AQC0824

Nanopublication — Computational Image Analysis - AQC0824

by Arnaud Quercy · D Minor - Research on Harmony - Variation 7 · 2025

Claim 1: Computational Image Analysis - AQC0824

> Computational image analysis [3] of artwork D Minor [1] - Research on Harmony - Variation 7 (AQC0824) [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]: 2253x3004 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C7C2B6	26.3	yellow-orange	silver
2		CECAC1	20.0	yellow-orange	lightgray
3		BFB4A3	14.5	yellow-orange	steel gray
4		D9D8D3	10.7	white	lightgrey
5		A6A29C	7.6	gray	steel gray
6		CDB067	7.5	yellow-orange	ochre
7		938D86	5.6	yellow-orange	gray
8		D19830	3.6	yellow-orange	goldenrod
9		726F6D	2.2	gray	dimgray
10		393635	1.9	gray	darkslategray
11		B57113	0.3	orange	darkgoldenrod [Accent]
12		46425D	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
yellow-orange	77.6
gray	11.7
white	10.7
orange	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
B57113	orange	darkgoldenrod	60.4
46425D	violet	dusty mauve	17.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.114
Mean Local Roughness	0.014
Roughness Uniformity	0.017
Edge Density	0.054
Mean Gradient Magnitude	0.114
Gradient Variance	0.032
Gradient Smoothness	0.0
Directional Coherence	0.041
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.619
Spatial Variation	0.063
Texture Consistency	0.478

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.723
Brightness Variance	0.114
Brightness Uniformity	0.843
Brightness Skewness	-2.174
Brightness Entropy	6.439
Rms Contrast	0.114
Michelson Contrast	1.0
Weber Contrast	0.284
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.325
Shadow Percentage	1.907
Midtone Percentage	18.378
Highlight Percentage	79.714
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.019
Coarse Contrast	0.03
Multiscale Contrast Ratio	0.248
Edge Contrast	0.114
Contrast Clustering	0.522

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.768
Color Clustering	0.271

Metric	Value
Color Transition Smoothness	0.715
Transition Uniformity	0.793
Sharp Transition Ratio	0.1
Transition Directionality	0.053
Mean Saturation	0.14
Saturation Variance	0.032
Low Saturation Ratio	0.878
Medium Saturation Ratio	0.092
High Saturation Ratio	0.029
Saturation Clustering	1.0
Hue Concentration	0.971
Complementary Balance	0.005
Analogous Dominance	0.986
Temperature Bias	0.981

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). D Minor - Research on Harmony - Variation 7 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0824.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/d-minor-research-on-harmony-variation-7_94o.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)

831b5ceeaf795119af06053a1be95fe08f0f85f96de3cb1ffe8c593a8a601f-dd

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