AQC0809

Nanopublication — Computational Image Analysis - AQC0809

by Arnaud Quercy · A Major - Research on Harmony - Variation 6 · 2025

Claim 1: Computational Image Analysis - AQC0809

> K-means clustering analysis [3] (10 colors) performed on artwork A Major [1] - Research on Harmony - Variation 6 (AQC0809) [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]: 2421x3228 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D9D4C8	19.4	yellow-orange	lightgray
2		D4C9B5	17.4	yellow-orange	silver
3		DCDFDD	17.4	white	gainsboro
4		A6A097	10.1	yellow-orange	steel gray
5		C9BBA0	9.8	yellow-orange	tan
6		8E877F	9.1	yellow-orange	gray
7		716860	5.1	orange	dimgray
8		22282A	4.2	gray	very dark gray
9		D8CA4B	4.2	yellow	ochre
10		579BB1	3.4	blue	cadetblue
11		8EB8BD	0.3	blue-green	steel gray [Accent]
12		83B7B4	0.3	green	mediumaquamarine [Accent]

Color Families:

Family	%
yellow-orange	65.8
white	17.4
orange	5.1
gray	4.2
yellow	4.2
blue	3.4
blue-green	0.3
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
8EB8BD	blue-green	steel gray	14.8
83B7B4	green	mediumaquamarine	18.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.178
Mean Local Roughness	0.016
Roughness Uniformity	0.02
Edge Density	0.066
Mean Gradient Magnitude	0.131
Gradient Variance	0.045
Gradient Smoothness	0.0
Directional Coherence	0.026
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.618
Spatial Variation	0.122
Texture Consistency	0.422

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.715
Brightness Variance	0.178
Brightness Uniformity	0.751
Brightness Skewness	-1.57
Brightness Entropy	6.899
Rms Contrast	0.178
Michelson Contrast	1.0
Weber Contrast	0.443
Mean Local Contrast	0.017
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.514
Shadow Percentage	4.472
Midtone Percentage	25.497
Highlight Percentage	70.031
Shadow Clipping	0.006
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.008
Medium Contrast	0.021
Coarse Contrast	0.035
Multiscale Contrast Ratio	0.242
Edge Contrast	0.131
Contrast Clustering	0.578

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.753
Color Clustering	0.632
Color Transition Smoothness	0.668
Transition Uniformity	0.696
Sharp Transition Ratio	0.1
Transition Directionality	0.032
Mean Saturation	0.149
Saturation Variance	0.024
Low Saturation Ratio	0.896
Medium Saturation Ratio	0.093
High Saturation Ratio	0.012
Saturation Clustering	1.0
Hue Concentration	0.402
Complementary Balance	0.067
Analogous Dominance	0.674
Temperature Bias	0.334

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 Major - Research on Harmony - Variation 6 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0809.html

[2] Quercy, A. (2025). A Major - Research on Harmony - Variation 6 - Gallery. https://artquamanima.com/en/artworks/2025/01/a-major-research-on-harmony-variation-6_8yu.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)

05784e33a0bd90e0593156158744f37129adc2b94fa6ea20119b31bf-bbf6da21

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