

THE MET API



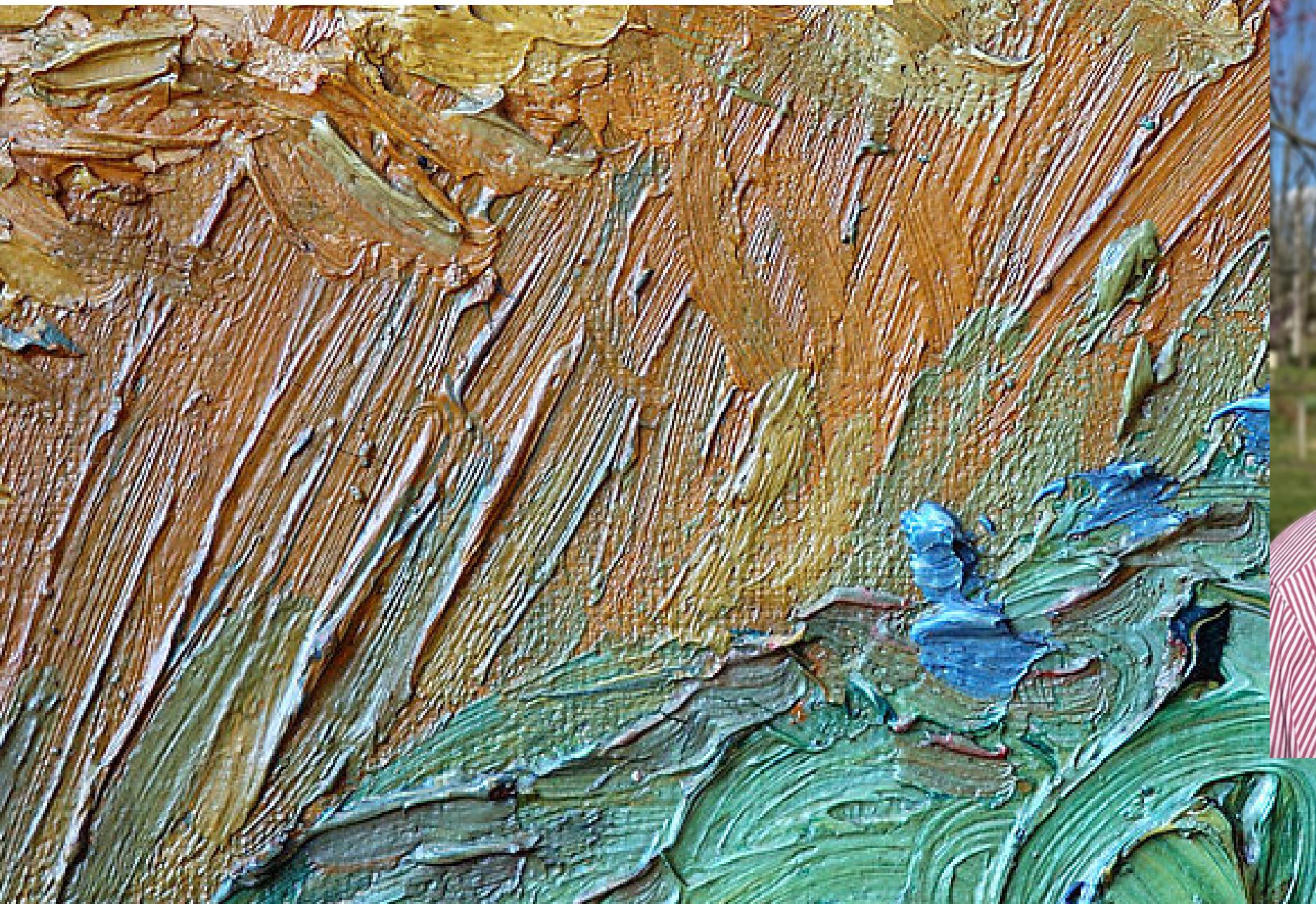
BOOKS AND SCHOLARS' POSSESSIONS - UNKNOWN ARTIST

DATA ANALYSIS, MODELING,
AND FORECASTING

ELIJAH JAROCKI
DATA SCIENTIST

ELIJAH JAROCKI

Data Scientist



WHEAT FIELD WITH CYPRESSES - VINCENT VAN GOGH

AGENDA

1. Business Understanding
2. Data Understanding
3. Use in Exhibitions
4. Analysis and Modeling
5. Forecasting
6. Recommendations



THE
MET

THE MET

\$3.7 BILLION DOLLARS
2 MILLION WORKS
\$63.1 MILLION IN 2019
PUBLIC DOMAIN IMAGES FROM COLLECTION



POEM BY SŌSEI HŌSHI, FROM THE SERIES ONE HUNDRED POEMS EXPLAINED BY THE NURSE (HYAKUNIN ISSHU UBA GA ETOKI) - HOKUSAI

BUSINESS PROBLEM

"HOW SHOULD THE MET
GROW ITS COLLECTION?"



DATA UNDERSTANDING

THE MET OPEN ACCESS API
CSV WITH 477,000 ENTRIES
ACCESSION YEAR



PANEL WITH ROSEBUSH, BIRDS, AND DEER PATTERN - UNKNOWN

TIGER IN REPOSE - ANTOINE-LOUIS BARYE

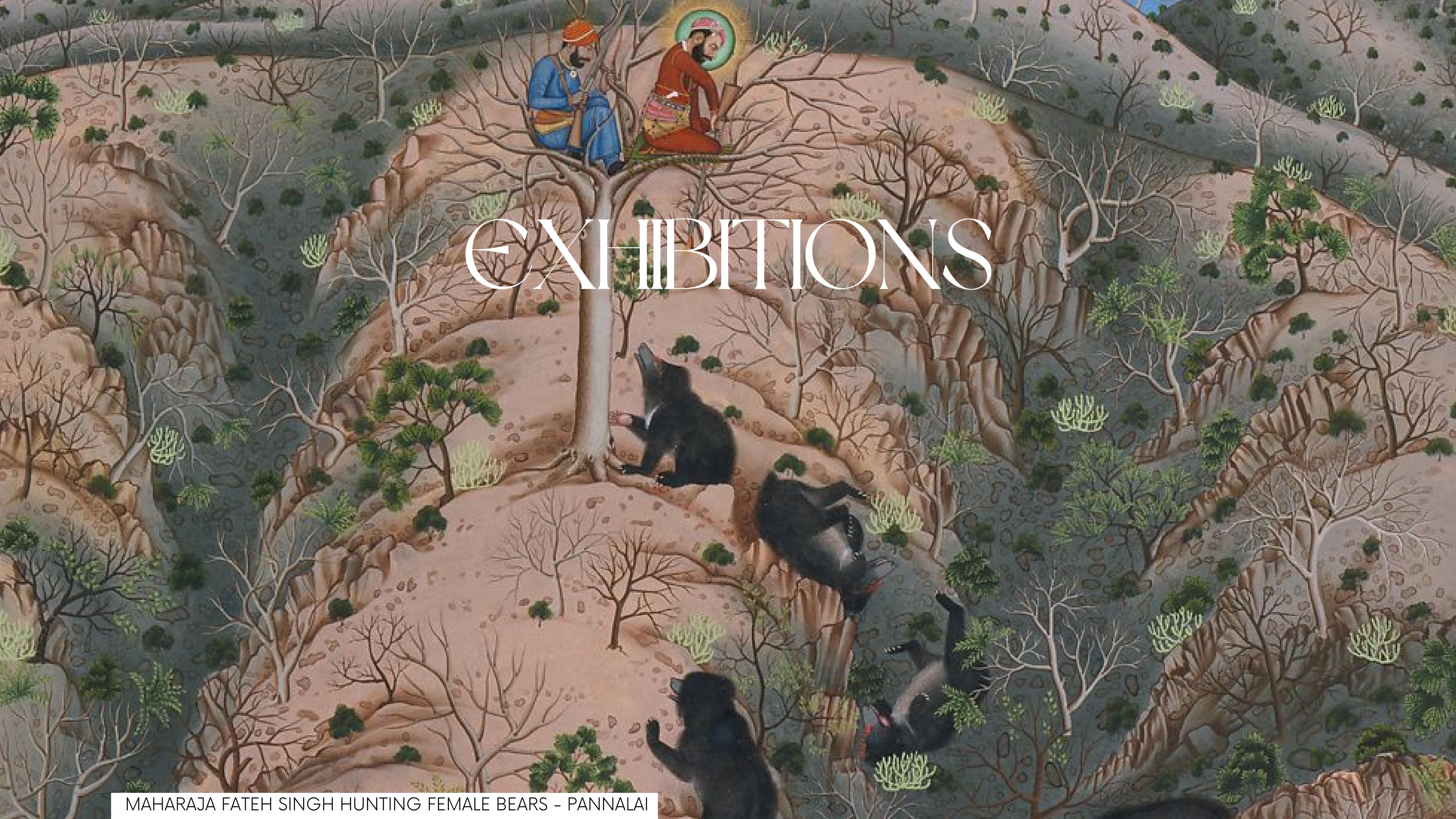
DATA UNDERSTANDING

1870-2022

474,248 USABLE ENTRIES

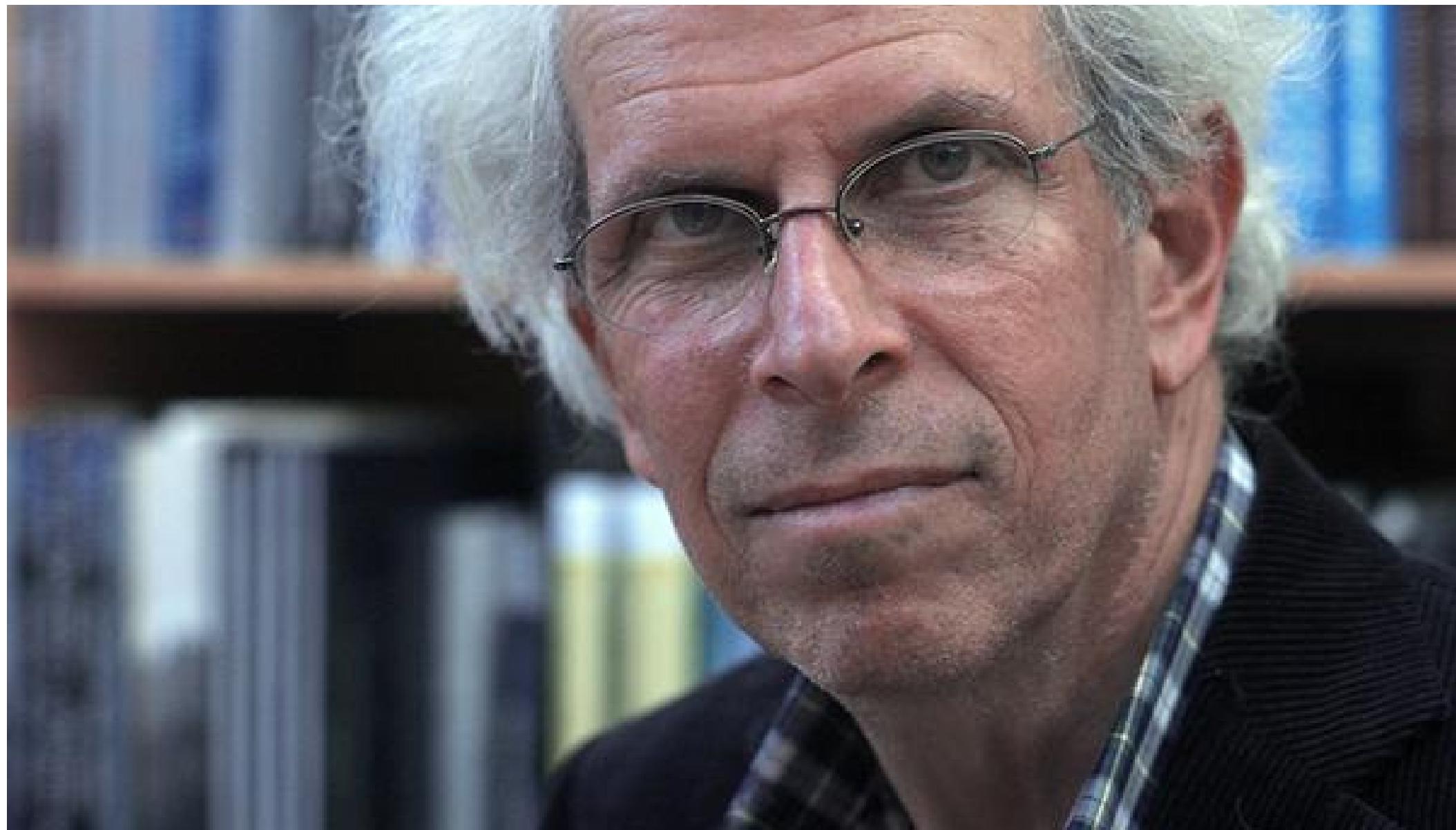
MEDIUM CLASSIFICATION

"OBJECT TIME"



EXHIBITIONS

MAHARAJA FATEH SINGH HUNTING FEMALE BEARS - PANNALAI

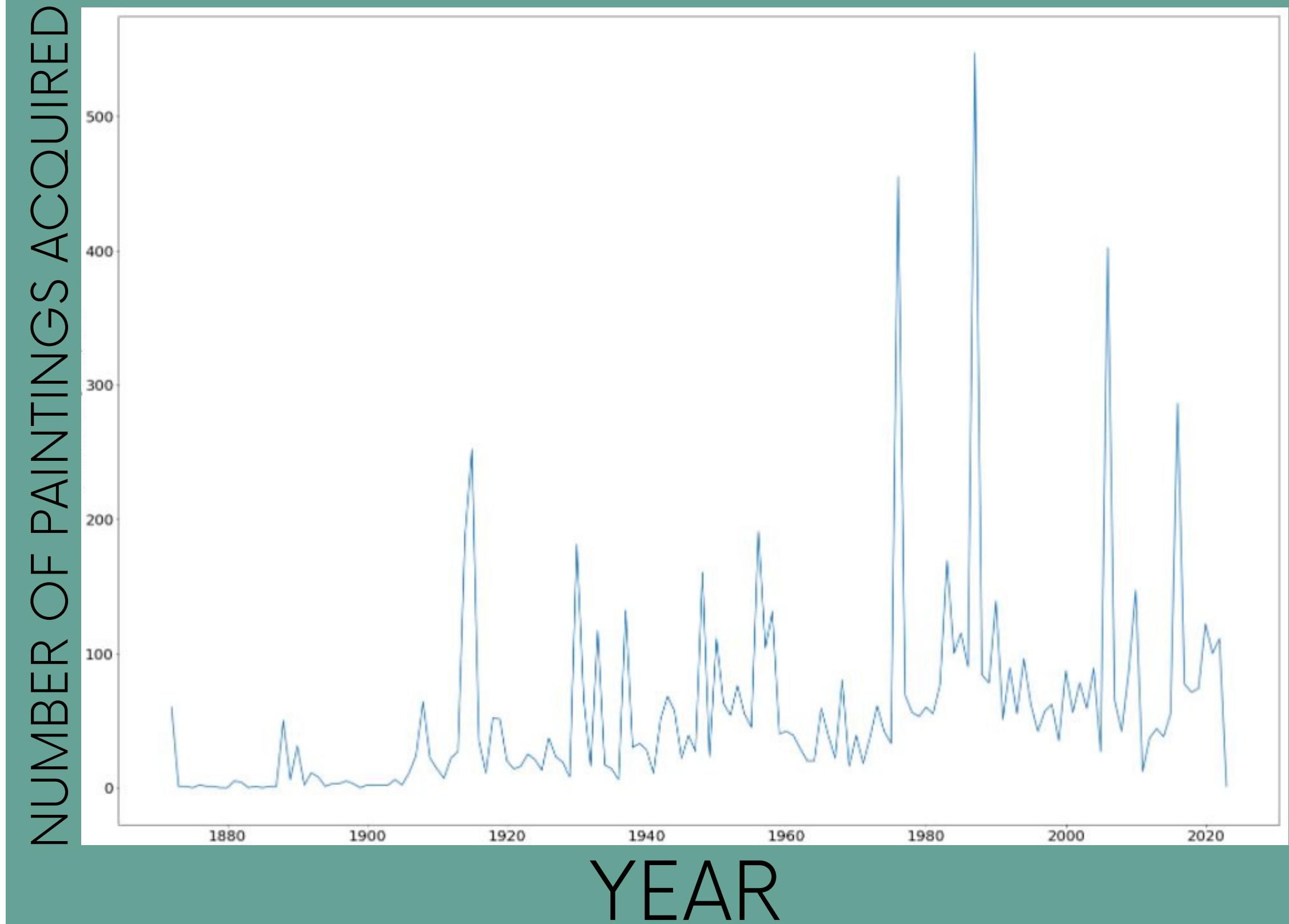


OBJECT TIME

STEPHEN SHORE
PHOTOGRAPHER
83 IMAGES SINCE 2000
LOW "OBJECT TIME"

ANALYSIS & MODELING

PAINTINGS SUBSET
8,000 ENTRIES
AGGREGATED BY YEAR
PEAKS 1920, 1980, 1990, 2000



BASELINE MODEL



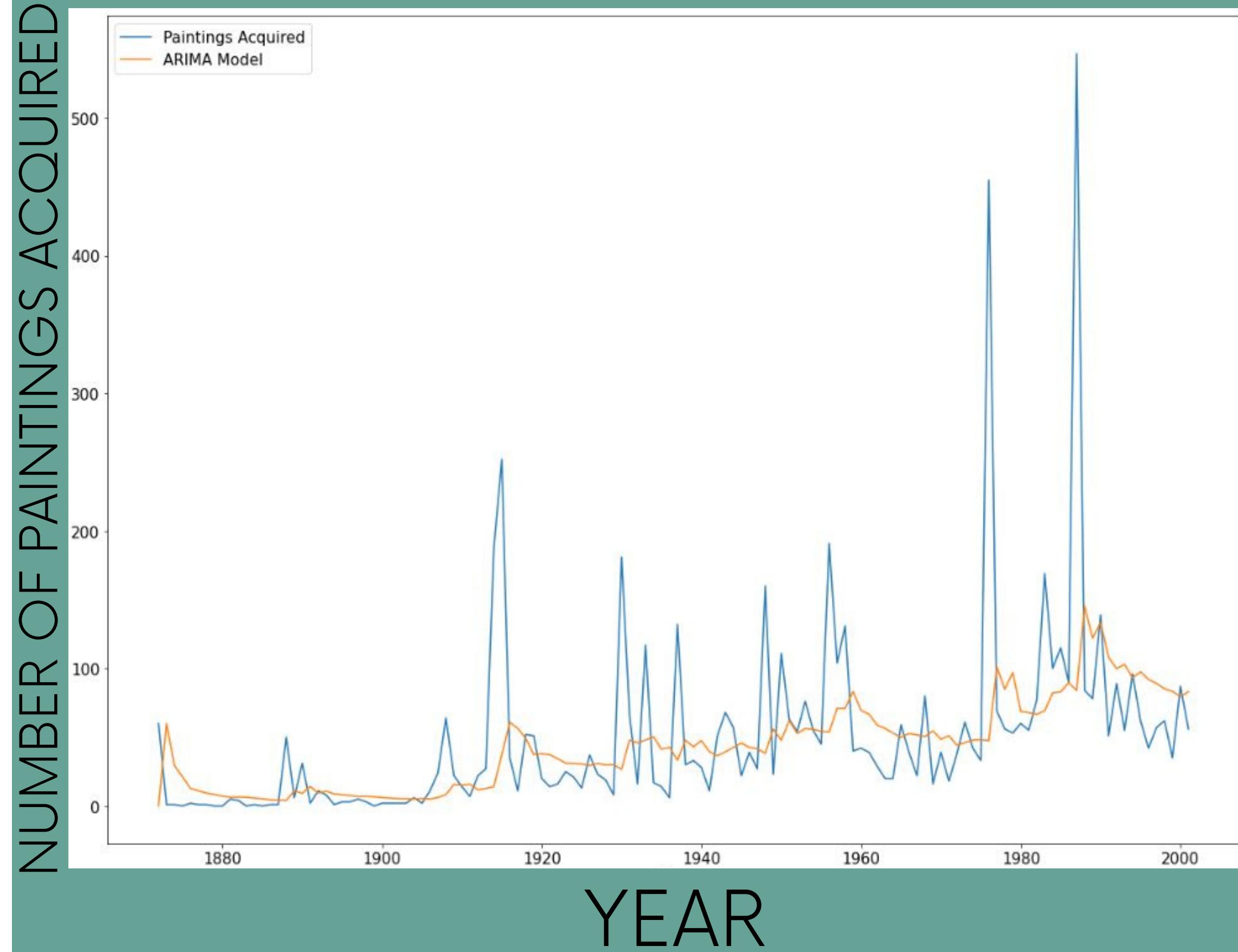
NAIVE SHIFT OF 1

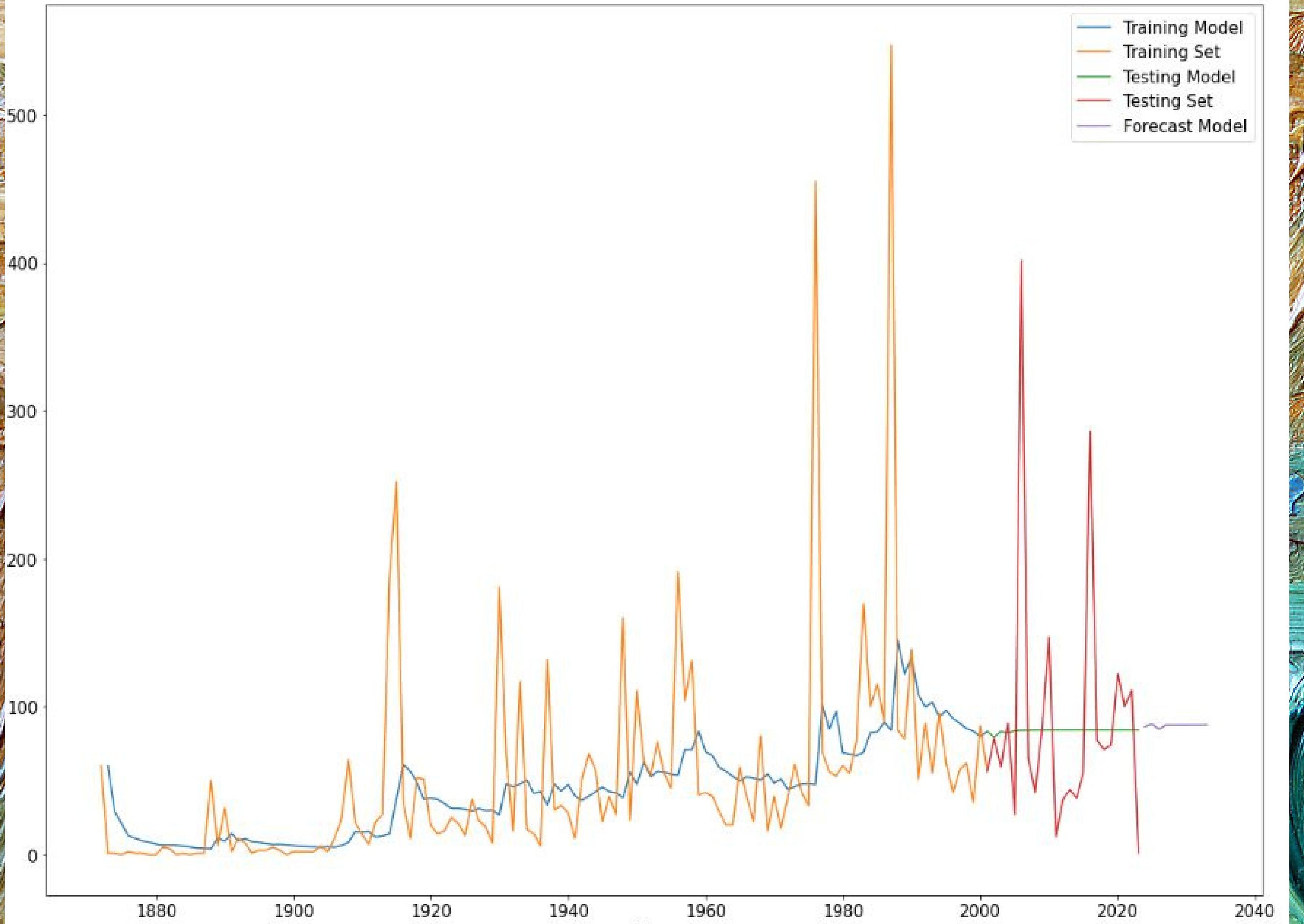
MSE OF 98.79

MUST BEAT TO BE EFFECTIVE

ARIMA MODEL

TRAIN: 1870-2000,
TEST: 2000-2022
NAIVE MSE: 87.02
ARIMA MSE: 98.79







THE CHAMPIONS OF THE MISSISSIPPI – A RACE FOR THE BUCKHORNS – FRANCES FLORA BOND PALMER

FORECAST

84-87 PAINTINGS PER YEAR 2022-2032
SPIKES IN HISTORICAL ACQUISITION
APPLICABLE TO OTHER CLASSIFICATIONS

庄野
通協

RECOMMENDATIONS

RECOMMENDATIONS

84-87 PAINTINGS PER YEAR 2022-2032
MODEL "PRINTS" AND "SCULPTURES"
ASSESS BIAS INHERENT IN DATASET





THANK YOU!

[LINKEDIN.COM/IN/ELIJAH-JAROCKI](https://www.linkedin.com/in/elijah-jarocki)
[GITHUB.COM/EJAROCKI](https://github.com/ejarocki)