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SECOND INTERNATIONAL CONFERENCE ON AUTOMATIC PROCESSING
OF ART HISTORY DATA AND DOCUMENTS

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Pisa, Scuola Normale Superiore

INPE
C.P. 515
12200 - Sao José dos Campos - SP
BRAZIL

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Dear Sir,

Thankyou for sending us your abstract which will be published in
the CensuS.

As soon as arrangements for the Conference have been finalized
we will keep you informed.

Yours sincerely,


Laura Corti

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"THE PORTINARI PROJECT, A BRIEF OUTLINE"

by

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Abstract

Cândido Portinari (1903-1962), one of the major Latin American painters, is the central theme of a fourteen member full-time teamwork at the Pontifical Catholic University of Rio de Janeiro. As part of a large effort in preserving our National heritage and strenghtening our cultural identy, the Portinari Project has been able to locate more than four thousand works by Portinari among prints, drawings, and paintings, that present an epic view of all aspects of Brazilian life, and that were scattered throughout Brazil and abroad. In five years of photographing and documenting "in loco" the works in fourteen Brazilian states and fifteen countries (in the three Americas, in Europe, and in Asia), the Project has now compiled an archive of more than ten thousand color transparencies and black and white negatives, as well as more than fifteen thousand letters, periodical clippings, exhibit catalogues, epoch photographs, etc, which represents an essential material for the understanding of the aesthetic, cultural, and political ideas of an important generation of painters, writers, poets, journalists, architects, politicians, and educators that shaped, for the first time in Brazilian History, a truly National cultural identity. The mis-en-oeuvre of all this material is planned to result in the creation of an Art Research Center, organized according to modern museological criteria and following rigorous scientific methods.

Besides having the Computer Sciences Department of Catholic University (PUC/RIO) endeavouring to produce a data base for this archive, commanded by a computer similar to the IBM PC, interfaced with videodisk hardware and software, that would be something like STAIRS or PARIS squeezed into a few hundred kilobytes, the Portinari Project is looking into nonconventional ways of preserving its invaluable photographic archive, especially the color transparencies.

The color transparencies were produced according to exacting standards, all of them obeying the same criteria with respect to format (6 x 6cm), film type (ektachrome 64), illumination procedures, color and grey scales, etc. The reason for all this was to obtain an homogeneous and high quality archive of visual data on the complete work of the artist.

From this material, and not from the hardly available originals, it is to be produced everything that the Art Center will generate using the Portinari oeuvre: general publications, travelling exhibitions, catalog raisonnée, films and audiovisuals, etc. Since Rio is a very humid and hot city (more than 90% relative humidity and temperatures above 35°C are not uncommon), the preservation of this collection poses a challenging problem. After having consulted with institutions and experts in photographic preservation, the Portinari Project decided to look into the possibilities of digitizing and

storing the images, in binary form, on magnetic tape or videodisk.

At this point the Institute for Space Research (INPE), from the National Council of Scientific and Technological Development (CNPq), asked to help in this problem, started its first experiments in order to determine the technical viability of this task. The preliminary tests were performed by using an Image-100 system, controlled by a PDP-11/45 minicomputer for analysing remote sensing multispectral data. The pictorial material was digitized with a vidicon camera and the results were obtained by photographing a 512 x 512 pixels (picture elements) color display monitor. The restrictions imposed by the acquisition, recording, and display systems are readily recognizable. Although relatively inexpensive and fast, the vidicon camera cannot exploit the full resolution of the transparencies, being capable of only 120 μm spacing on a 6 x 6cm color transparency. It is felt that an adequate resolution would be about 50 μm . In order to accomplish this, two devices are being considered for further work: 1) rotary drum microdensitometers that, although expensive and slow, are capable of up to 5 μm resolution with good photometric uniformity and geometric accuracy; 2) photodiode linear arrays, which are relatively inexpensive and capable of adequate spacial resolution, although with some limitations in photometric uniformity (about 3%). As far as color reproduction is concerned, if the available filters would not bracket exactly the spectral response of the color films, further digital processing may be necessary to correct it.

An audiovisual presentation will be made, showing the Portinari Project major aspects, including a digitized images preliminary display.