

CONCEPTUAL RELATIONS OF ARCHITECTURE, PAINTING, COLOR, AND EDUCATION  
AND THEIR APPLICATION IN AN ELEMENTARY SCHOOL

by  
Jeffrey Allen Wilson

Thesis submitted to the Faculty of the  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of  
MASTER OF ARCHITECTURE

APPROVED:

D.E. Egger/Chair

Donna W. Dunay

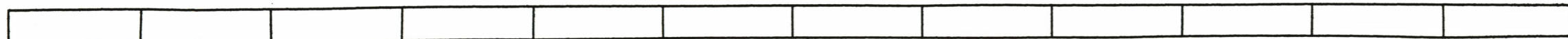
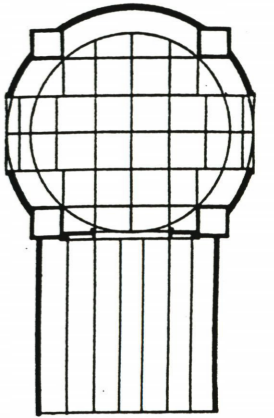
William U. Galloway

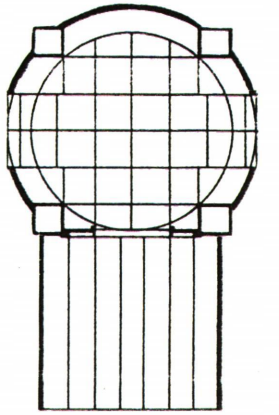
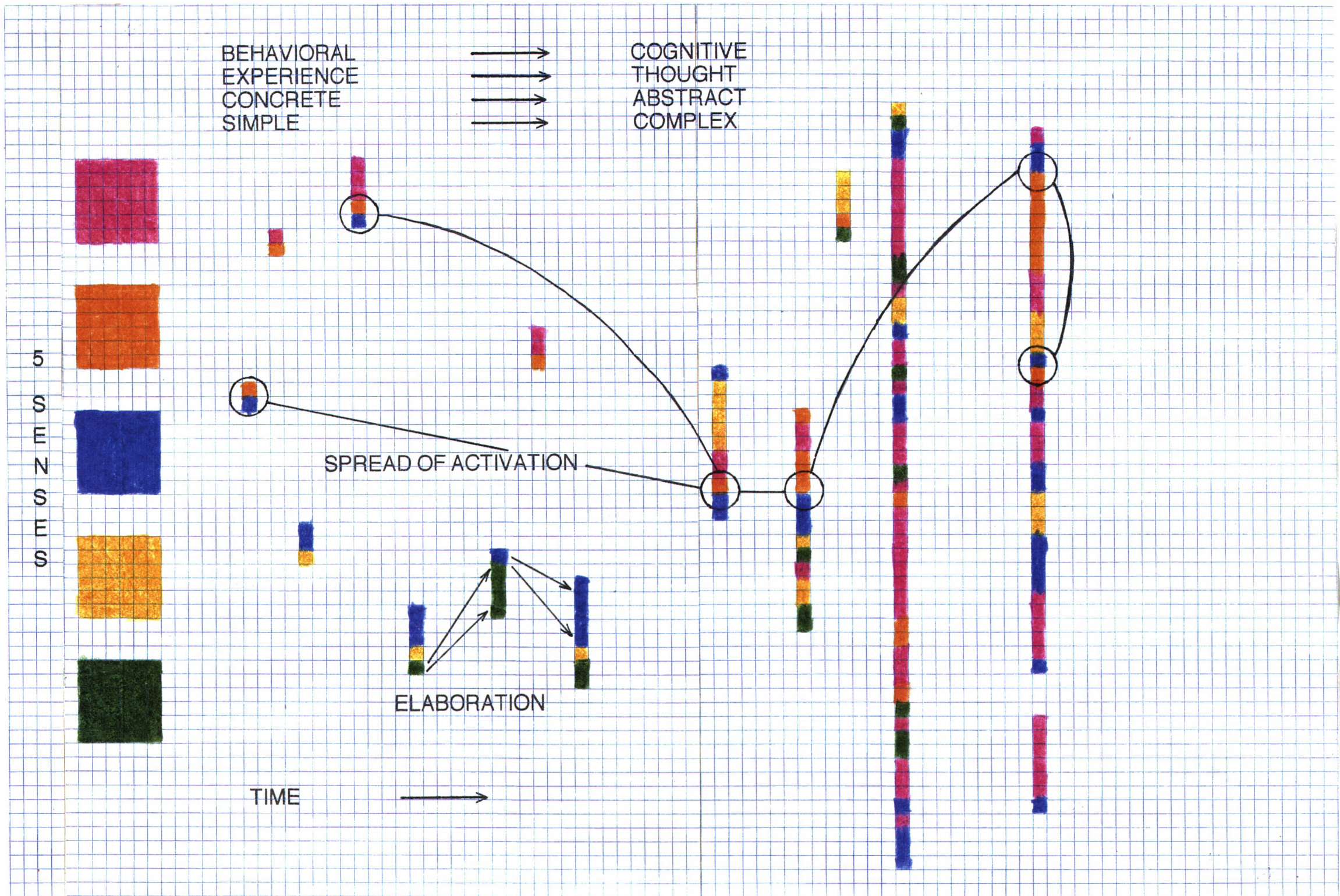
Bailey van Hook

October 7, 1996

Blacksburg, Virginia

**Key words:** Elementary Education, Color, Bruner, Piaget, School



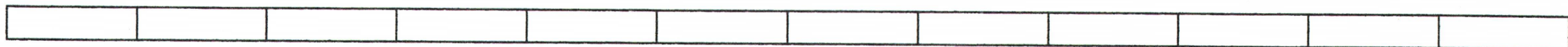


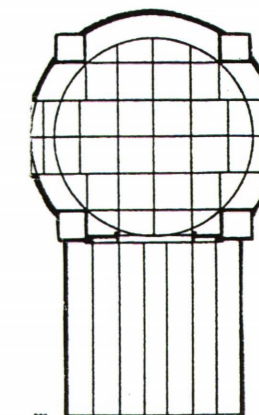
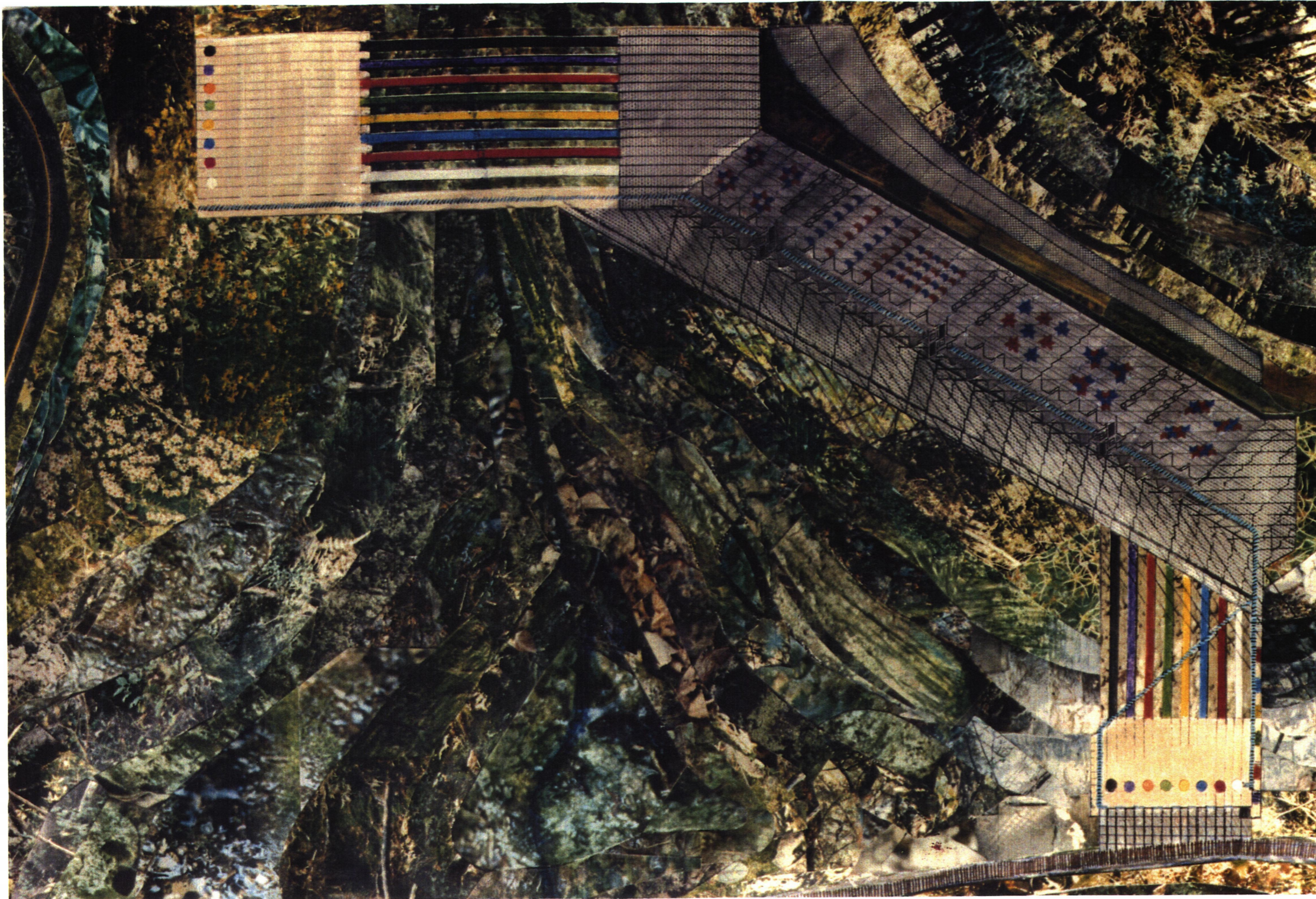
ii

If the theories of Piaget (stages of cognitive development) and Bruner (anything can be taught to anyone as long as it is taught in their language) are combined and applied to an elementary school the resulting conclusion is very quickly hands-on learning. Or, more simply, elementary aged children understand their world through tangible experiences, so teach them through tangible experiences.

A child's early memory code is formed by concrete experiences (combinations of the 5 senses), but these experiences become the building blocks for their later abstract cognitive thought patterns. This theory of education is widely applied from the standpoint of teaching (hands on lessons, manipulatives, etc.), but is a low if not nonexistent priority in constructing the environments in our schools. The experiential aspects of our schools should not only provide for a purely more pleasing environment, but should also allow for strong behavioral imprinting experiences that would result in memory niches -- the foundation for later abstract cognitive thought patterns.

This diagram shows the progression of memory coding through these stages and how the resulting thoughts would be accessed.



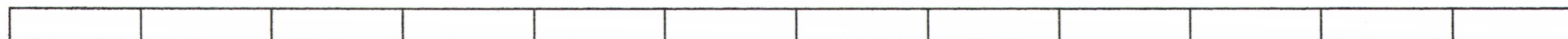


iii

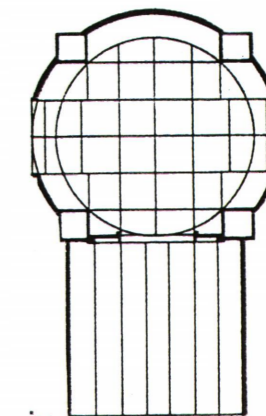
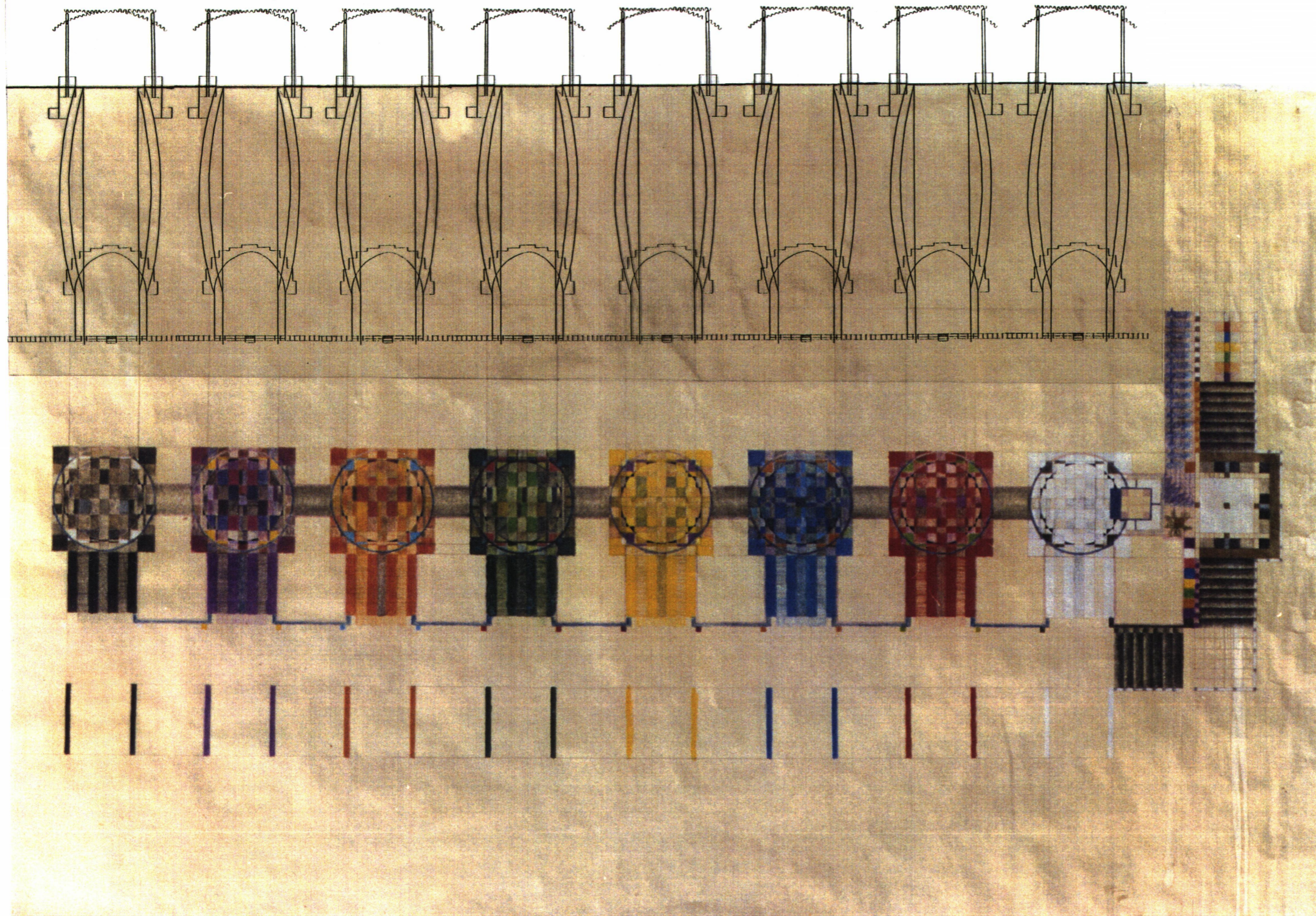
Architecture does not have to be surrounded by nature, but the architect does need to be sensitive to the nature of the site, regardless of the context. Studying the elemental visual syntax of nature and translating these formulations into expressions in paint has helped to develop a sensitivity to abstract compositions in color, line, texture, value, pattern and form. In keeping the knowledge gained on a conceptual level, this skill in abstract composition is applicable to all areas of design. While there is more to design than abstract compositions, the same is true for nature. Hence the return to form and function.

In this particular project nature is an important element of the function of the architecture. In a number of instances the attempt is made to frame nature as part of the architecture, but the pure natural environment is still one of the best classrooms available to a teacher.

As a painter and teacher of art coming to these conclusions, I've looked strongly to Hans Hofmann as a guide, but to Mark Rothko as an inspiration. Both of these painters understood the nature of their medium. Hofmann often sacrificed the spirit of his work in favor of his strong formal language, while Rothko was willing to give up a formal language for pure spiritual affect. I too am willing to sacrifice composition for spiritual (experiential) quality of space, but this opportunity has its beginnings in order.





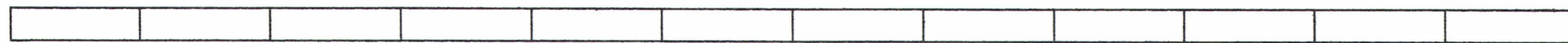


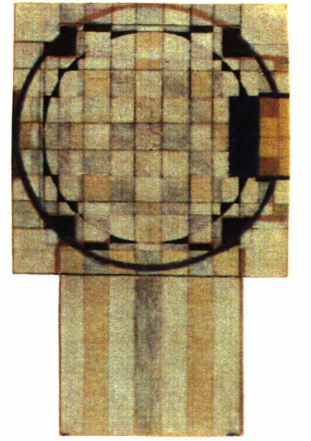
iv

This drawing is a strong ordering factor in the philosophy of the design of the school, the education in the school, and in the organization of this book. The eight rooms and their entrances are part of an existing structure on the site. Originally coke ovens, these spaces have been reconceived as shrines to color. Originally located at the bottom of a mountain, next to a railroad, so that the mined materials could be brought continuously down hill, this path is renewed with a trail of water for people to follow.

These shrines to color are a crossroads for the intentions in the school. Simultaneously a place where students can contemplate a particular color as related to light, water, temperature, texture, space, and emotional weight while at the same time making intellectual links to the lessons of the day. The intention is that these shrines to color would provide the environment for the transition from the concrete memory niches to the later abstract cognitive thought patterns.

The following pages present the abstract memory codes and then examples of where in the architecture they may have been generated from as related to color. The shrines to color provide the sequencing and numbering for the pages.

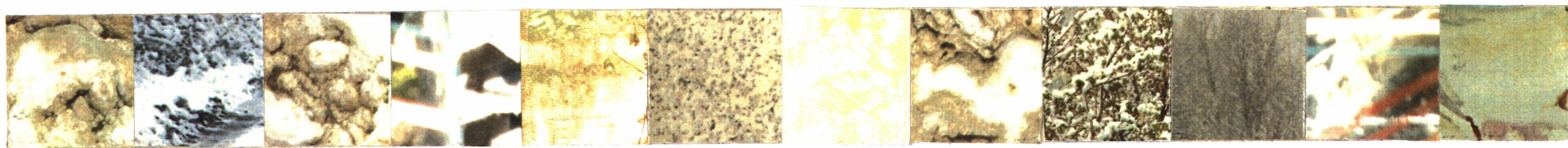




1

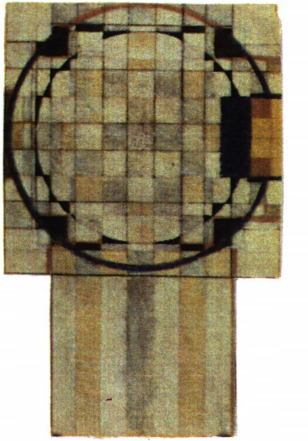
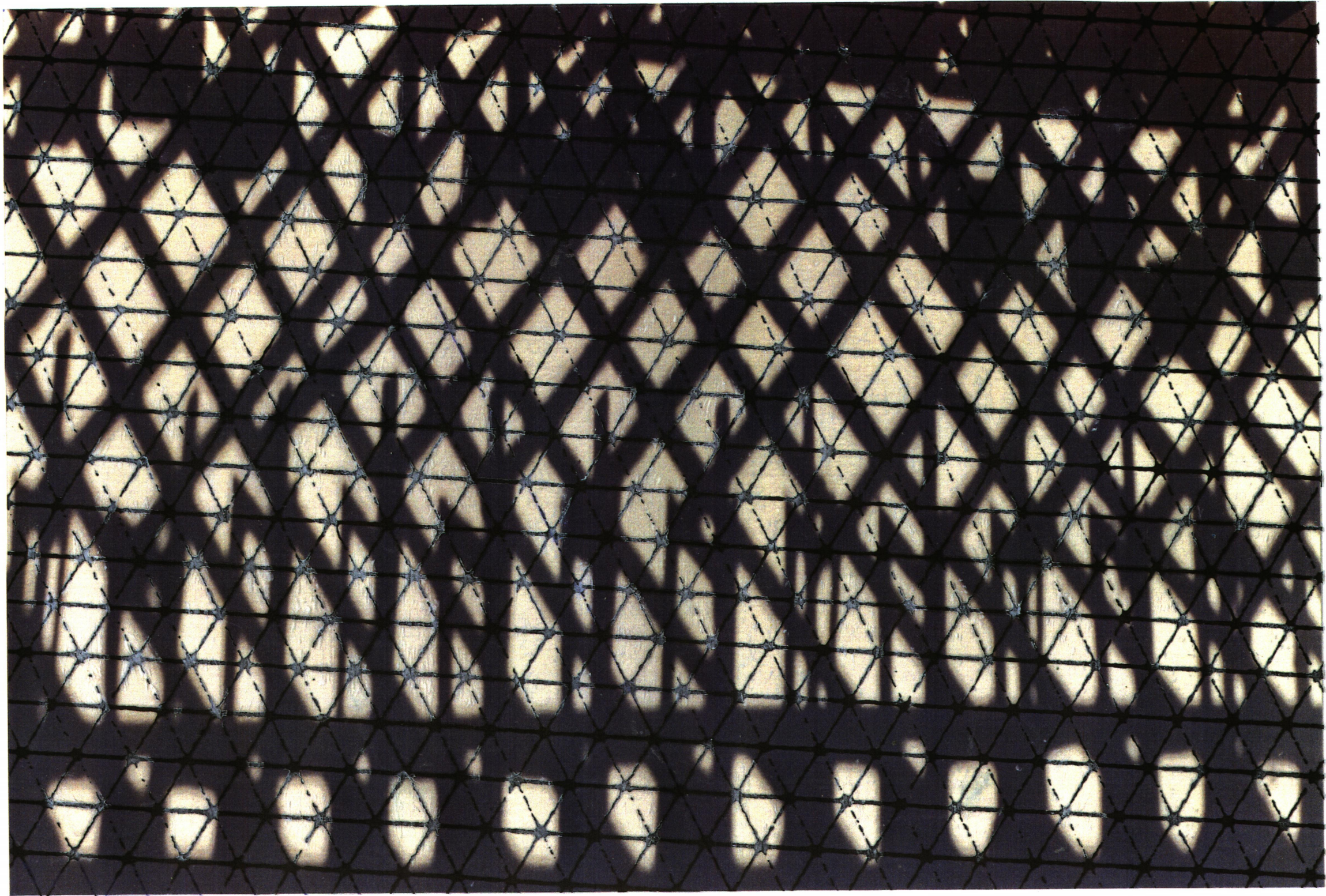
White

Cognitive



Thought

Abstract



1  
1

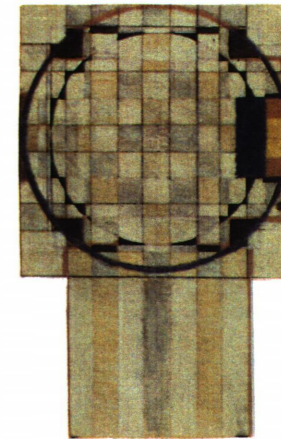
White

Behavioral

Experience

Concrete





2

1

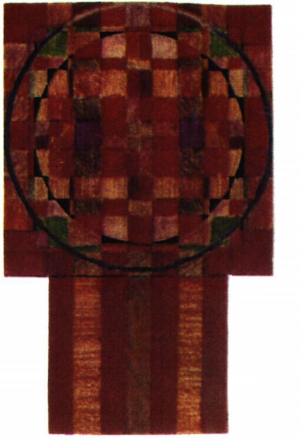
White

Behavioral

Experience

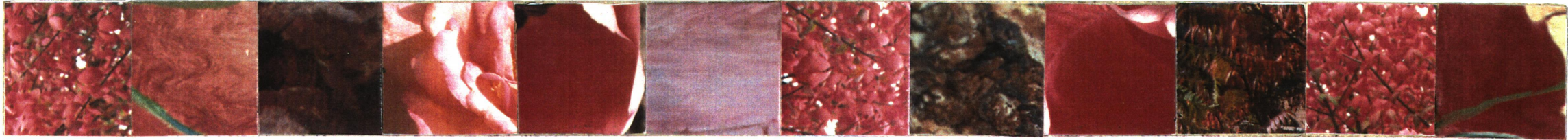
Concrete

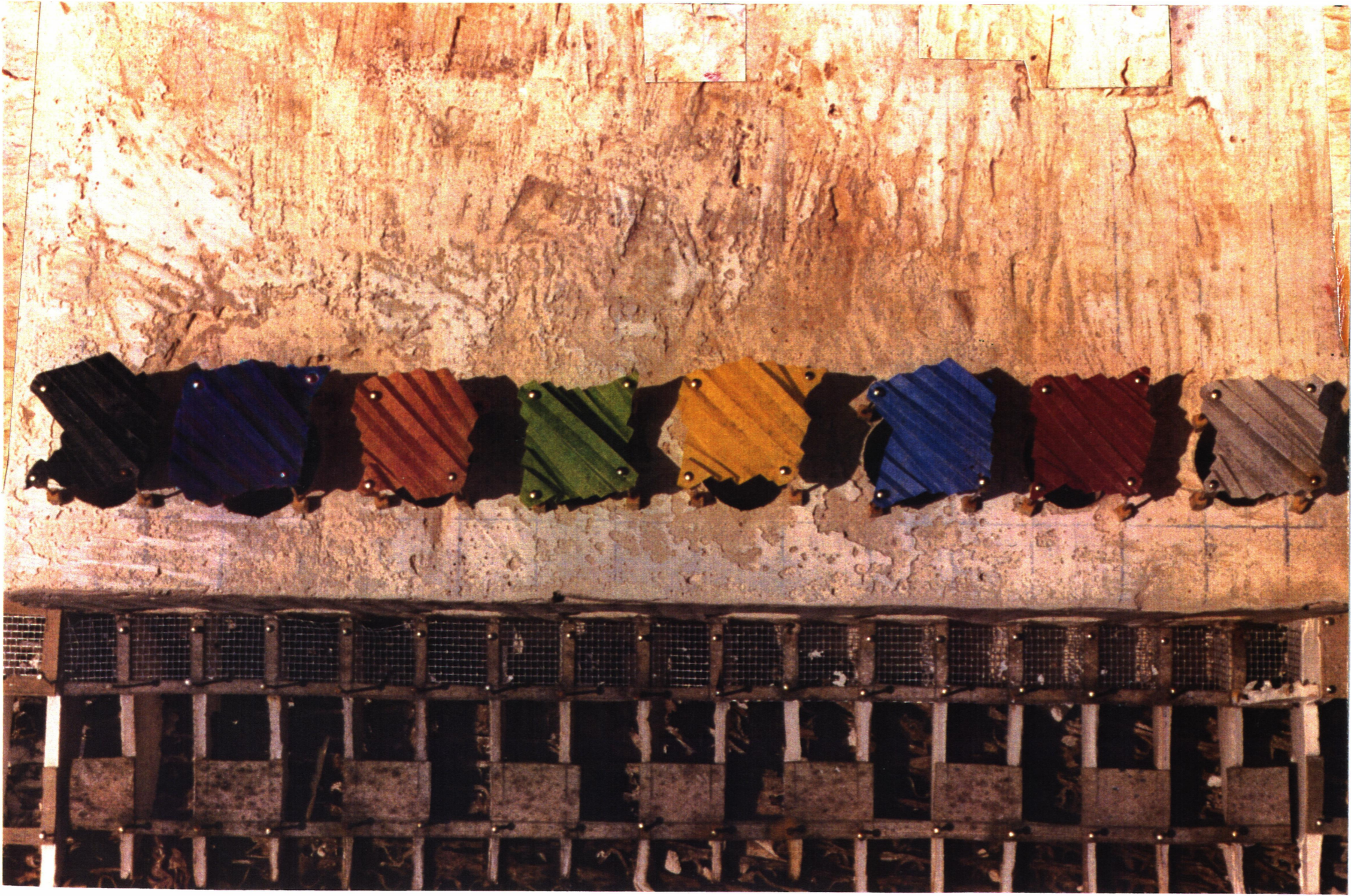




2

Red

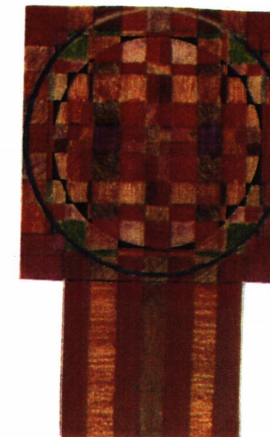
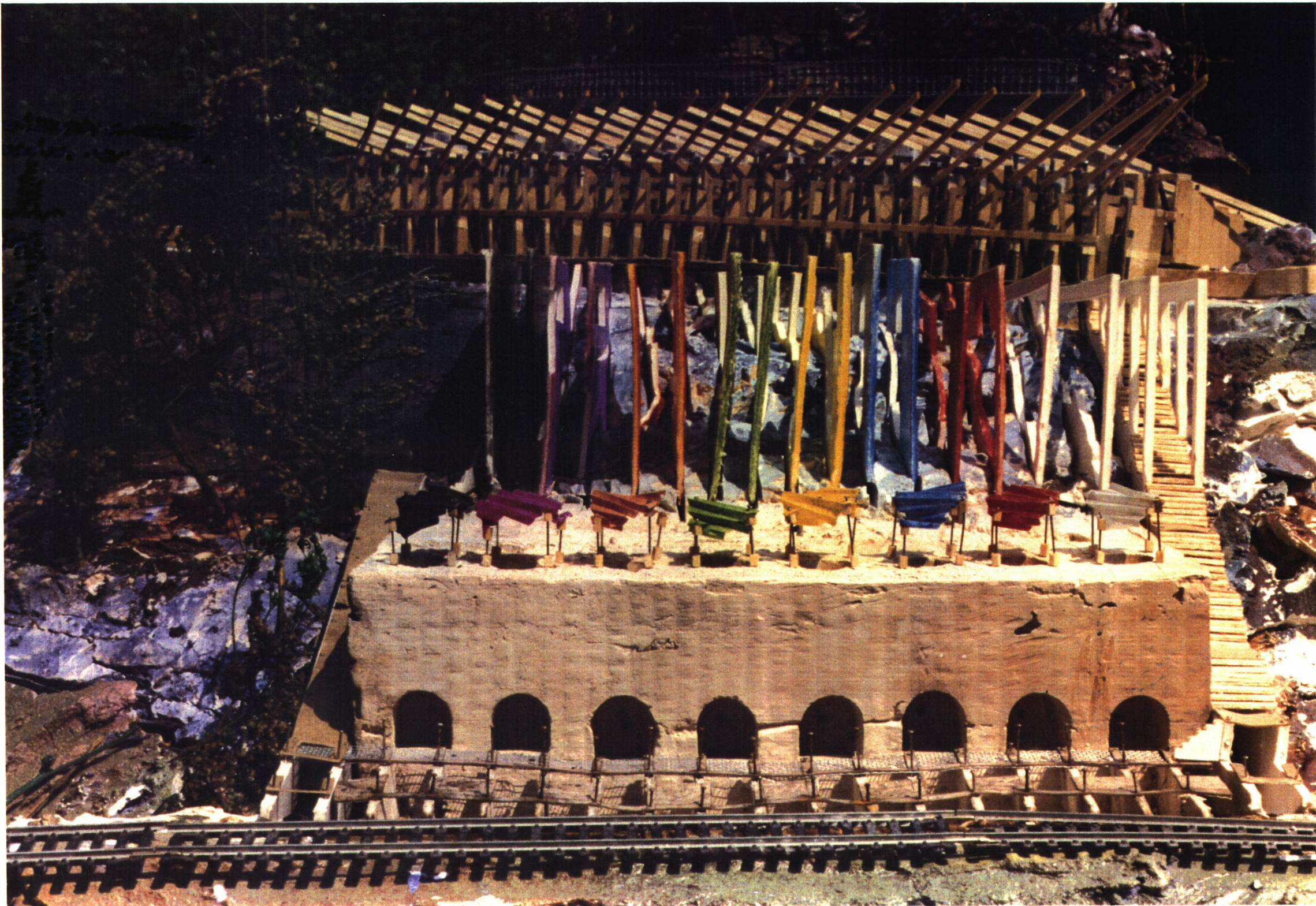




1  
2

Red





2

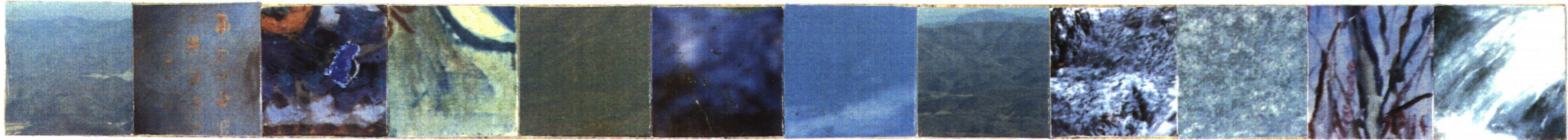
Red

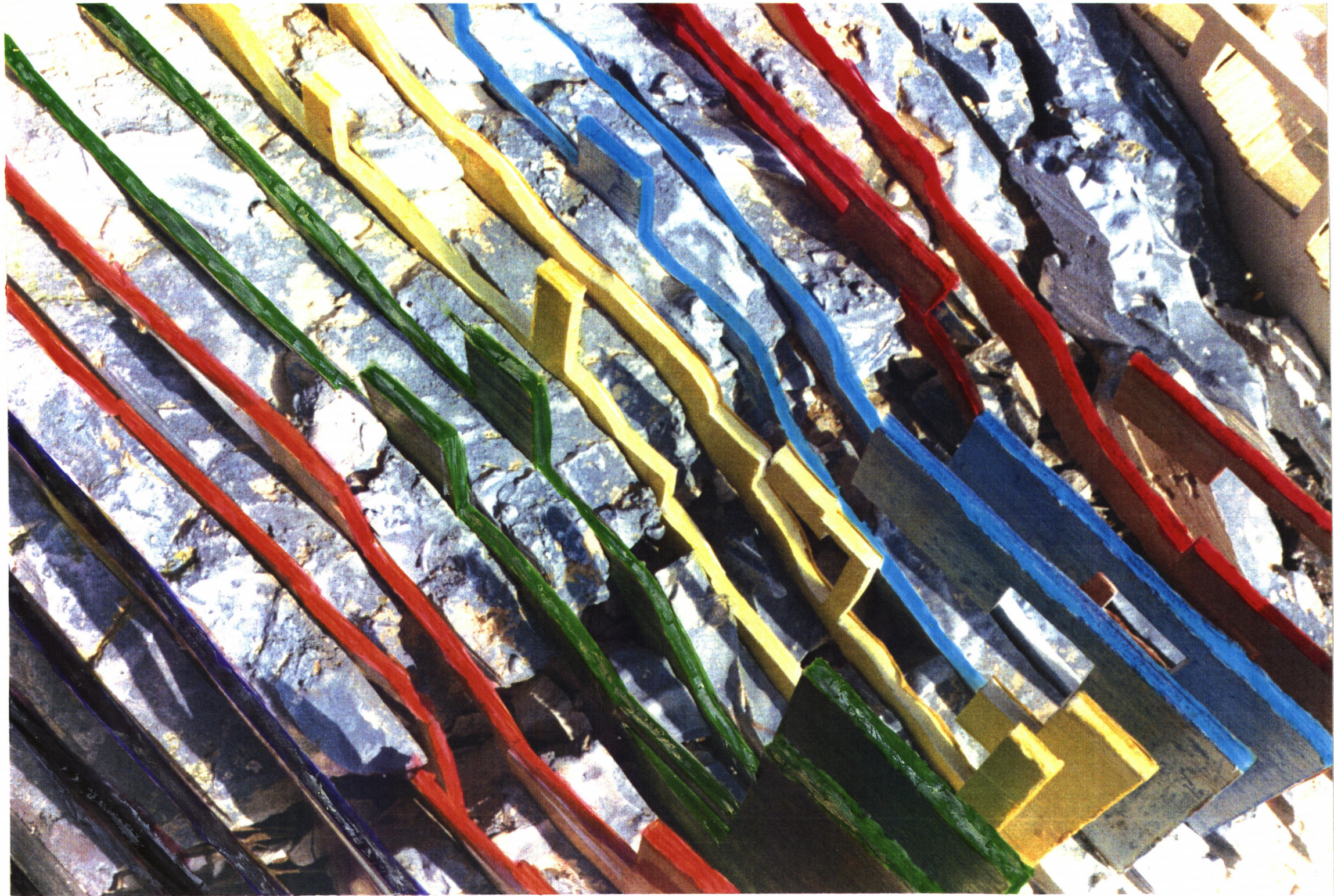




3

Blue

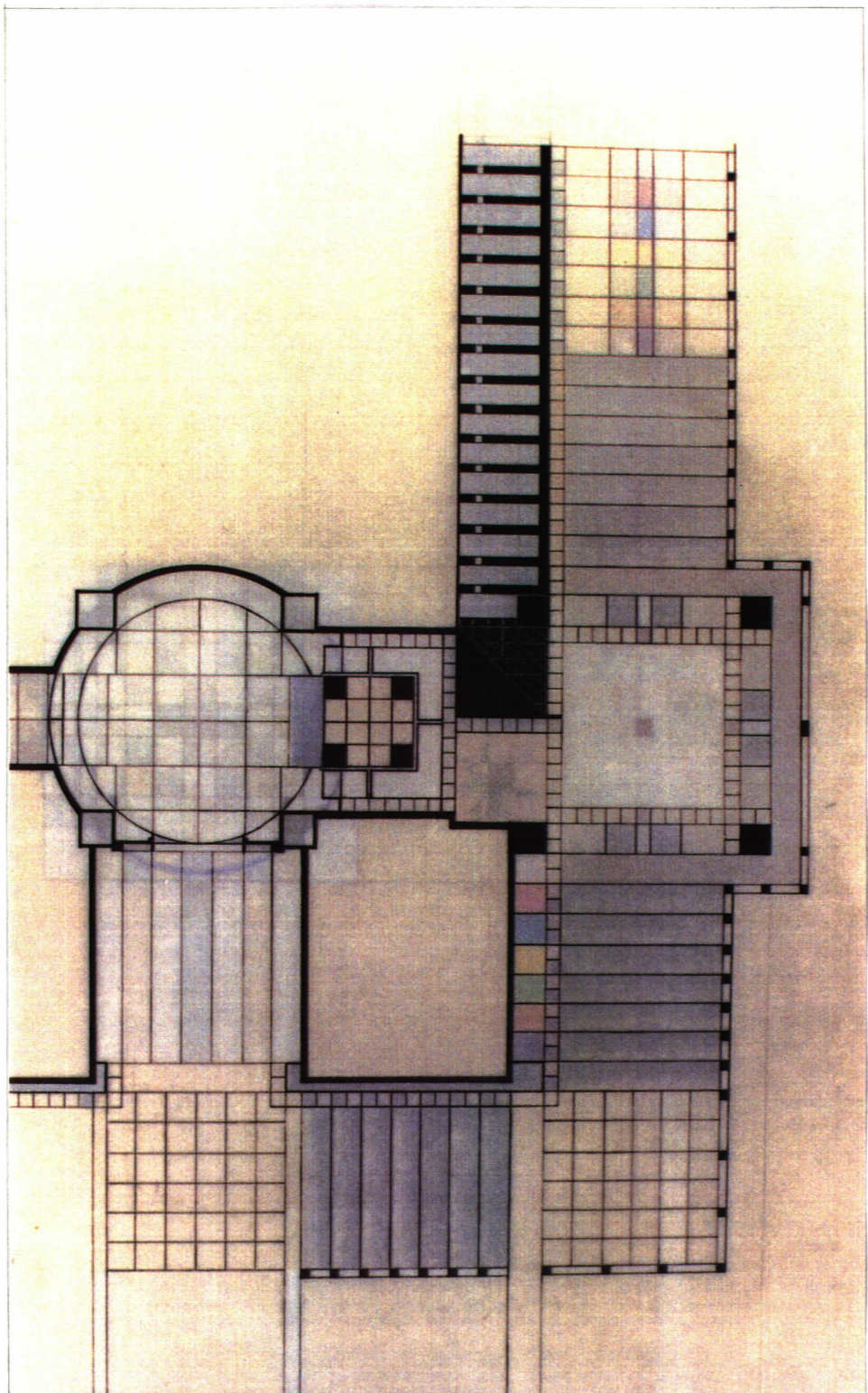




1  
3

Blue





3

2

Blue

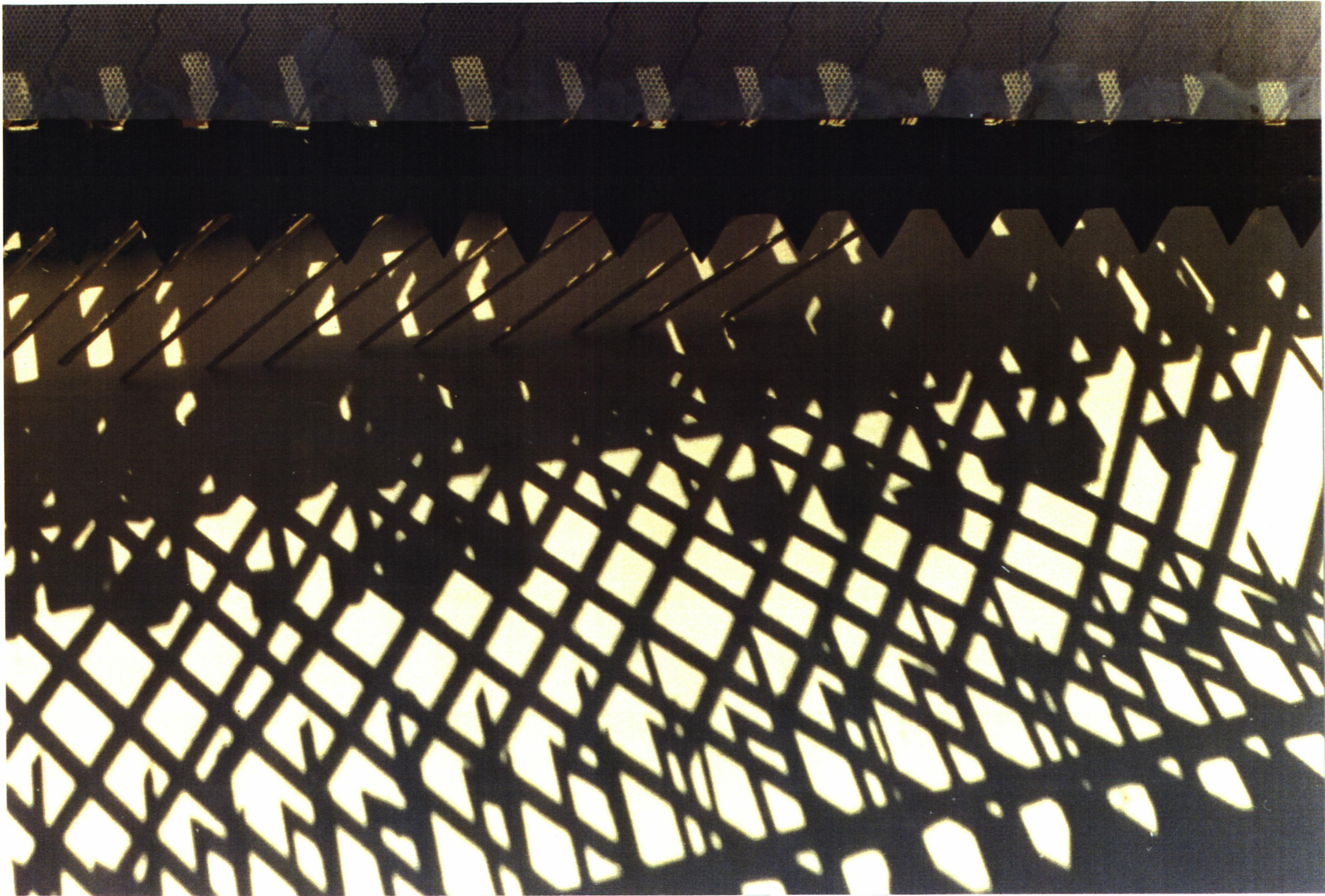




4

Yellow

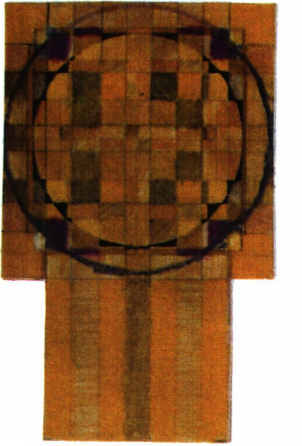
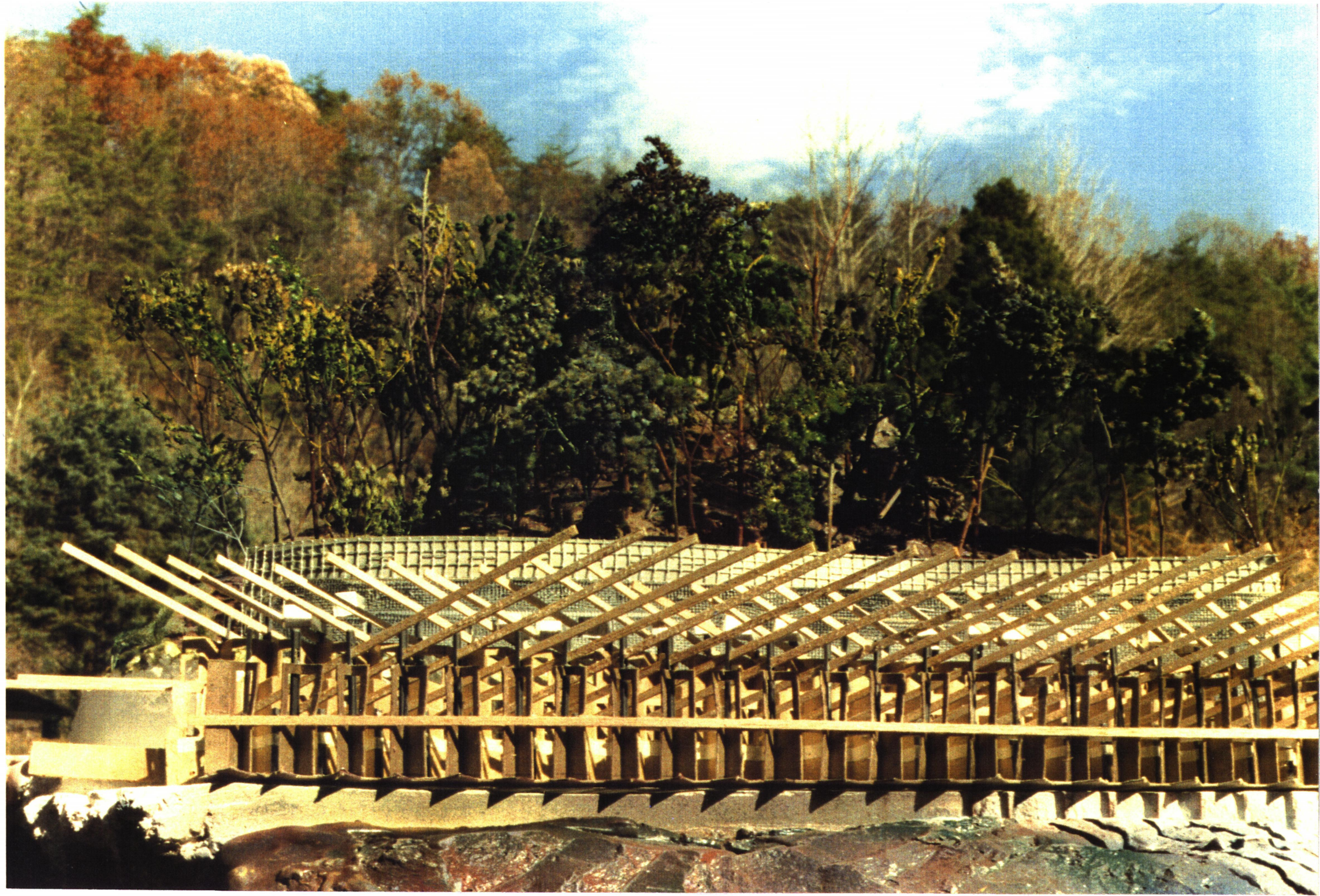




1  
4

Yellow





2

4

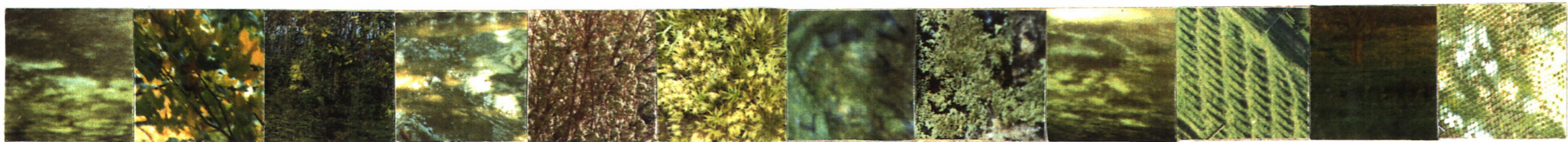
Yellow

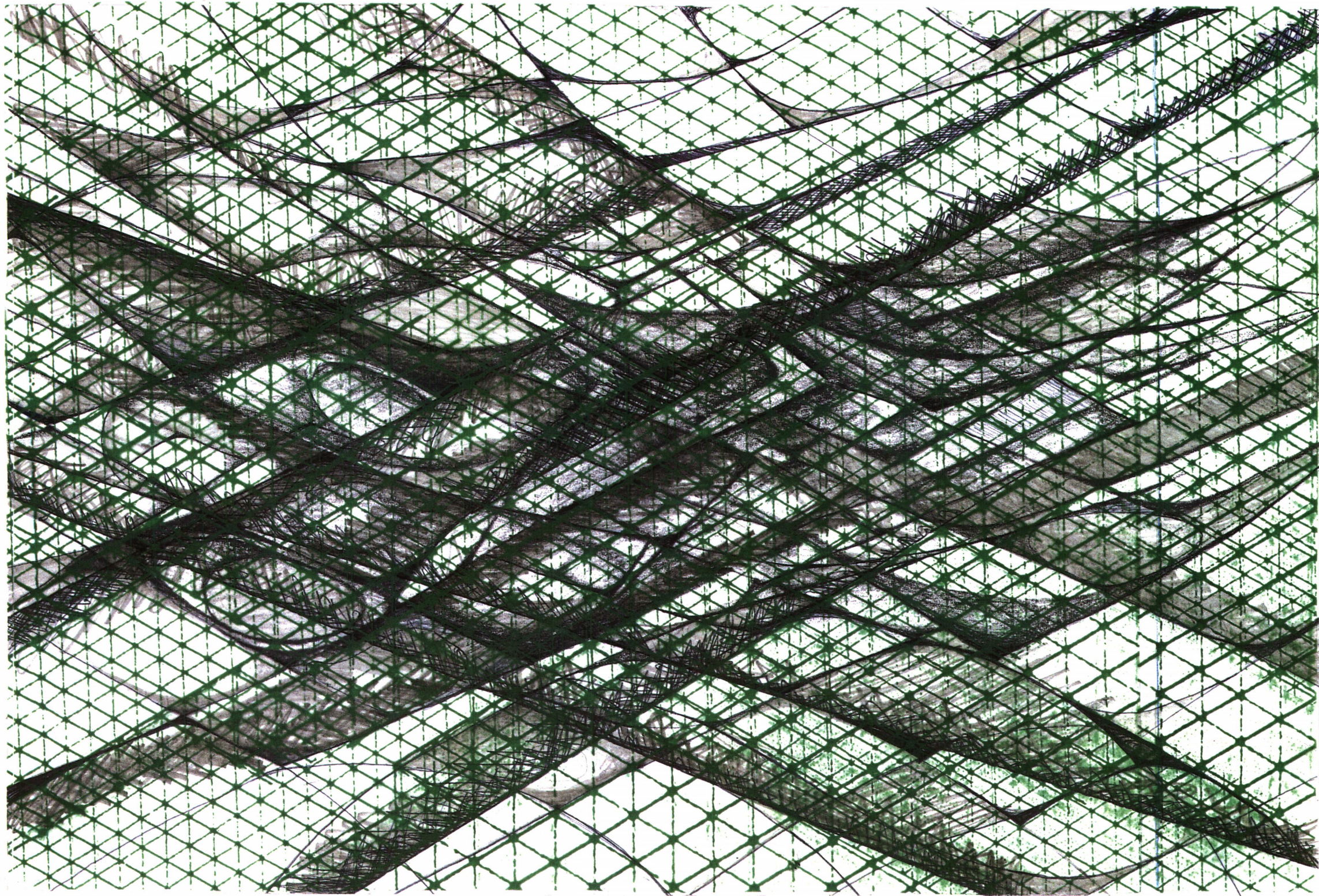




5

Green

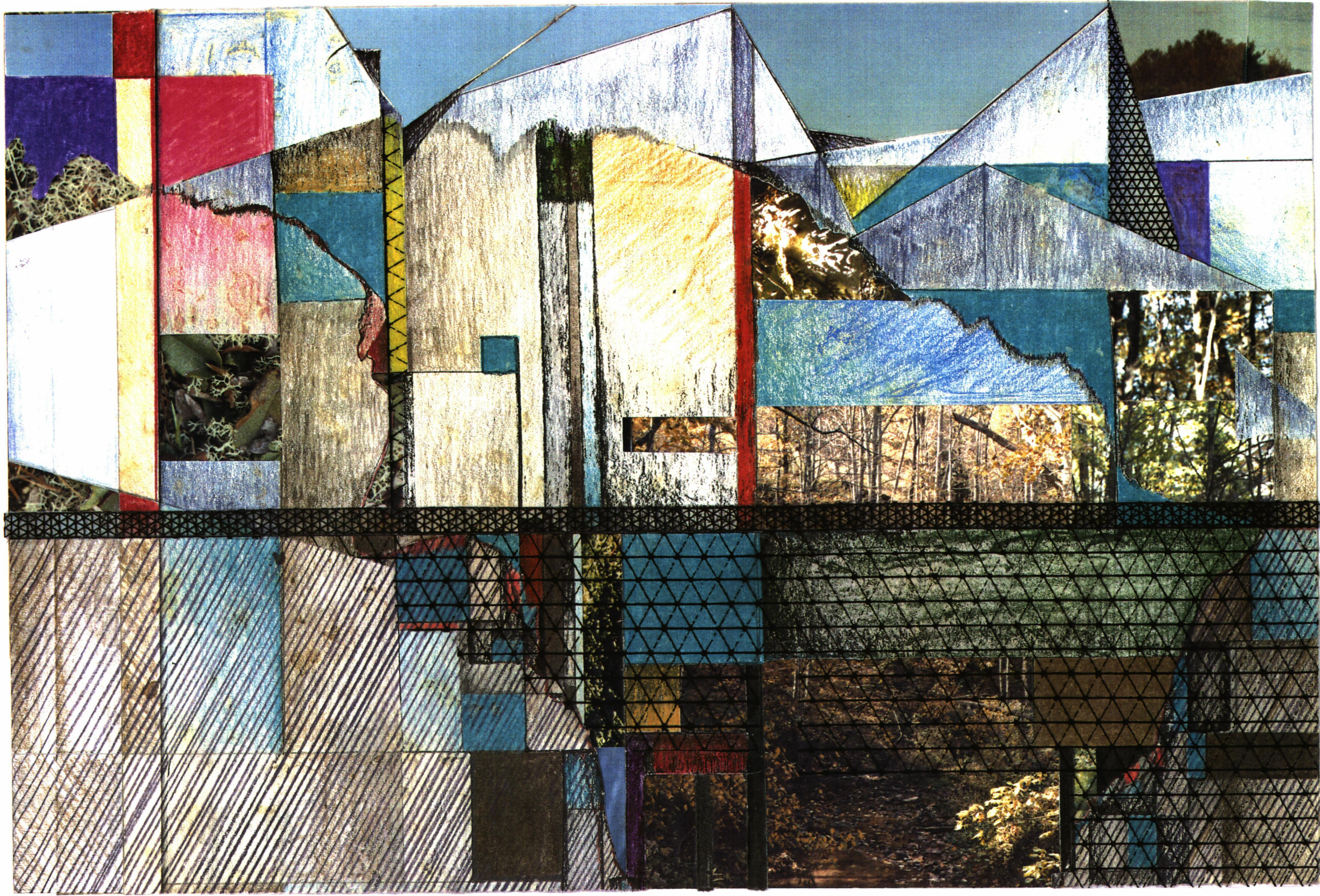




1  
5

Green

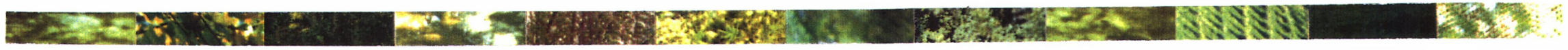




2

5

Green





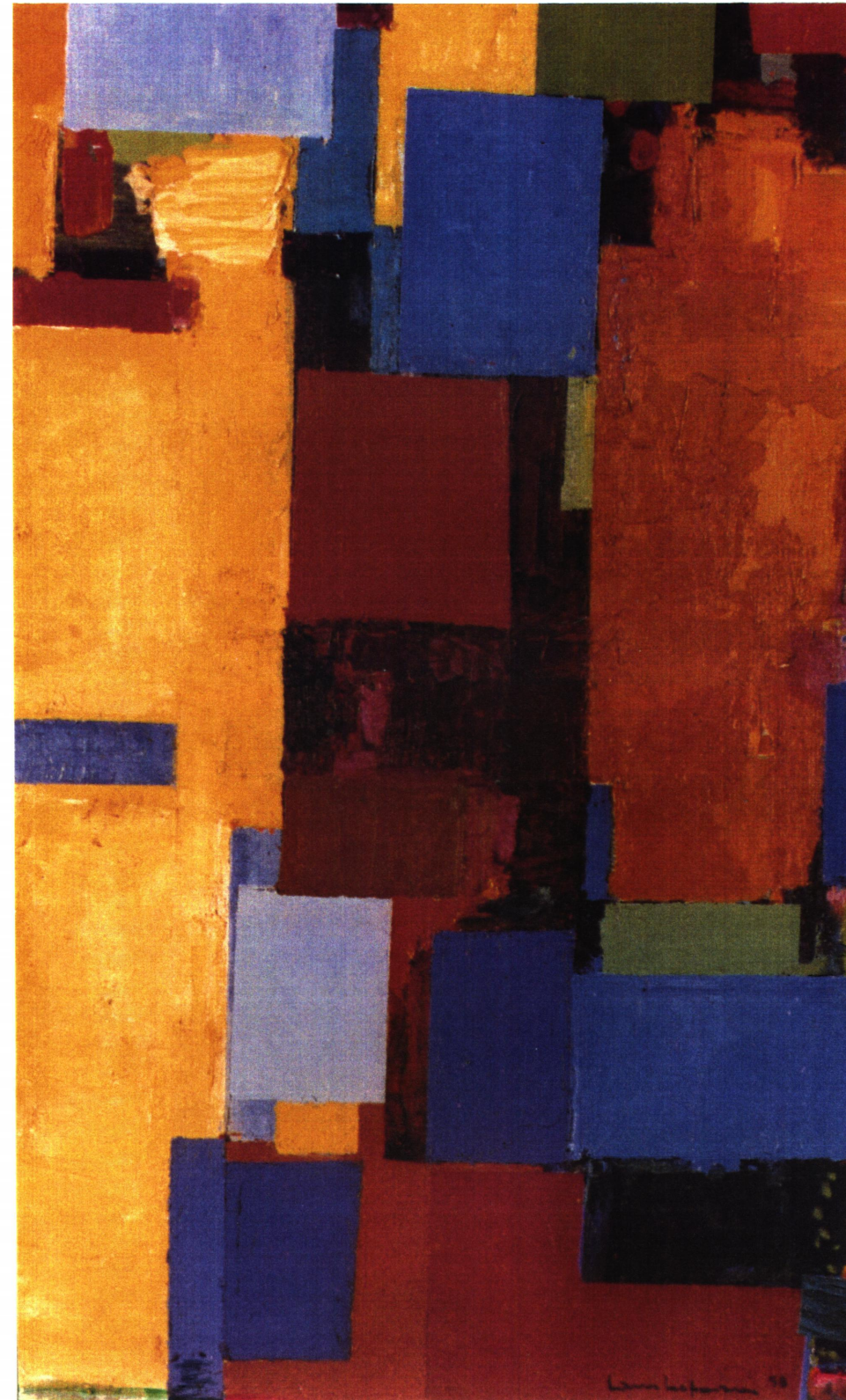
6

Orange





Mark Rothko



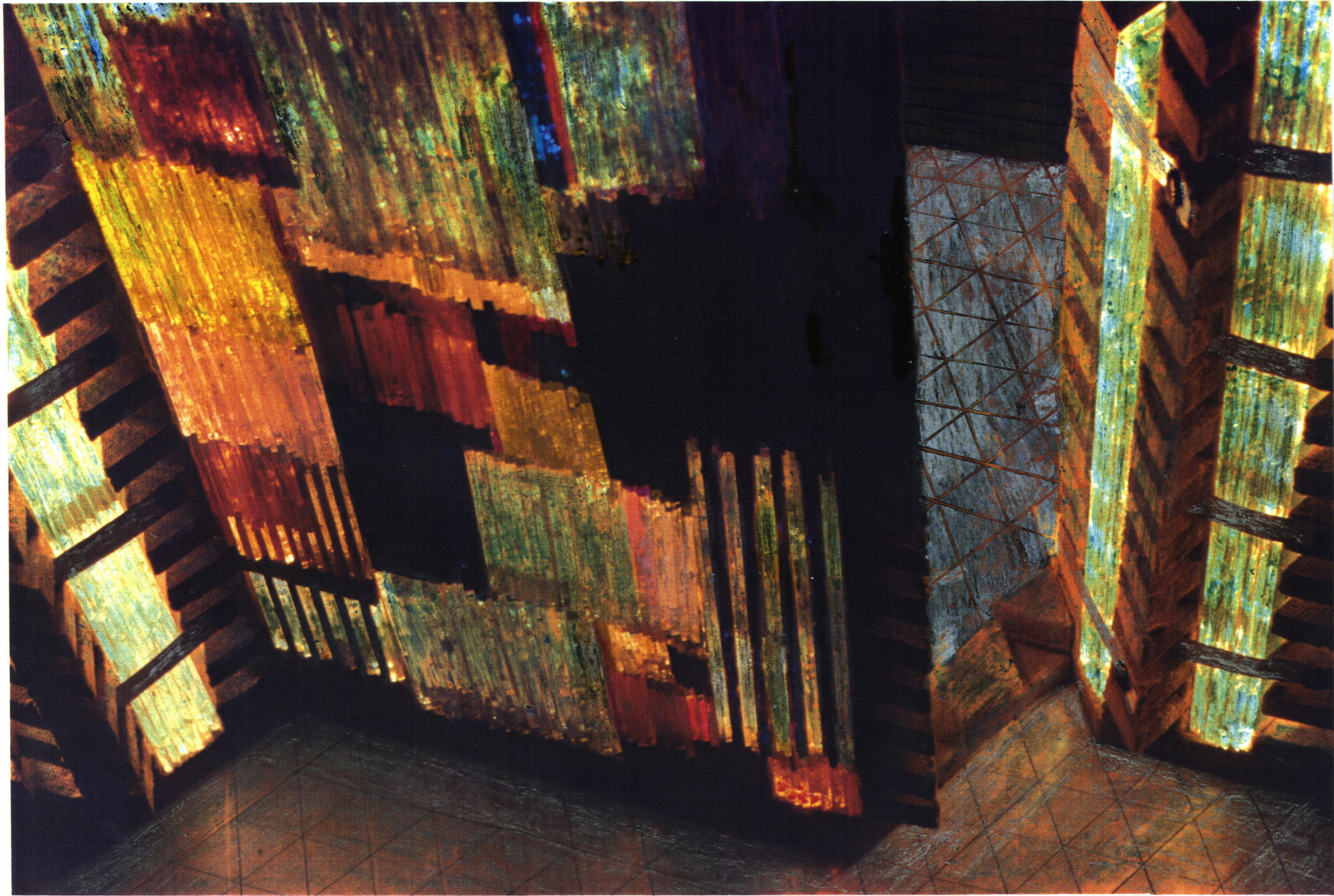
Hans Hofmann



6<sup>1</sup>

Orange





2

6

Orange





7

Purple





7<sup>1</sup>

Purple





2

7

Purple





8

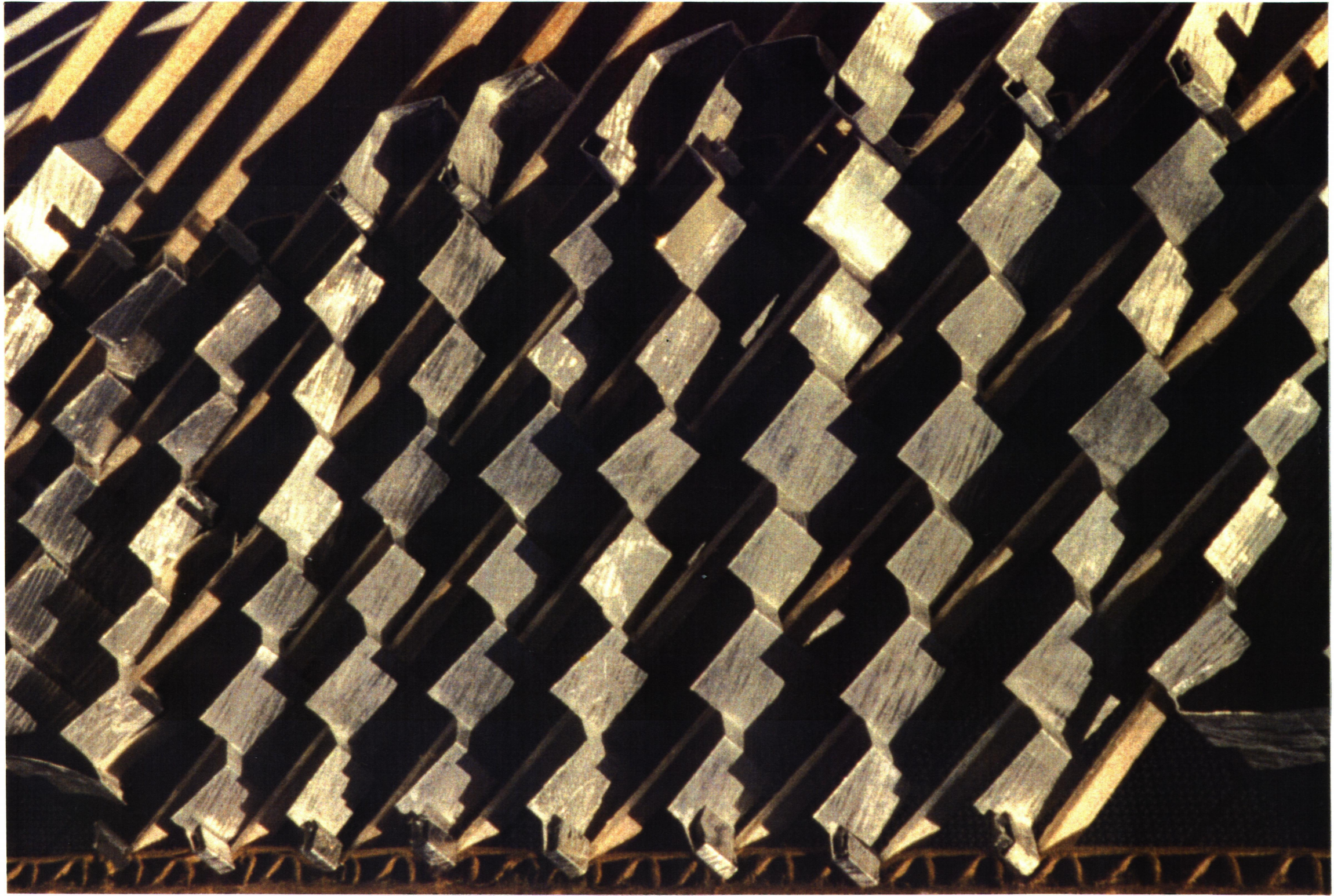
Black

Cognitive



Thought

Abstract



8

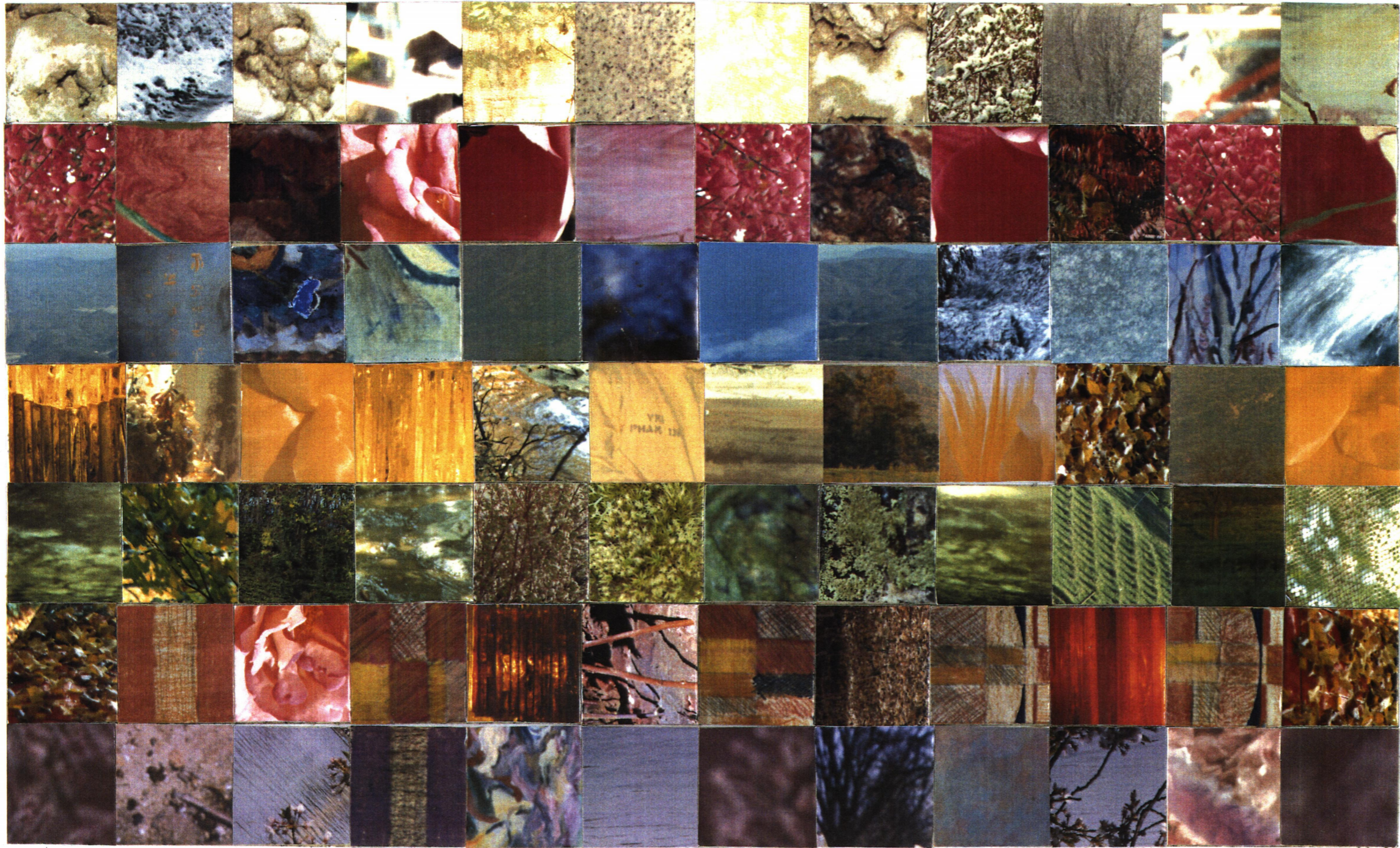
Black

Behavioral

Experience

Concrete





8

2

Black

Experience  
Thought



Knowledge

**Selected Bibliography**

Bruner, Jerome Seymour, *Process of Education*.  
Harvard University Press, 1977.

Hofmann, Hans, *Hans Hofmann*.  
H. N. Abrams, New York, New York 1964.

**The vita has been removed from  
the scanned document**