

Nanopublication — Computational Image Analysis - AQC0806

by Arnaud Quercy · Ab Octaves - Reflexions 32 · 2025

Claim 1: Computational Image Analysis - AQC0806

Computational image analysis [3] of artwork Ab Octaves [1] - Reflexions 32 (AQC0806) [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]: 2419x3225 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	A8B4D6	18.0	blue-violet	lightsteelblue
2	BEC8E2	17.5	blue-violet	lightblue
3	8F9ECC	11.0	blue-violet	steel gray
4	6D6B70	11.0	gray	dusty mauve
5	D6DFEF	10.8	blue-violet	gainsboro
6	8A8585	9.5	gray	gray
7	535259	7.6	gray	dusty mauve
8	A89DA1	7.5	red	steel gray
9	6D83AA	4.6	blue-violet	grayish purple
10	1C1B1F	2.5	gray	very dark gray
11	E5B88D	0.3	orange	burlywood [Accent]
12	467B93	0.3	blue	steelblue [Accent]
13	556EC5	0.3	violet	slateblue [Accent]
14	D0C1AA	0.3	yellow-orange	silver [Accent]

Color Families:

Family	%
blue-violet	61.9
gray	30.6
red	7.5
orange	0.3
blue	0.3
violet	0.3
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
E5B88D	orange	burlywood	29.7

Hex	Family	Name	Chroma
467B93	blue	steelblue	21.1
556EC5	violet	slateblue	50.9
D0C1AA	yellow-orange	silver	13.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.182
Mean Local Roughness	0.03
Roughness Uniformity	0.015
Edge Density	0.227
Mean Gradient Magnitude	0.262
Gradient Variance	0.043
Gradient Smoothness	0.212
Directional Coherence	0.005
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.611
Spatial Variation	0.127
Texture Consistency	0.691

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.624
Brightness Variance	0.182
Brightness Uniformity	0.708
Brightness Skewness	-0.668
Brightness Entropy	7.451
Rms Contrast	0.182
Michelson Contrast	1.0
Weber Contrast	0.554
Mean Local Contrast	0.033
Contrast Uniformity	0.539
Dynamic Range	1.0
Effective Dynamic Range	0.557
Shadow Percentage	6.184
Midtone Percentage	45.546
Highlight Percentage	48.27
Shadow Clipping	0.005
Highlight Clipping	0.003
Tonal Balance	0.177
Fine Contrast	0.016
Medium Contrast	0.04
Coarse Contrast	0.065
Multiscale Contrast Ratio	0.255
Edge Contrast	0.262
Contrast Clustering	0.309

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.687
Color Clustering	0.861
Color Transition Smoothness	0.34
Transition Uniformity	0.725
Sharp Transition Ratio	0.1
Transition Directionality	0.004
Mean Saturation	0.169
Saturation Variance	0.011
Low Saturation Ratio	0.886
Medium Saturation Ratio	0.114
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.903
Complementary Balance	0.041
Analogous Dominance	0.951
Temperature Bias	-0.892

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 32 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0806.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/ab-octaves-reflexions-32_8xo.html
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

65471cb9ba6e41ae0fcbe5ad82dda11d75da24f684d6e193d93e72b-bc2696f2b

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20250125-0002
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