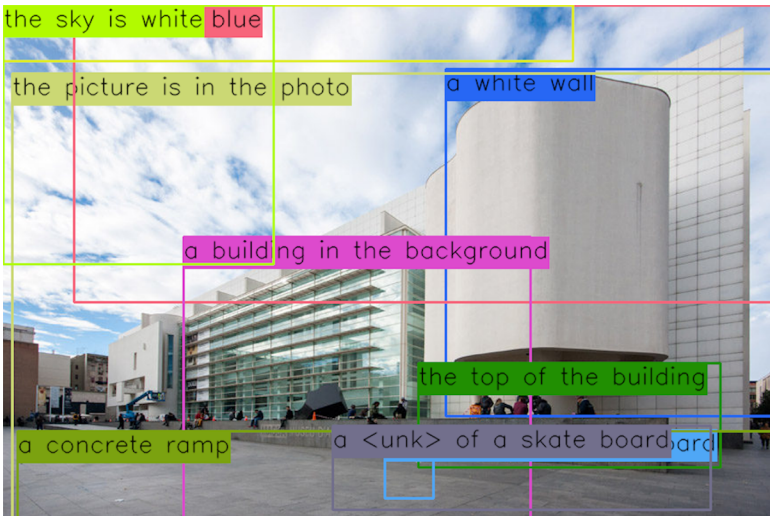


A Crack within the museum

MACBA

Problematizing Computer Vision of Commercial AIs



In recent years, commercial systems based on artificial intelligence have emerged and have been gaining ground in the daily life of large cities, however almost imperceptibly to end users. We are in contact with these systems when we use translation services, product recommendation, object and person detection, and many other services. These systems are trained with large volumes of data, and, inevitably, present some type of ideological bias.

From the analysis of contemporary artwork figures using the Art Decoder* platform, we realized the possibility of looking at these systems from a critical perspective. We present this zine, with works selected collectively from the digital collection of the Museu d'Art Contemporani de Barcelona (MACBA), being concerned to highlight some of the ideological biases present in some of those commercial computer vision systems, which, as we have seen in our research, follow a capitalist, consumerist and sometimes misogynistic logic. In addition, we highlight other moments when our platform is unable to understand artworks resulting in interpretations of great poetic value.

This publication wouldn't be possible without the support of CtrlZ.AI organization members, and the commitment of the participants of the workshop "A Crack Inside the Museum", carried out by Lucas Nunes Sequeira and Rafael Tsuha members of GECID**, on January 30, 2020, at CtrlZ.AI, Barcelona.

Good reading!

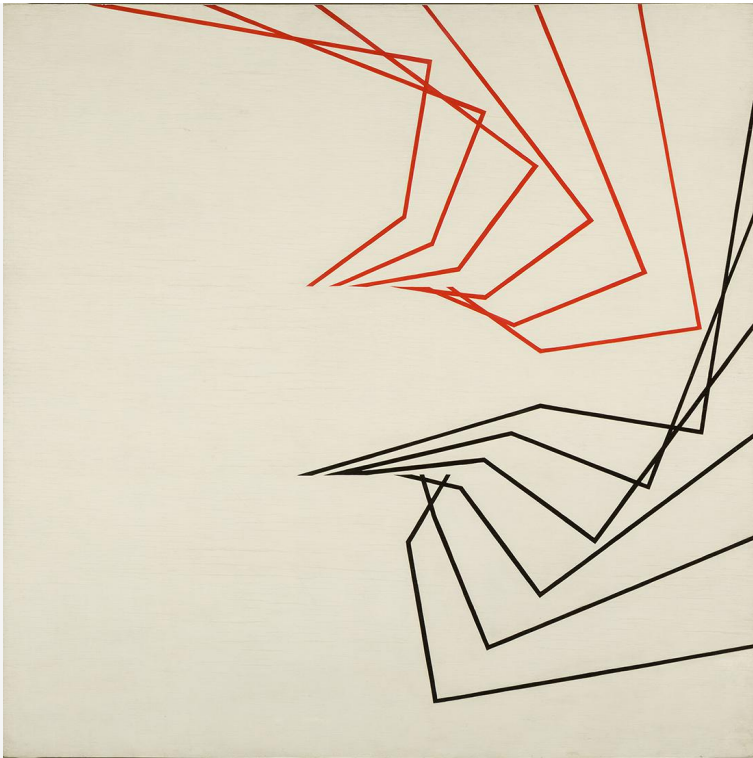
* Art Decoder is a platform created by our group and has been used since 2018 to reveal the behavior of commercial AIs (Amazon Rekognition, Google Cloud Vision, Microsoft Azure, ClarifAI, Densenet, Facebook Detectron, IBM Watson and Darknet YOLO APIs) from the use of contemporary art images.

** We are part of the Group of Critical Experiences in Digital Infrastructures (GECID), an activist group of researchers from different areas of knowledge located in Brazil at the Innovation Center of the University of São Paulo / C4AI and coordinated by professor Fabio Cozman and artist Bruno Moreschi. Our work involves a set of experiences that aims to think and problematize contemporary infrastructures based on a logic different from that applied in technology centers in the Global North. We are interested in encouraging studies that think about technology not in an abstract way, but inserted in determined contexts, with social implications.

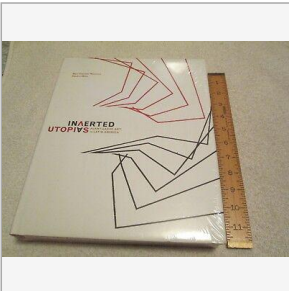
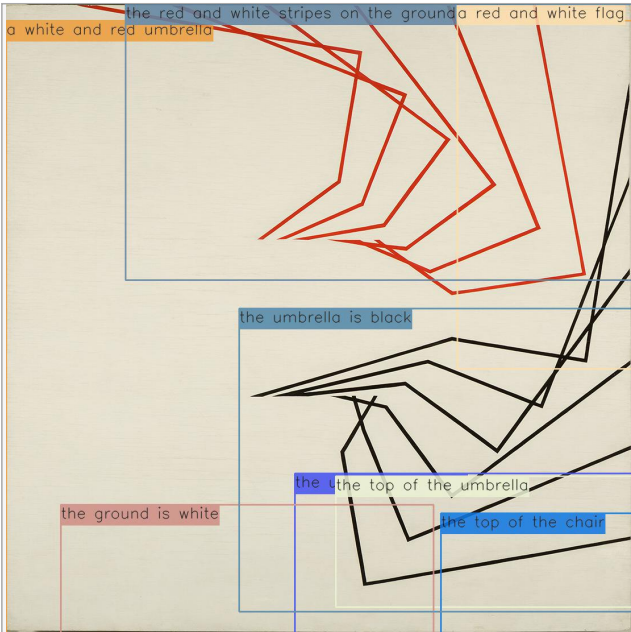
Waldemar Cordeiro

Ideia Visível

1957



artwork read as product



visually similar

Microsoft Azure

category: others

is adult content? False 5% adult

is racy content? False 5% racy

labels: nintendo, text, drawing, map, sketch, child art, design, cartoon, triangle

ClarifAI

safe for work? 0% nsfw

labels: 98% illustration, 97% art, 96% no person, 96% graphic, 94% line, 94% abstract, 92% shape, 92% design, 92% business, 90% paper, 90% vector, 90% print, 89% chalk out, 88% desktop, 87% symbol, 87% arrow, 86% pattern, 85% technology, 83% text

moderation: 99% safe, 0% suggestive, 0% explicit, 0% gore, 0% drug

Rodolfo Bernadelli

Moema

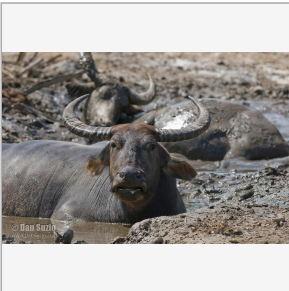
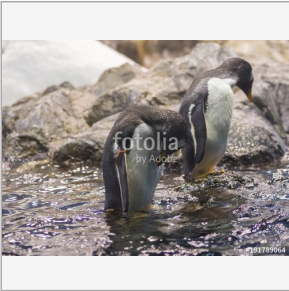
1895



sculpture read as mammal, mud and water



visually similar



Google Cloud Vision

best guess: water

violence:
likely

medical:
very unlikely

adult:
very unlikely

spoof:
very unlikely

racy:
unlikely

labels: **93%** water
56% black-and-white
54% rock

text: no texts found

Microsoft Azure

category:
no category

is adult content? False **3%** adult

is racy content? False **6%** racy

labels:	rock	black	elephant
outdoor	sea lion	large	zoo
marine mammal	water	old	playing
building	harbor seal	dirt	river
animal	standing	street	
bird	sitting	laying	

COLLABORATORS

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