AQC0462

Nanopublication — Computational Image Analysis - AQC0462

by Arnaud Quercy · Hawaï · 2023

Claim 1: Computational Image Analysis - AQC0462

> Computational image analysis [3] of artwork Hawaï [1] (AQC0462) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		B7998E	13.8	orange	rosybrown
2		946669	12.4	red-orange	gray
3		74A4E9	10.6	blue-violet	cornflowerblue
4		707995	10.4	blue-violet	grayish purple
5		998CB6	10.2	violet	steel gray
6		535164	10.1	violet	dusty mauve
7		B6B6DF	9.9	violet	lightsteelblue
8		212E49	9.8	blue-violet	very dark indigo
9		487DDA	8.2	blue-violet	royalblue
10		1C53AE	4.6	violet	darkslateblue
11		65D3E6	0.3	blue-green	skyblue [Accent]
12		C2E1FB	0.3	blue	paleturquoise [Accent]
13		D5AEBD	0.3	red	silver [Accent]
14		B8AE6A	0.3	yellow	ochre [Accent]
15		7D3962	0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
blue-violet	39.0
violet	34.8
orange	13.8
red-orange	12.4
blue-green	0.3
blue	0.3
red	0.3
yellow	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
65D3E6	blue-green	skyblue	32.2
C2E1FB	blue	paleturquoise	16.8
D5AEBD	red	silver	17.1
B8AE6A	yellow	ochre	36.5
7D3962	red-violet	dusty mauve	36.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.168
Mean Local Roughness	0.036
Roughness Uniformity	0.018
Edge Density	0.254
Mean Gradient Magnitude	0.26
Gradient Variance	0.042
Gradient Smoothness	0.216
Directional Coherence	0.003
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.662
Spatial Variation	0.085
Texture Consistency	0.792

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.495
Brightness Variance	0.168
Brightness Uniformity	0.662
Brightness Skewness	-0.411
Brightness Entropy	7.373
Rms Contrast	0.168
Michelson Contrast	1.0
Weber Contrast	0.652
Mean Local Contrast	0.035
Contrast Uniformity	0.527
Dynamic Range	1.0
Effective Dynamic Range	0.565
Shadow Percentage	18.086
Midtone Percentage	66.047
Highlight Percentage	15.867
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.144
Fine Contrast	0.022
Medium Contrast	0.044
Coarse Contrast	0.056
Multiscale Contrast Ratio	0.403

Metric	Value
Edge Contrast	0.26
Contrast Clustering	0.208

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.649
Color Clustering	0.541
Color Transition Smoothness	0.33
Transition Uniformity	0.722
Sharp Transition Ratio	0.1
Transition Directionality	0.002
Mean Saturation	0.391
Saturation Variance	0.041
Low Saturation Ratio	0.415
Medium Saturation Ratio	0.498
High Saturation Ratio	0.087
Saturation Clustering	0.999
Hue Concentration	0.529
Complementary Balance	0.11
Analogous Dominance	0.674
Temperature Bias	-0.295

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). Hawaï — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0462.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/hawai_57w.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 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)

77d3bafb2f1c2e6c54b56fe62a1c11ec21fb7ff2d342db050ddaf-d7c3cfc34c6

Artist	Arnaud Quercy
Date	2023
Collection	American Voyage
Certificate	20231231-0049
Asset code	AQC0462
Version	1
Published	2026-04-09

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/AQC0462-computational-image-analysis-aqc0462.pdf