AQC0845

Nanopublication — Computational Image Analysis - AQC0845

by Arnaud Quercy · Ab Octaves - Reflexions 33 · 2025

Claim 1: Computational Image Analysis - AQC0845

> K-means clustering analysis [3] (10 colors) performed on artwork Ab Octaves [1] - Reflexions 33 (AQC0845) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 2237x2982 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		CACDCC	19.6	white	lightgray
2		B7BEC1	14.6	gray	silver
3		E1CBB2	13.8	yellow-orange	wheat
4		DCDCD8	12.9	white	gainsboro
5		D3BAA2	11.1	orange	tan
6		A0AAB4	8.8	blue	steel gray
7		8B909D	7.4	blue-violet	lightslategray
8		6F7989	7.0	blue-violet	grayish purple
9		2D2C2E	2.9	gray	very dark gray
10		4C5B60	2.0	blue	dimgray
11		BC8B92	0.3	red	rosybrown [Accent]

Color Families:

Family	%
white	32.5
gray	17.6
blue-violet	14.4
yellow-orange	13.8
orange	11.1
blue	10.7
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
BC8B92	red	rosybrown	20.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.155
Mean Local Roughness	0.018
Roughness Uniformity	0.017
Edge Density	0.088
Mean Gradient Magnitude	0.159
Gradient Variance	0.036
Gradient Smoothness	0.0
Directional Coherence	0.006
Pattern Complexity	0.114
Pattern Repetition	1.0
Detail Frequency Ratio	0.611
Spatial Variation	0.086
Texture Consistency	0.613

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.717
Brightness Variance	0.155
Brightness Uniformity	0.784
Brightness Skewness	-1.765
Brightness Entropy	6.792
Rms Contrast	0.155
Michelson Contrast	1.0
Weber Contrast	0.419
Mean Local Contrast	0.02
Contrast Uniformity	0.12
Dynamic Range	1.0
Effective Dynamic Range	0.455
Shadow Percentage	3.725
Midtone Percentage	20.11
Highlight Percentage	76.165
Shadow Clipping	0.002
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.025
Coarse Contrast	0.041
Multiscale Contrast Ratio	0.227
Edge Contrast	0.159
Contrast Clustering	0.387

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.696
Color Clustering	0.86
Color Transition Smoothness	0.605
Transition Uniformity	0.76
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.006
Mean Saturation	0.12
Saturation Variance	0.008
Low Saturation Ratio	0.981
Medium Saturation Ratio	0.019
High Saturation Ratio	0.0
Saturation Clustering	1.0
Hue Concentration	0.497
Complementary Balance	0.154
Analogous Dominance	0.747
Temperature Bias	0.497

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 33 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0845.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/ab-octaves-reflexions-33_9cu.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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2188a6640410e9f446f9a699c0c9c219fdcefc7415d172fd-
b16e8daacacd8da7
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Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20250125-0041
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