AQC0805

Nanopublication — Computational Image Analysis - AQC0805

by Arnaud Quercy · Ab Octaves - Reflexions 31 · 2025

Claim 1: Computational Image Analysis - AQC0805

> Computational image analysis [3] of artwork Ab Octaves [1] - Reflexions 31 (AQC0805) [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]: 2441x3255 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D9DADA	21.5	white	gainsboro
2		B3A58F	15.6	yellow-orange	rosybrown
3		C1CAE3	13.9	blue-violet	lightsteelblue
4		9B8E80	11.8	yellow-orange	gray
5		A8B6DE	11.2	blue-violet	lightblue
6		C6BAA4	10.8	yellow-orange	tan
7		8EA0C9	5.2	blue-violet	steel gray
8		7C7164	4.0	yellow-orange	dimgray
9		527E9A	3.2	blue	grayish purple
10		292A2E	2.8	gray	very dark gray
11		170E08	0.3	red-orange	black [Accent]
12		E4AE80	0.3	orange	burlywood [Accent]
13		62A6B5	0.3	blue-green	cadetblue [Accent]
14		7F799D	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
yellow-orange	42.3
blue-violet	30.3
white	21.5
blue	3.2
gray	2.8
red-orange	0.3
orange	0.3
blue-green	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
170E08	red-orange	black	5.0
E4AE80	orange	burlywood	34.0
62A6B5	blue-green	cadetblue	22.7
7F799D	violet	dusty mauve	20.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.151
Mean Local Roughness	0.021
Roughness Uniformity	0.019
Edge Density	0.112
Mean Gradient Magnitude	0.171
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.012
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.62
Spatial Variation	0.064
Texture Consistency	0.615

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.694
Brightness Variance	0.151
Brightness Uniformity	0.783
Brightness Skewness	-1.333
Brightness Entropy	7.033
Rms Contrast	0.151
Michelson Contrast	1.0
Weber Contrast	0.402
Mean Local Contrast	0.022
Contrast Uniformity	0.165
Dynamic Range	1.0
Effective Dynamic Range	0.443
Shadow Percentage	2.993
Midtone Percentage	32.928
Highlight Percentage	64.08
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.028
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.26
Edge Contrast	0.171

Metric	Value
Contrast Clustering	0.385

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.714
Color Clustering	0.763
Color Transition Smoothness	0.575
Transition Uniformity	0.716
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.178
Saturation Variance	0.012
Low Saturation Ratio	0.908
Medium Saturation Ratio	0.091
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.039
Complementary Balance	0.203
Analogous Dominance	0.498
Temperature Bias	0.005

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 (2025). Ab Octaves - Reflexions 31 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0805.html

[2] Quercy, A. (2025). Ab Octaves - Reflexions 31 - Gallery. https://artquamanima.com/en/artworks/2025/01/ab-octaves-reflexions-31_8xa.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/10/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)

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c6fbf4d5c80b02122a1d9d104d4dd32d336a15e5eb6ffaf4e85d-
d17d1ad1e022
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Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20250125-0001
Asset code	AQC0805
Version	1
Published	2026-03-25