

Nanopublication — Computational Image Analysis - AQC0490

by Arnaud Quercy · Phrygian Voyage · 2023

Claim 1: Computational Image Analysis - AQC0490

Computational image analysis [3] of artwork Phrygian [1] Voyage (AQC0490) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2026-02-04.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 1210x1694 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D2CDBE	18.8	yellow	lightgray
2	211312	15.6	red-orange	black
3	566C6D	13.2	blue-green	dimgray
4	D6C094	13.1	yellow-orange	tan
5	7B9C9C	12.7	blue-green	lightslategray
6	6E0604	7.1	red-orange	maroon
7	332E2C	7.0	gray	darkslategray
8	BCB3AB	6.0	orange	steel gray
9	4A9198	4.0	blue-green	cadetblue
10	A9720E	2.7	yellow-orange	darkgoldenrod
11	B1C352	0.3	yellow-green	ochre [Accent]
12	BF818F	0.3	red	rosybrown [Accent]

Color Families:

Family	%
blue-green	29.8
red-orange	22.7
yellow	18.8
yellow-orange	15.8
gray	7.0
orange	6.0
yellow-green	0.3
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
B1C352	yellow-green	ochre	58.3
BF818F	red	rosybrown	26.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.272
Mean Local Roughness	0.014
Roughness Uniformity	0.022
Edge Density	0.037
Mean Gradient Magnitude	0.1
Gradient Variance	0.046
Gradient Smoothness	0.0
Directional Coherence	0.142
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.615
Spatial Variation	0.121
Texture Consistency	0.715

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.49
Brightness Variance	0.272
Brightness Uniformity	0.445
Brightness Skewness	-0.258
Brightness Entropy	7.364
Rms Contrast	0.272
Michelson Contrast	1.0
Weber Contrast	0.859
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.749
Shadow Percentage	30.197
Midtone Percentage	32.977
Highlight Percentage	36.827
Shadow Clipping	0.001
Highlight Clipping	0.002
Tonal Balance	0.023
Fine Contrast	0.008
Medium Contrast	0.018
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.1
Contrast Clustering	0.285

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.748
Color Clustering	0.762

Metric	Value
Color Transition Smoothness	0.729
Transition Uniformity	0.698
Sharp Transition Ratio	0.1
Transition Directionality	0.132
Mean Saturation	0.333
Saturation Variance	0.077
Low Saturation Ratio	0.616
Medium Saturation Ratio	0.241
High Saturation Ratio	0.143
Saturation Clustering	0.999
Hue Concentration	0.268
Complementary Balance	0.222
Analogous Dominance	0.621
Temperature Bias	0.257

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

- [1] Arnaud Quercy (2023). Phrygian Voyage — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0490.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/phrygian-voyage_5is.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

EPISTEMIC PROFILE

Claim type computational analysis

Voice third person

Epistemic status empirical measurement

Methodology computational analysis

Certainty high

CHECKSUM (SHA-256)

1509f8f49ca4b8ac3a326974745263305440a7cdf78b049c802e7-fab8b02589

Artist Arnaud Quercy

Date 2023

Collection Synesthetic Explorations

Certificate 20231231-0077

Asset code AQC0490

Version 1

Published 2026-04-09

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Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-04-09

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0490-computational-image-analysis-aqc0490.pdf>

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