

# Nanopublication — Computational Image Analysis - AQC0481

by Arnaud Quercy · The Solitary Cyclop · 2023

## Claim 1: Computational Image Analysis - AQC0481

Computational image analysis [3] of artwork The [1] Solitary Cyclop (AQC0481) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	E7E3DD	21.0	white	white
2	D3CBC0	13.4	yellow-orange	lightgray
3	31231D	12.2	orange	very dark gray
4	B6AC9D	9.7	yellow-orange	steel gray
5	9B8D7C	9.5	orange	gray
6	6D3726	9.4	red-orange	russet
7	4D443E	9.3	orange	darkslategray
8	716861	7.2	orange	dimgray
9	966440	6.1	orange	burnt sienna
10	75A6B8	2.2	blue	cadetblue
11	E9DF9C	0.3	yellow	palegoldenrod [Accent]
12	A1C9D0	0.3	blue-green	lightsteelblue [Accent]
13	CBD18A	0.3	yellow-green	tan [Accent]

### Color Families:

Family	%
orange	44.2
yellow-orange	23.1
white	21.0
red-orange	9.4
blue	2.2
yellow	0.3
blue-green	0.3
yellow-green	0.3

### Accent Colors:

Hex	Family	Name	Chroma
E9DF9C	yellow	palegoldenrod	34.5

Hex	Family	Name	Chroma
A1C9D0	blue-green	lightsteelblue	14.4
CBD18A	yellow-green	tan	37.3

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.273
Mean Local Roughness	0.068
Roughness Uniformity	0.045
Edge Density	0.31
Mean Gradient Magnitude	0.429
Gradient Variance	0.153
Gradient Smoothness	0.086
Directional Coherence	0.007
Pattern Complexity	0.129
Pattern Repetition	1.0
Detail Frequency Ratio	0.687
Spatial Variation	0.128
Texture Consistency	0.79

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.555
Brightness Variance	0.273
Brightness Uniformity	0.509
Brightness Skewness	-0.126
Brightness Entropy	7.79
Rms Contrast	0.273
Michelson Contrast	1.0
Weber Contrast	0.794
Mean Local Contrast	0.057
Contrast Uniformity	0.364
Dynamic Range	1.0
Effective Dynamic Range	0.784
Shadow Percentage	28.997
Midtone Percentage	29.565
Highlight Percentage	41.438
Shadow Clipping	0.018
Highlight Clipping	0.061
Tonal Balance	0.481
Fine Contrast	0.047
Medium Contrast	0.07
Coarse Contrast	0.08
Multiscale Contrast Ratio	0.582
Edge Contrast	0.429
Contrast Clustering	0.21

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.681
Color Clustering	0.885
Color Transition Smoothness	0.0
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.006
Mean Saturation	0.235
Saturation Variance	0.057
Low Saturation Ratio	0.698
Medium Saturation Ratio	0.24
High Saturation Ratio	0.061
Saturation Clustering	0.995
Hue Concentration	0.831
Complementary Balance	0.064
Analogous Dominance	0.931
Temperature Bias	0.86

## 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). The Solitary Cyclop — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0481.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2023/01/the-solitary-cyclop\\_5fa.html](https://artquamanima.com/en/artworks/2023/01/the-solitary-cyclop_5fa.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)

94e59ced952c8ea0c700cf48ccd4acf30649bf8df75a89fce534dc92c2a8ae-aa

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Date	2023
Collection	Mediterranean Echoes
Certificate	20231231-0068
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