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Constructivism in Lost Wax

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CONSTRUCTIVISM IN LOST WAX

A Creative Thesis Abstract

Presented to

Dr. Joel C. Moss

and the Faculty of the Graduate School

Fort Hays Kansas State College

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Art Education

by

Gary E. Coulter

January, 1961

THESIS ABSTRACT

Coulter, G. E. 1961. Constructivism in Lost Wax.

It was the purpose of this study to (1) explore the potentialities of the "cire perdue" or "lost wax" process in the breaking of volume and mass and to explore the possibilities of space in regard to free and open "organic" forms, and (2) to explore the versatility and flexibility of bronze as a material for such sculpture.

This creative thesis is an outgrowth of "3 a.m.", the artist's first experience with bronze as a medium. Because of the dilemmas and rewards encountered in completing this perplex piece of sculpture the artist wished to continue his investigation.

A motivating factor which helped determine the decision for further investigation was the act of departing from the traditional use of bronze. Throughout the past most cast bronze emphasized solid mass using volume as an expression of space. The sculpture making up this thesis achieves an immense amount of volume though its forms are broken and open creating space that is nothing but one continuous depth.

Most constructivists are not castors and in working with complex forms choose materials they can manage such as steel, wood and plastic. However, because of the writer's acute interest in the field of casting he was determined to succeed in casting such intricate and complicated forms. Because of the involved "gating system" necessary for such casting most commercial foundries would refuse service. Thus, it seems necessary that the constructivist sculptor, whose interest lies in the "lost wax" process, administer his own casting.

The technical knowledge required in the casting of such sculpture is vast and involved, hence, each piece took considerable study and effort in striving for perfection. However, such study did not take place until

the sculpture had been completed in the wax form. The facilities for "burn out" and the size of the foundry were the primary limitations in this search.

The forms included in this creative thesis originated through preliminary thinking and sketching which resulted in a basic idea on paper or a mental image. Then shapes of wax were pre-cut, joined together and built up one piece at a time. Because of the artist's individuality and his response to such a sketch or mental image, the piece itself, became the building blocks which determined the form and brought about the expected deviation from the original idea. As stated previously, there were no restrictions, with the exception of largeness, allowing absolute concentration on the search for unique form.

Only two pieces deviate from the process described above. The relief "Mother and Child" was first modeled in clay and "Bronze Head", although created directly in wax, was built up through the use of the "pinch method".

Throughout the whole of the thesis there is an obvious personal preference for powerful and intense rectangular and square forms. This became a conscious preference in the artist's search for personal expression.

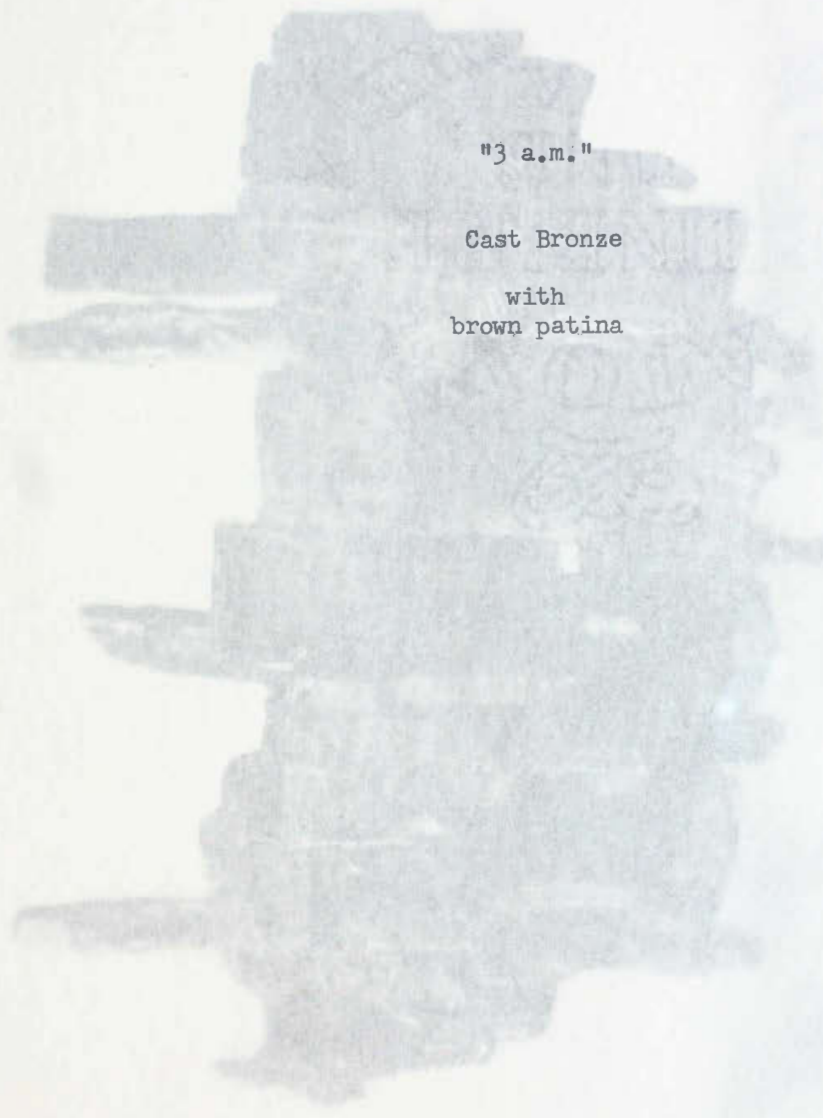
Through the use of several chemicals the investigator has experimented with the patination of different bronzes throughout this thesis. Realizing that bronze does possess a tonality of its own, the artist, because of his consciousness of color, felt that such patinas were an asset in the enhancement of the sculpture. Such experimentation also served to explore certain curiosities concerning patinas in conjunction with bronze.

Upon the completion of this study it is felt that the build-up or constructive method, through the use of the "cire perdue" process, is more appropriate to this artist's creative personality than any other approach or medium in sculpture as it imposes less limitation upon his personal expression. Regarding bronze, it is sensitive; it has an immense amount of versatility, flexibility and fluidity. The versatility of bronze appears in the surfaces that can be achieved. These may be smooth and flowing, with sharp clear edges, or they may accurately record the traces of the sculptor's fingers on the pliable wax. Any surface treatment that is possible in clay or wax may be preserved in bronze. Above all bronze is a metal and has a high tensile strength making it possible to open it up, extend members or forms freely in any direction and preserve in relatively permanent form any shape and texture.

These deductions, along with the education and the excitement of the casting process are among the reasons why the artist chose bronze for his constructions rather than steel, wood or plastic.

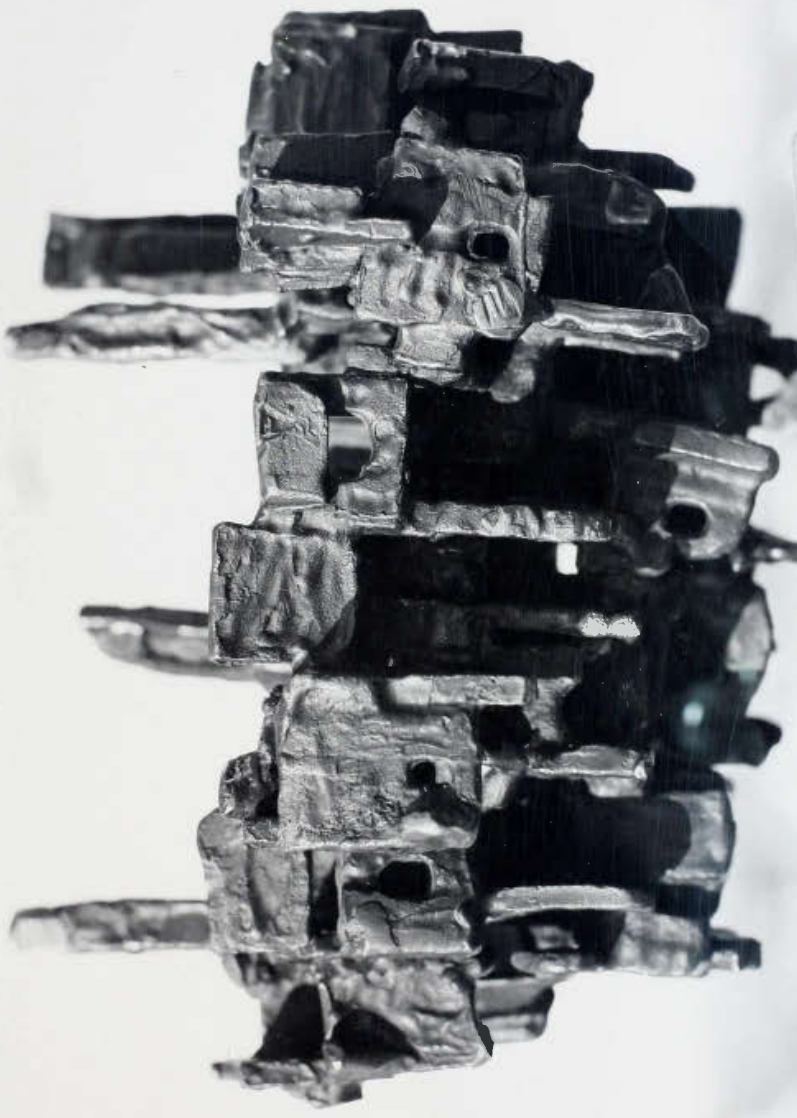
Through this process the artist feels that he has "found himself" for the first time and that the forms in this thesis are truly unique expressions of himself.

THESIS PHOTOGRAPHS



"3 a.m."

Cast Bronze
with
brown patina





"MOTHER AND CHILD"

Cast Bronze

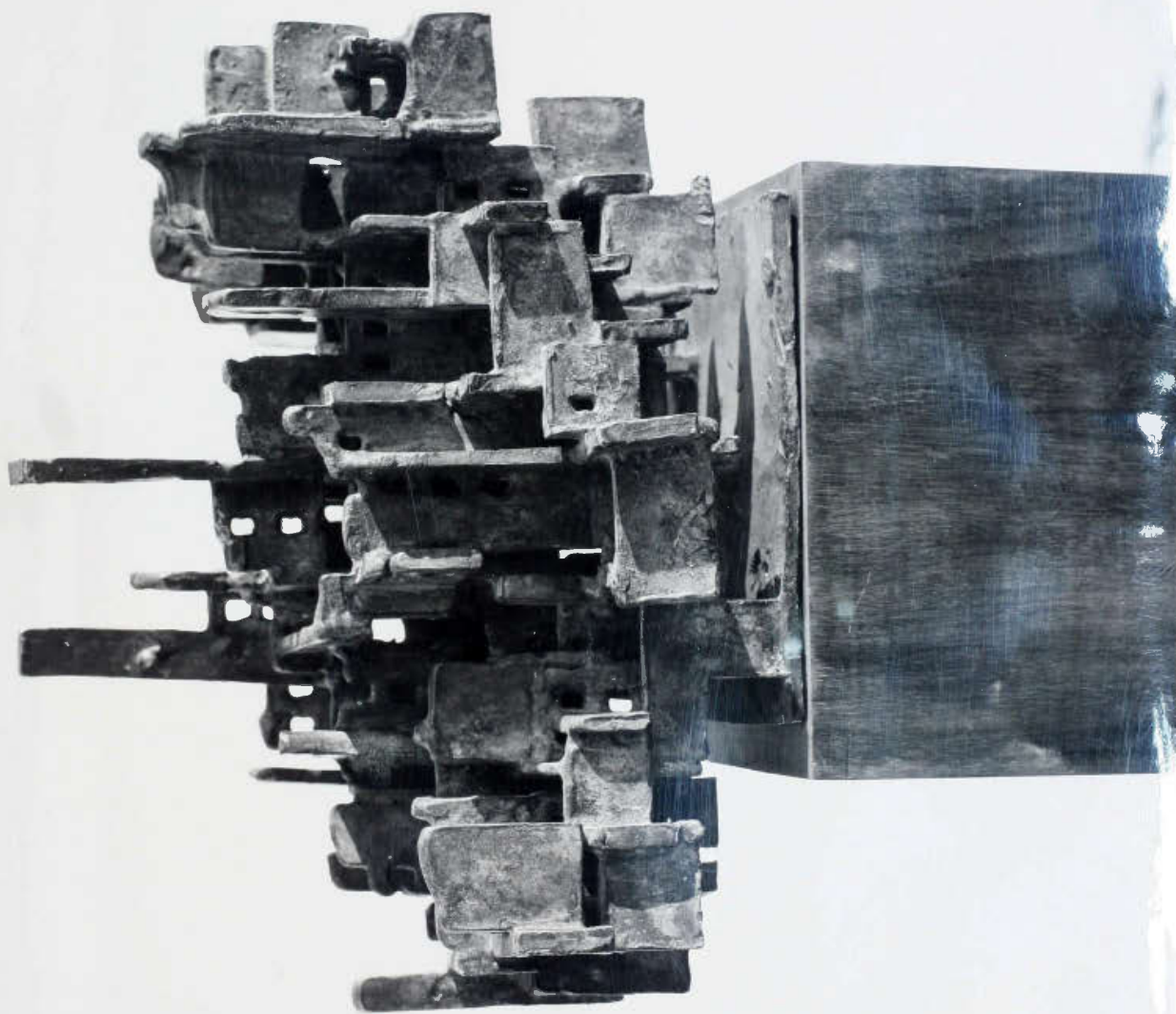
with
brown patina

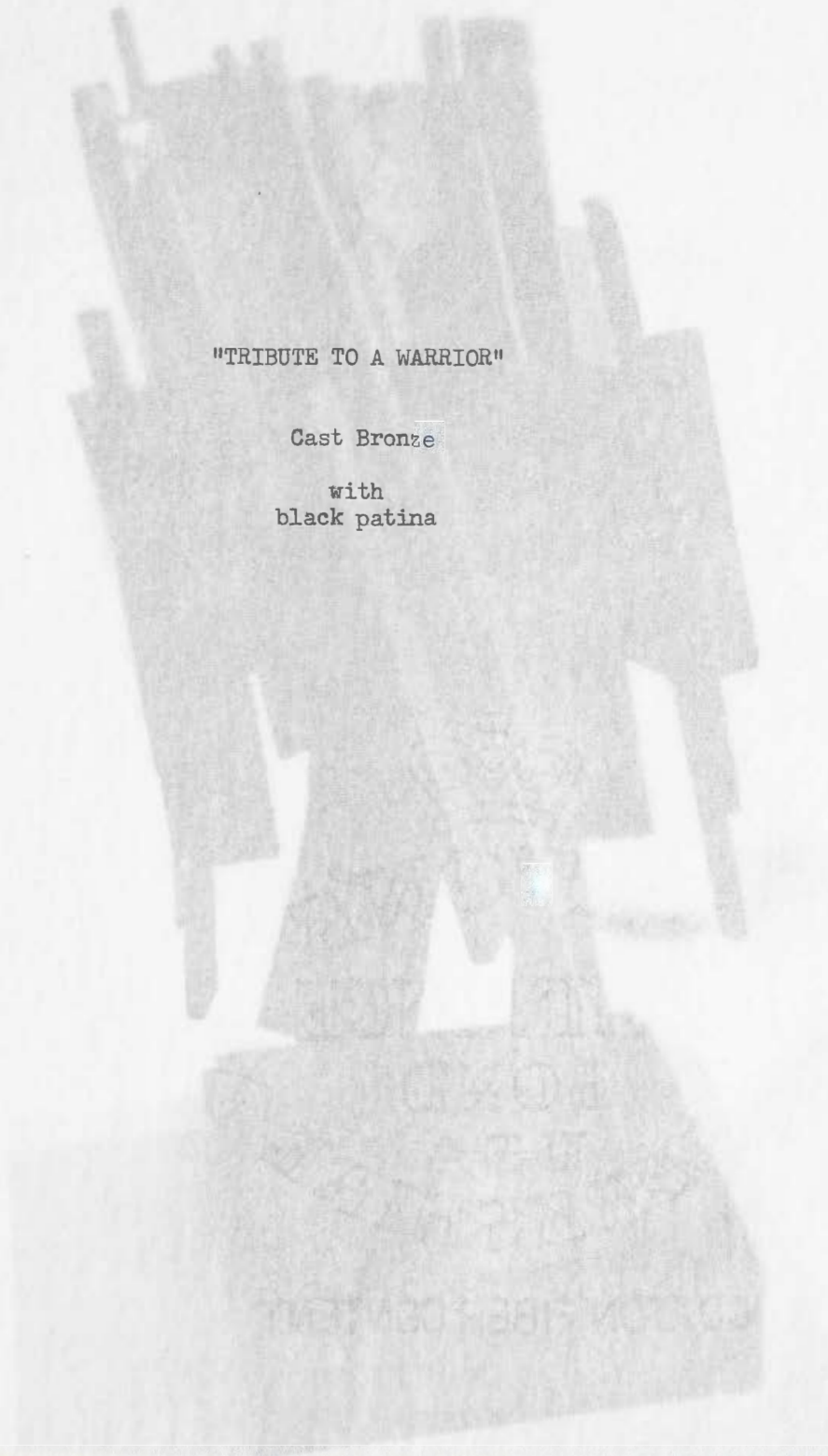


"ATLANTIS"

Cast Bronze

with
green patina



The image shows a dark, abstract sculpture titled "TRIBUTE TO A WARRIOR". The sculpture is composed of several vertical, rectangular blocks of varying heights and widths, arranged in a way that suggests a warrior's stance or a group of figures. The blocks are dark in color, likely cast bronze with a black patina. The sculpture is set against a light, textured background. The text "TRIBUTE TO A WARRIOR" is centered above the sculpture. Below the title, the material and finish are described: "Cast Bronze with black patina".

"TRIBUTE TO A WARRIOR"

Cast Bronze
with
black patina

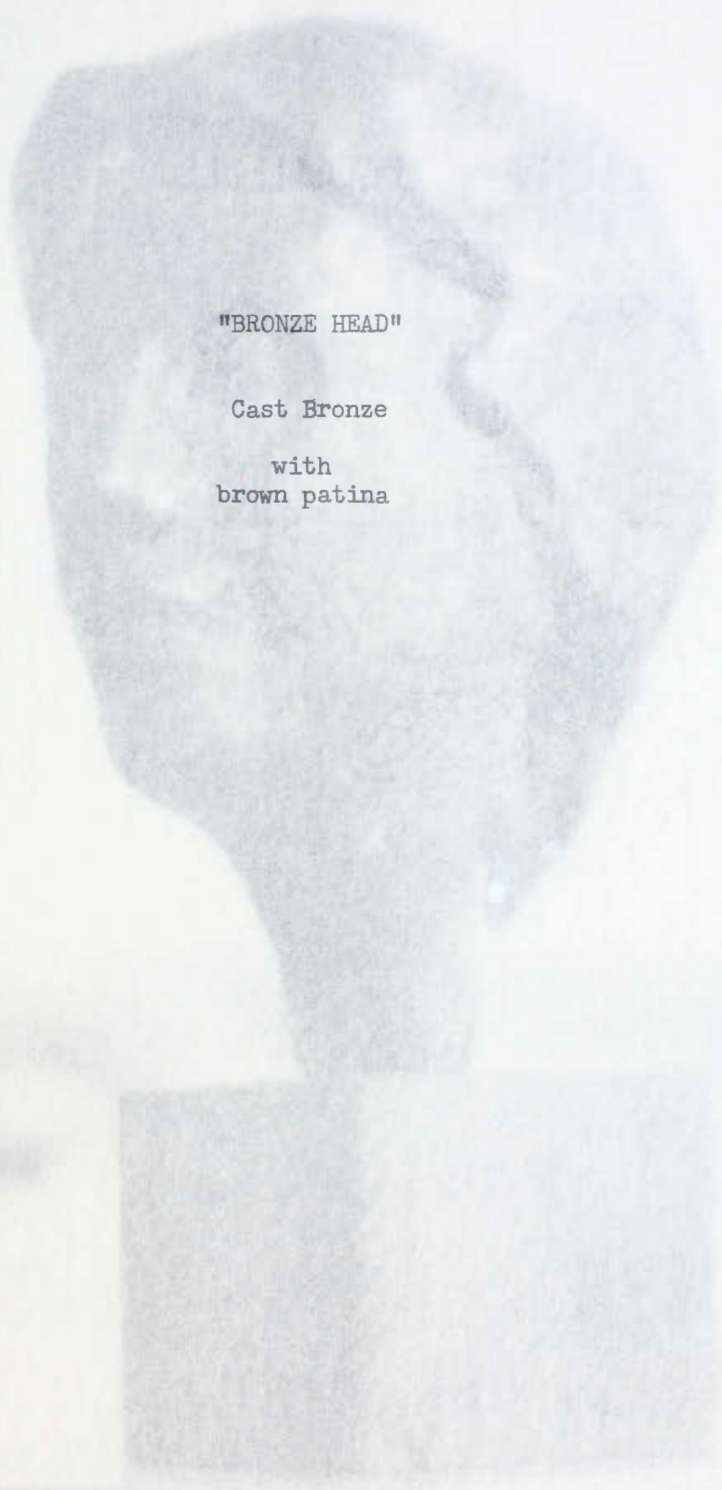




"CITADEL"

Cast Bronze
with
white patina

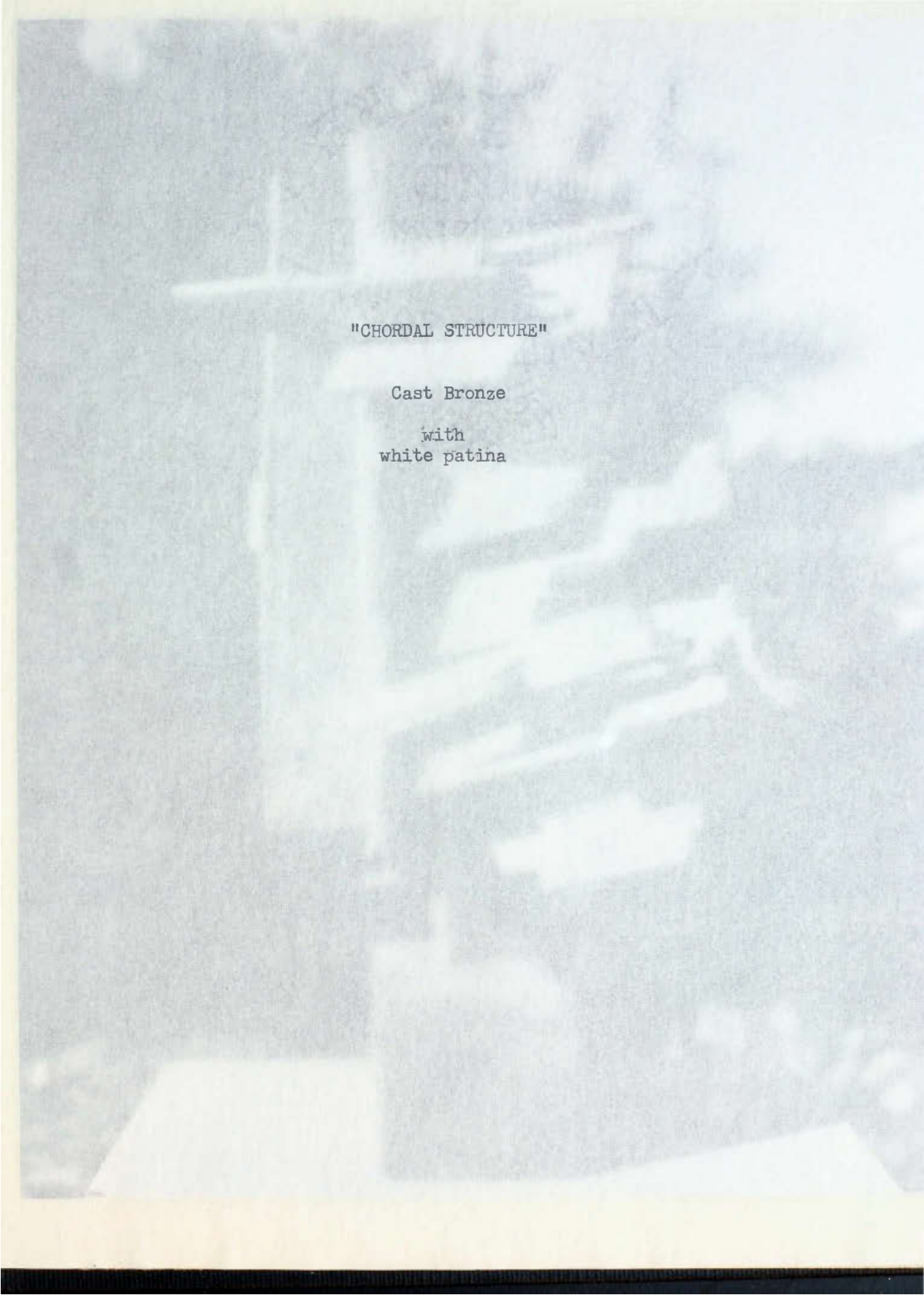


A dark, abstract sculpture of a head, possibly made of cast bronze, mounted on a rectangular base. The head is stylized and somewhat indistinct, with a prominent forehead and a rounded top. The sculpture is set against a light, neutral background.

"BRONZE HEAD"

Cast Bronze
with
brown patina

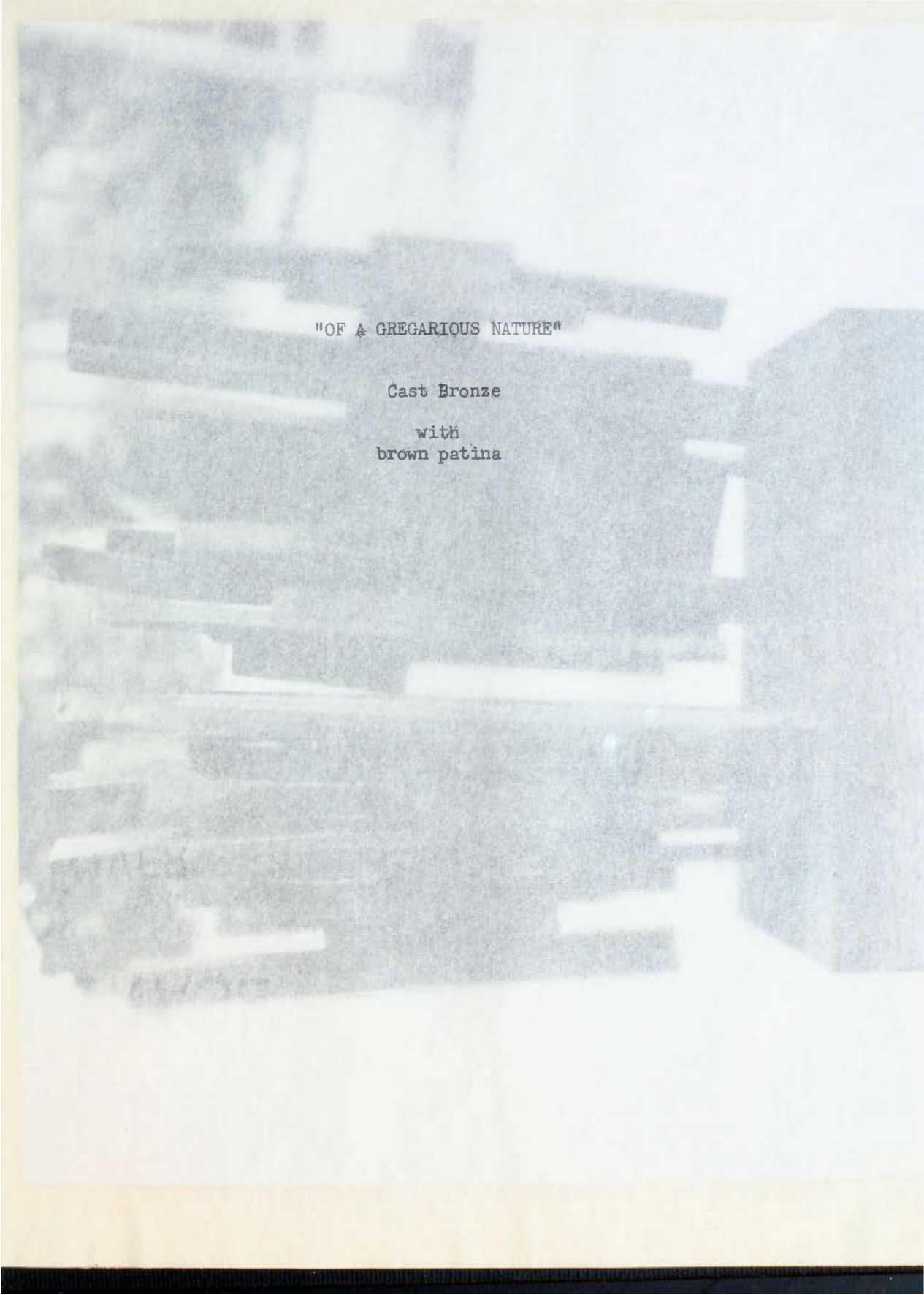




"CHORDAL STRUCTURE"

Cast Bronze
with
white patina





"OF A GREGARIOUS NATURE"

Cast Bronze

with
brown patina

