed within the space.

Ninety foot-square portraits set within the grid of one hundred and twenty-six glass blocks was the outcome of this project that I took great pleasure in doing.

The Stairway Seven project augmented further research in the technology involved in the development of kodalith itself, and posed the question of how far into visible reality I could push the human photographic image contained in a thirty-five millimeter negative.

My experiments with the full figure thus far are life-sized, and the photographs serving to illustrate these studies have been shown in their original environmental context.

I plan to continue to work extensively with environmental kodaliths. This work will involve large groups of people in their environmental context.

























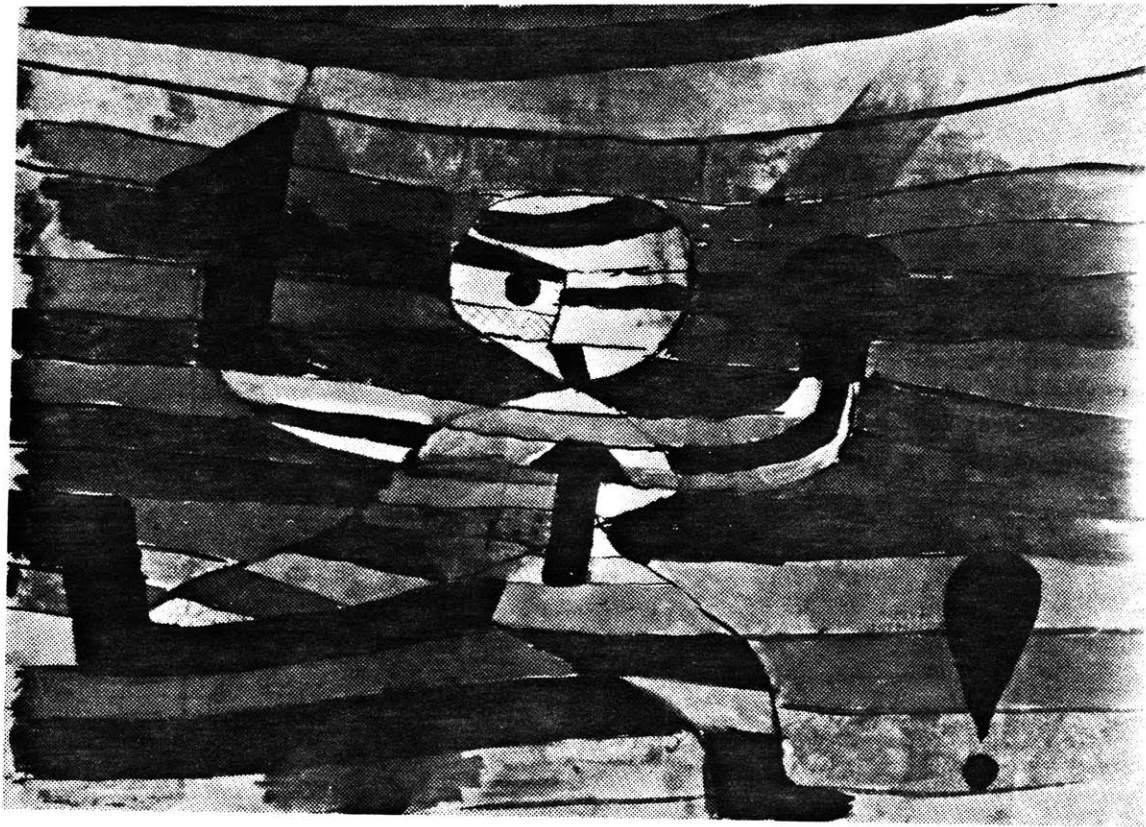






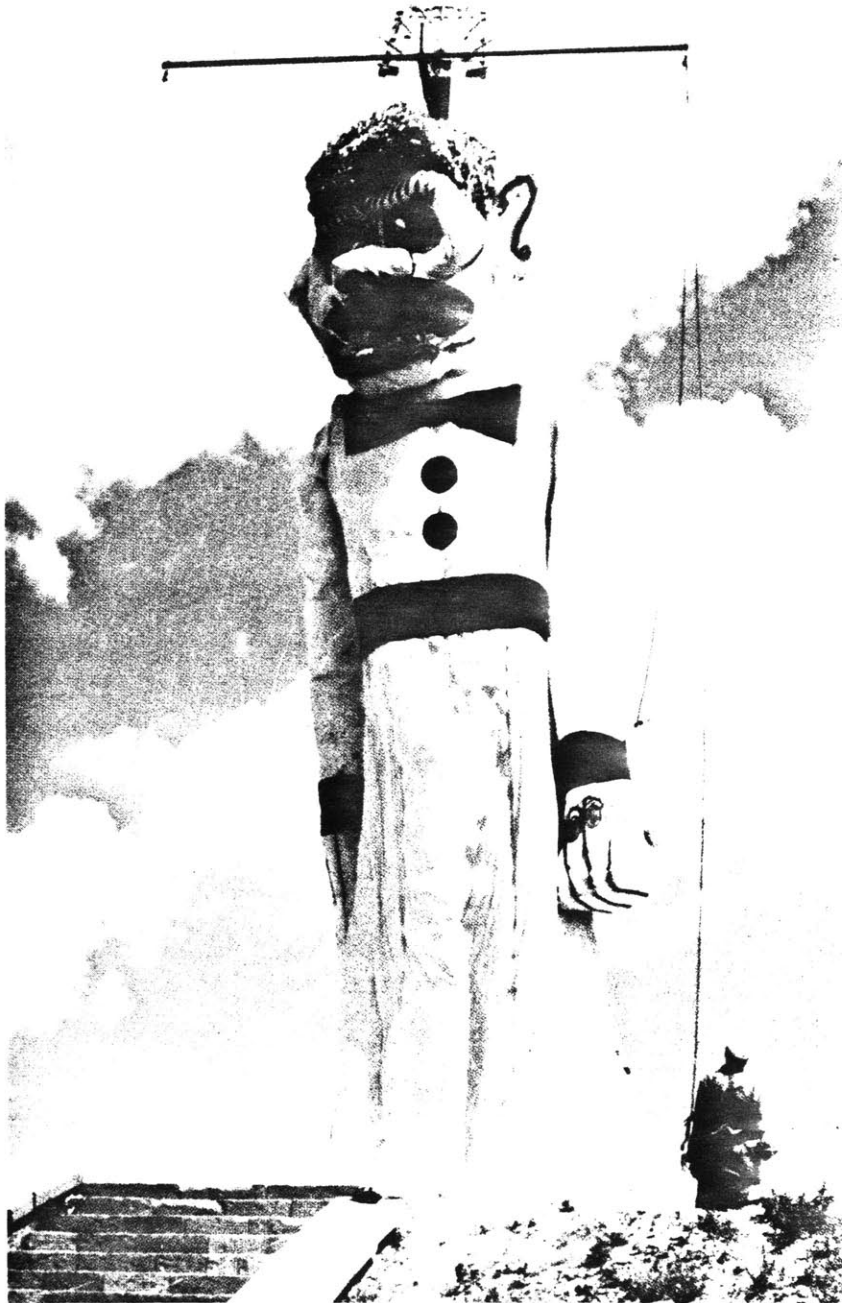
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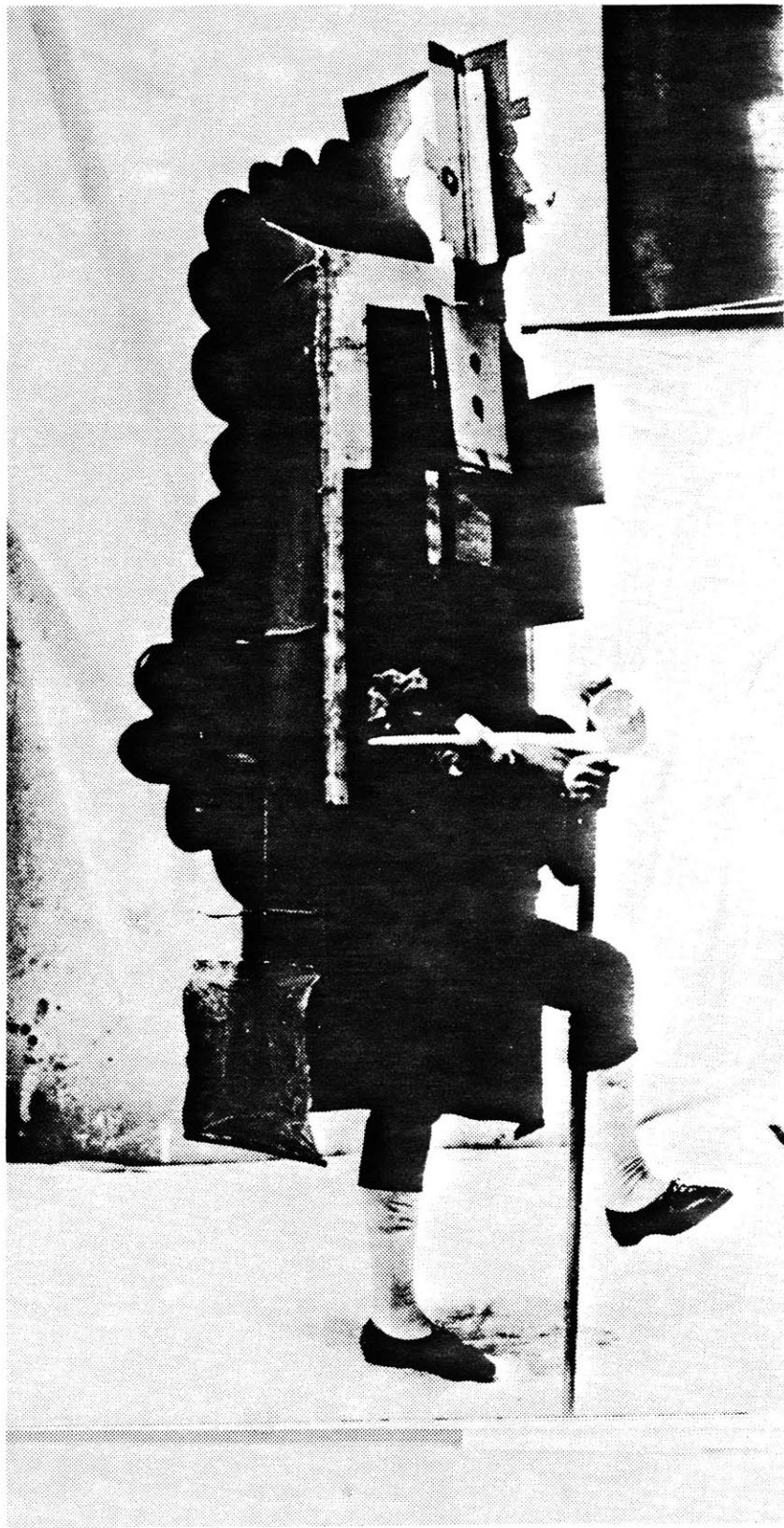




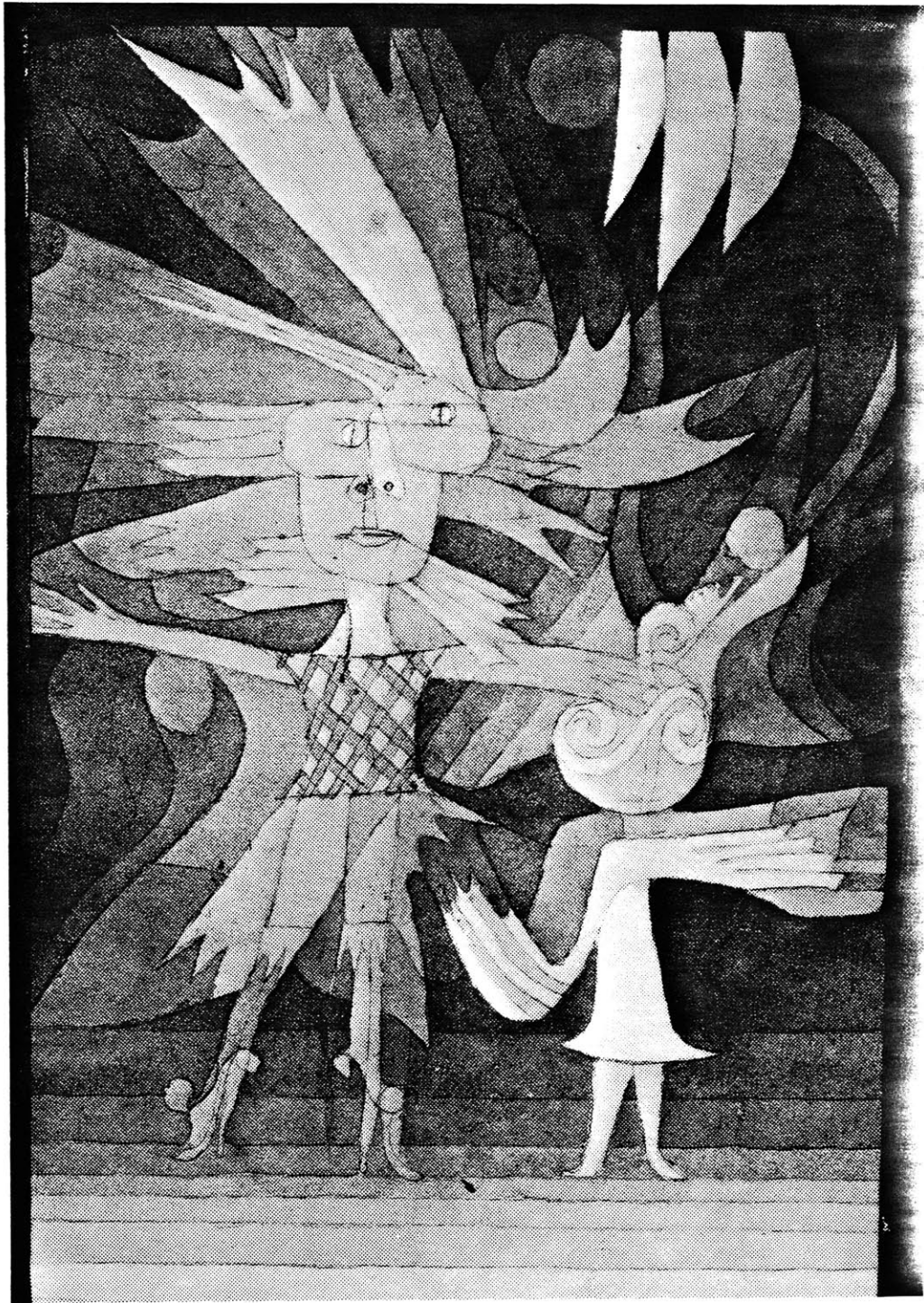


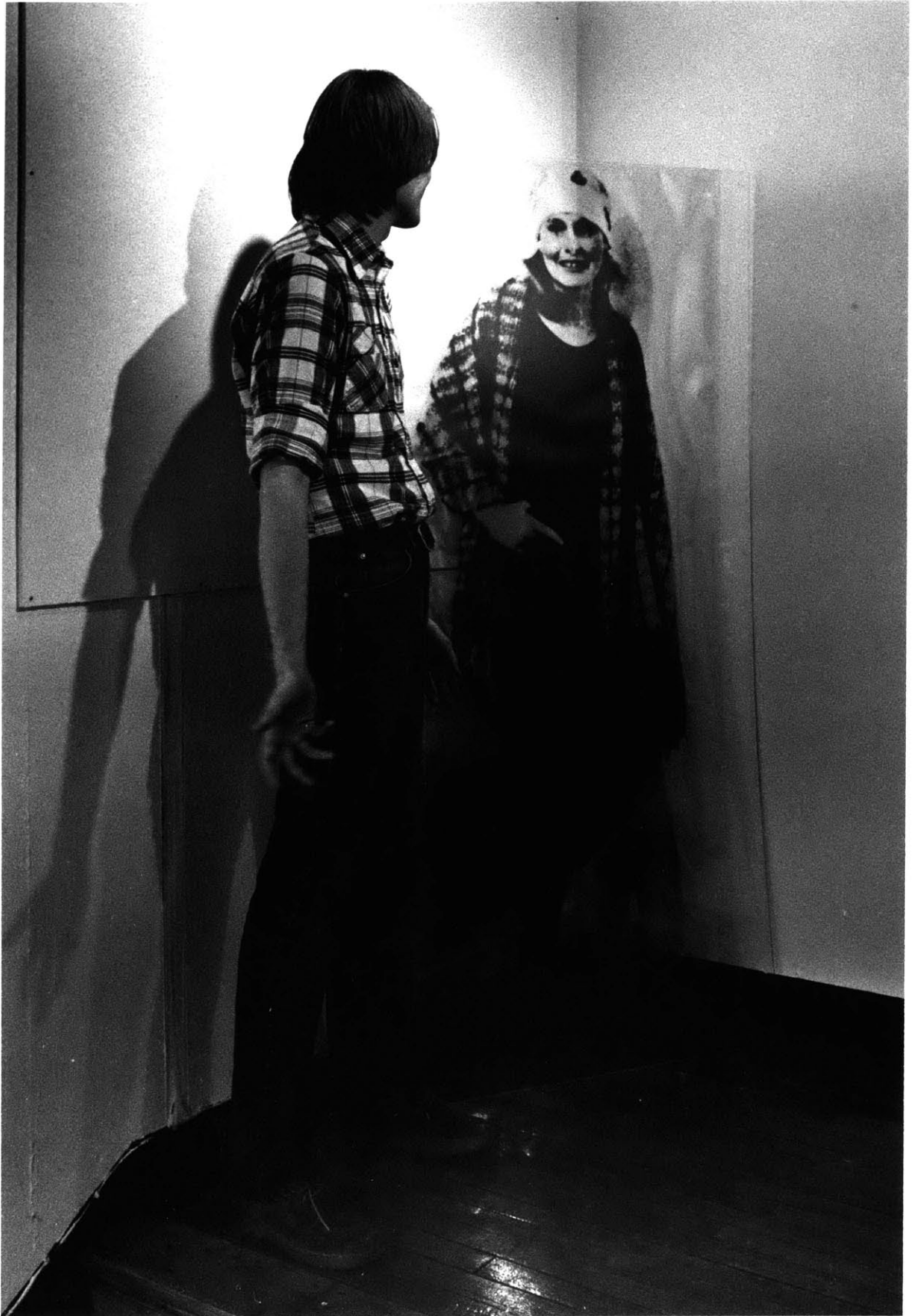






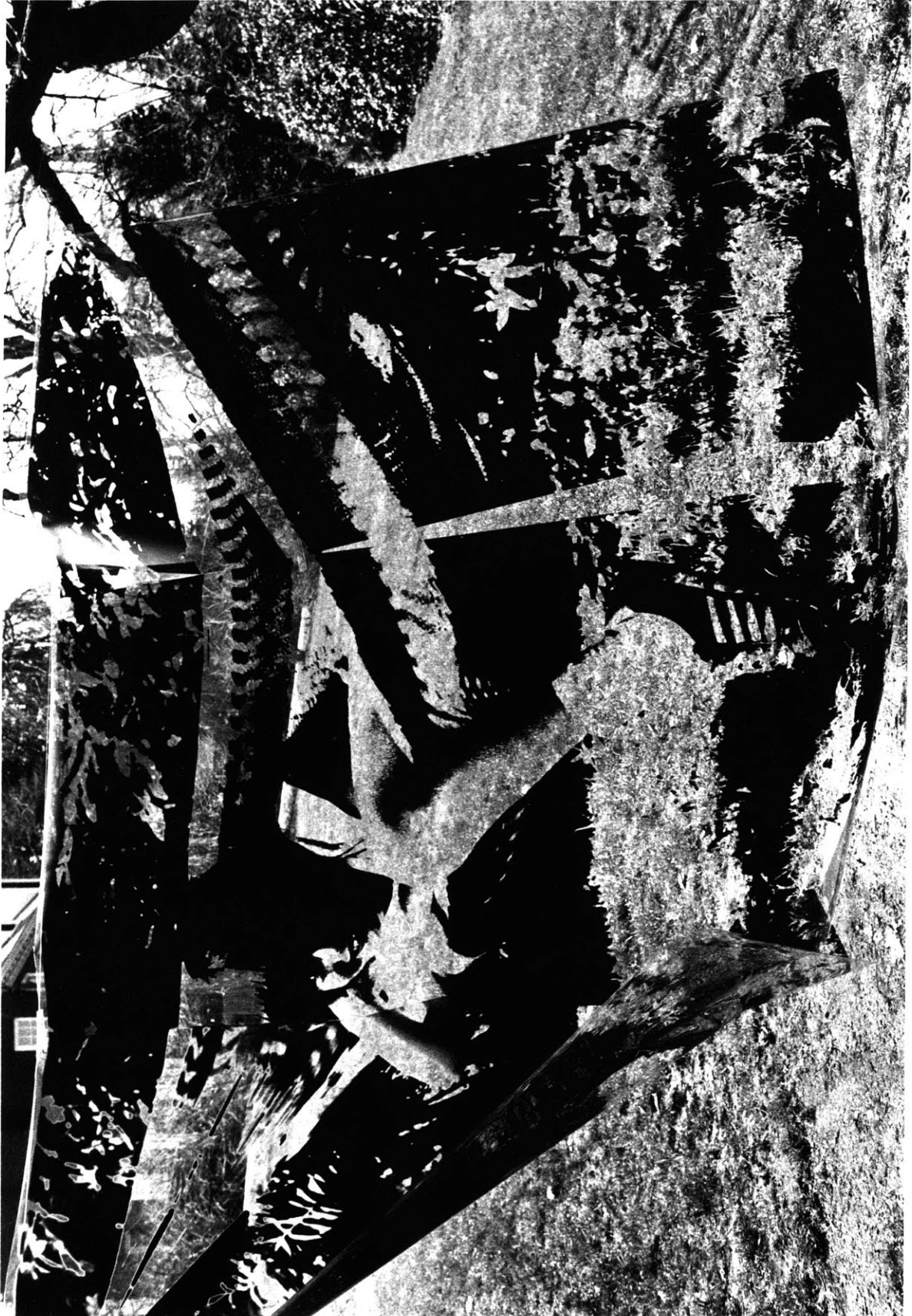




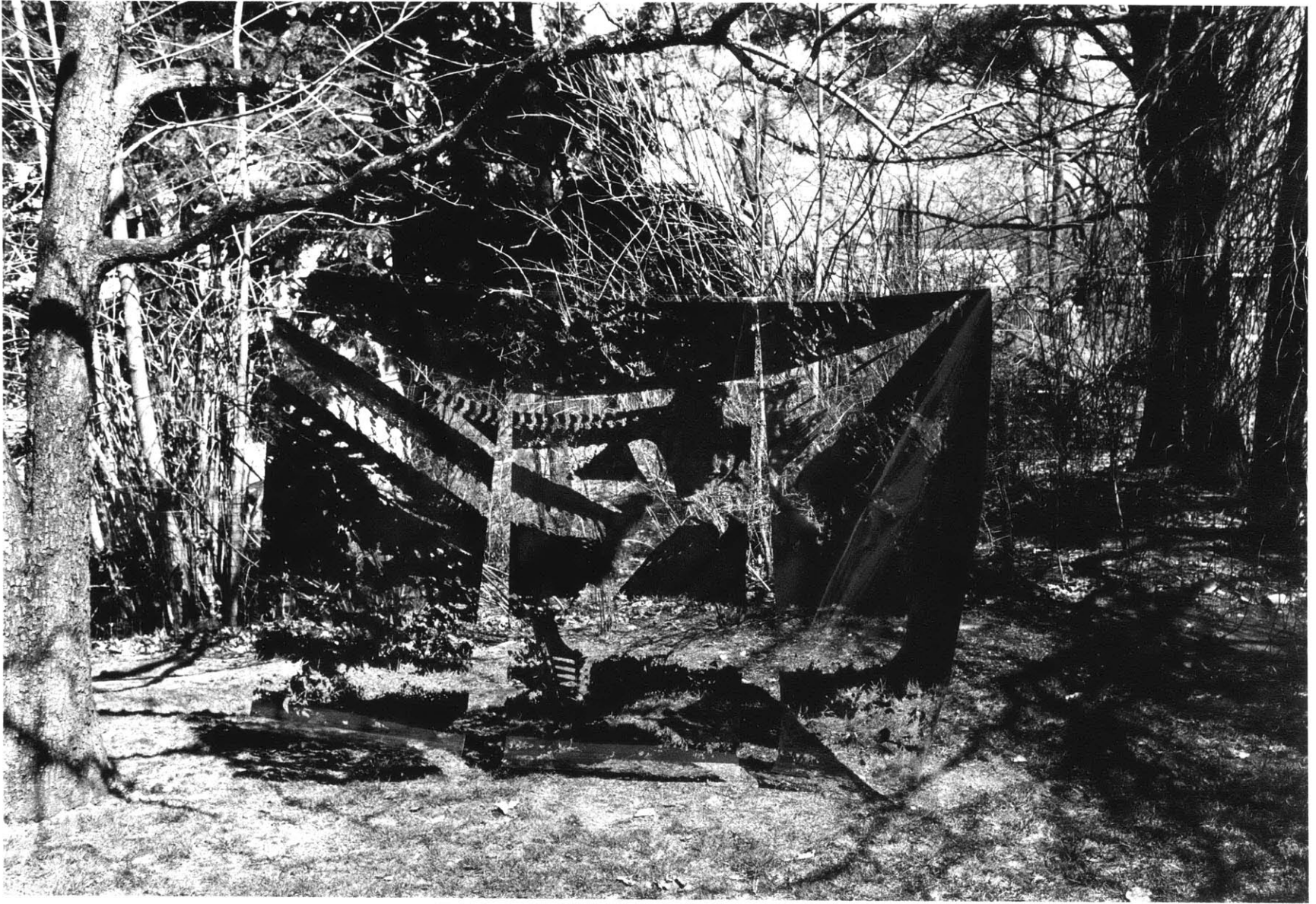






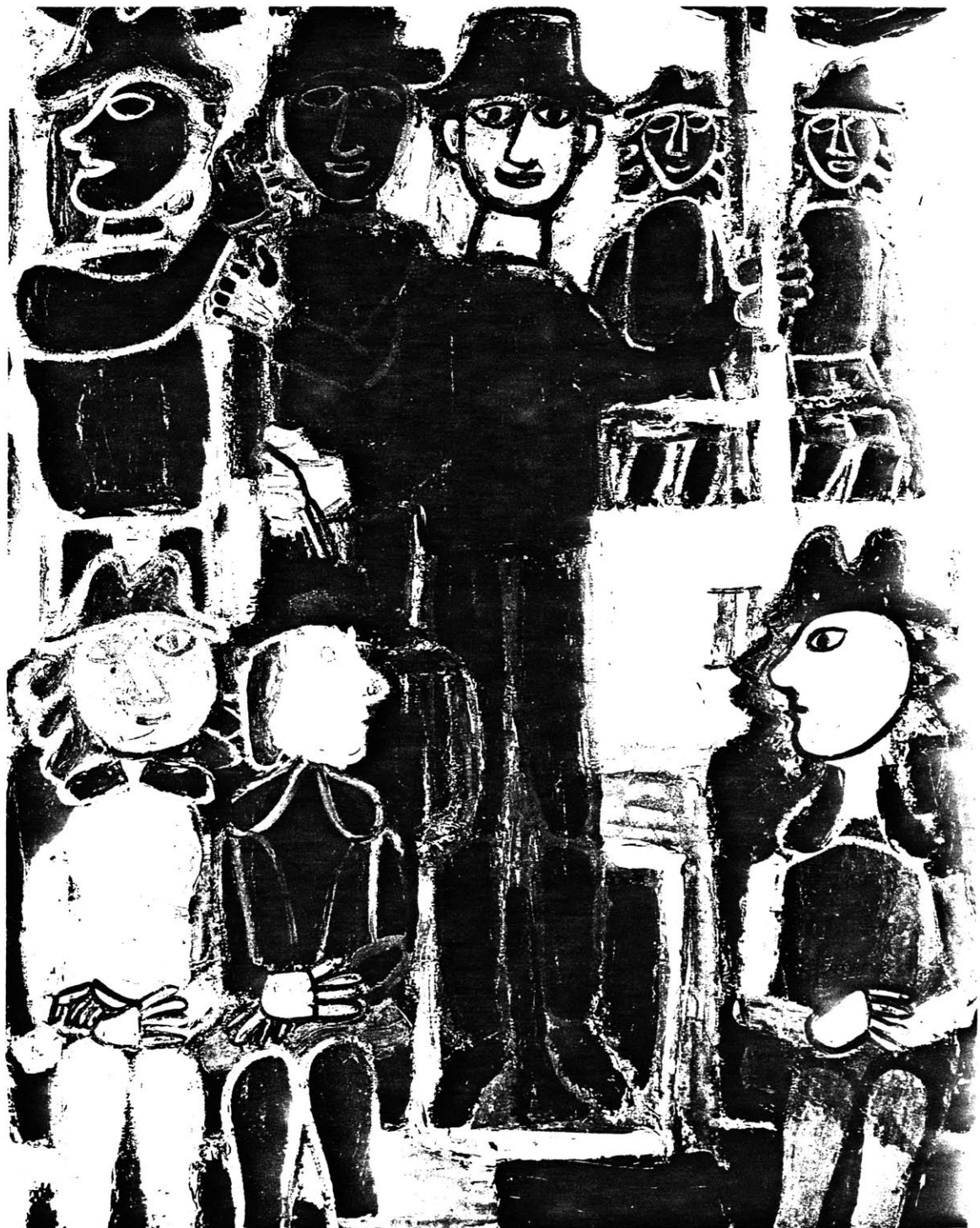












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