AQC0855

Nanopublication — Computational Image Analysis - AQC0855

by Arnaud Quercy · Db Major - Research on Harmony - Variation 12 · 2025

Claim 1: Computational Image Analysis - AQC0855

> K-means clustering analysis [3] (10 colors) performed on artwork Db Major [1] - Research on Harmony - Variation 12 (AQC0855) [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]: 2239x2986 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E3E0D7	28.2	yellow	gainsboro
2		CED5D4	20.3	white	lightgray
3		BBC5C0	12.9	white	silver
4		98B1B5	7.9	blue-green	steel gray
5		78969F	7.2	blue	lightslategray
6		9E6187	6.4	red-violet	dusty mauve
7		5A7585	5.2	blue	blue gray
8		465559	4.5	blue-green	darkslategray
9		2B2A2F	4.2	gray	very dark gray
10		753767	3.1	red-violet	dusty mauve
11		D3AC8A	0.3	orange	tan [Accent]
12		325485	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
white	33.2
yellow	28.2
blue-green	12.5
blue	12.4
red-violet	9.6
gray	4.2
orange	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
D3AC8A	orange	tan	24.7
325485	blue-violet	grayish purple	31.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.213
Mean Local Roughness	0.015
Roughness Uniformity	0.019
Edge Density	0.062
Mean Gradient Magnitude	0.128
Gradient Variance	0.044
Gradient Smoothness	0.0
Directional Coherence	0.037
Pattern Complexity	0.113
Pattern Repetition	1.0
Detail Frequency Ratio	0.606
Spatial Variation	0.123
Texture Consistency	0.613

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.692
Brightness Variance	0.213
Brightness Uniformity	0.692
Brightness Skewness	-1.013
Brightness Entropy	7.116
Rms Contrast	0.213
Michelson Contrast	1.0
Weber Contrast	0.611
Mean Local Contrast	0.016
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.631
Shadow Percentage	9.054
Midtone Percentage	25.135
Highlight Percentage	65.81
Shadow Clipping	0.003
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.008
Medium Contrast	0.021
Coarse Contrast	0.034
Multiscale Contrast Ratio	0.234
Edge Contrast	0.128
Contrast Clustering	0.387

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.728
Color Clustering	0.881

Metric	Value
Color Transition Smoothness	0.671
Transition Uniformity	0.7
Sharp Transition Ratio	0.1
Transition Directionality	0.048
Mean Saturation	0.145
Saturation Variance	0.021
Low Saturation Ratio	0.842
Medium Saturation Ratio	0.157
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.443
Complementary Balance	0.04
Analogous Dominance	0.573
Temperature Bias	-0.164

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). Db Major - Research on Harmony - Variation 12 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0855.html

[2] Quercy, A. (2025). Db Major - Research on Harmony - Variation 12 - Gallery. https://artquamanima.com/en/artworks/2025/01/db-major-research-on-harmony-variation-12_9gq.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)

bd5972f7879b467677fb74612d6c3fc45a2c780a4319243ec5e2375d94b6e-f10

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