AQC0844

Nanopublication — Computational Image Analysis - AQC0844

by Arnaud Quercy · A minor - Research on Harmony - Variation 9 · 2025

Claim 1: Computational Image Analysis - AQC0844

> Computational image analysis [3] of artwork A minor - Research [1] on Harmony - Variation 9 (AQC0844) [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]: 2209x2945 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DFE0D9	18.0	white	gainsboro
2		CD9A76	17.1	orange	darksalmon
3		C48E66	14.1	orange	peru
4		D3C8B7	13.6	yellow-orange	silver
5		D2A68A	11.6	orange	tan
6		C8B5A6	9.7	orange	steel gray
7		A78B79	5.6	orange	rosybrown
8		BC7B51	5.2	orange	indianred
9		2E282B	3.2	gray	very dark gray
10		534D51	1.9	gray	dusty mauve
11		B0CCD6	0.3	blue	lightsteelblue [Accent]
12		6B7890	0.3	blue-violet	grayish purple [Accent]
13		AFC9CE	0.3	blue-green	lightsteelblue [Accent]

Color Families:

Family	%
orange	63.3
white	18.0
yellow-orange	13.6
gray	5.1
blue	0.3
blue-violet	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
B0CCD6	blue	lightsteelblue	10.6
6B7890	blue-violet	grayish purple	15.0
AFC9CE	blue-green	lightsteelblue	9.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.152
Mean Local Roughness	0.014
Roughness Uniformity	0.015
Edge Density	0.039
Mean Gradient Magnitude	0.124
Gradient Variance	0.033
Gradient Smoothness	0.0
Directional Coherence	0.014
Pattern Complexity	0.113
Pattern Repetition	1.0
Detail Frequency Ratio	0.598
Spatial Variation	0.069
Texture Consistency	0.789

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.685
Brightness Variance	0.152
Brightness Uniformity	0.778
Brightness Skewness	-1.262
Brightness Entropy	6.899
Rms Contrast	0.152
Michelson Contrast	1.0
Weber Contrast	0.363
Mean Local Contrast	0.016
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.467
Shadow Percentage	4.412
Midtone Percentage	40.425
Highlight Percentage	55.163
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.02
Coarse Contrast	0.033
Multiscale Contrast Ratio	0.218
Edge Contrast	0.124
Contrast Clustering	0.211

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.696
Color Clustering	0.7
Color Transition Smoothness	0.684
Transition Uniformity	0.773
Sharp Transition Ratio	0.1
Transition Directionality	0.018
Mean Saturation	0.277
Saturation Variance	0.031
Low Saturation Ratio	0.514
Medium Saturation Ratio	0.484
High Saturation Ratio	0.002
Saturation Clustering	1.0
Hue Concentration	0.972
Complementary Balance	0.007
Analogous Dominance	0.984
Temperature Bias	0.98

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). A minor - Research on Harmony - Variation 9 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0844.html

[2] Quercy, A. (2025). A minor - Research on Harmony - Variation 9 - Gallery. https://artquamanima.com/en/artworks/2025/01/a-minor-research-on-harmony-variation-9_9cg.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)

5d4580c718c641142c025ee4e7c9d2a17a78b18b901ac7d99599bef7cebad-cfd

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