AQC0457

Nanopublication — Computational Image Analysis - AQC0457

by Arnaud Quercy · Tritone (E, Bb) - Reflexions 9 · 2023

Claim 1: Computational Image Analysis - AQC0457

> Computational image analysis [3] of artwork Tritone [1] (E, Bb) - Reflexions 9 (AQC0457) [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 2026-02-24.

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]: 794x1106 pixels. Analysis date: 2026-02-24.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DAD15C	22.8	yellow	ochre
2		C7C2A5	10.9	yellow	silver
3		140B29	10.9	violet	very dark purple
4		271D40	10.9	violet	very dark purple
5		EAE465	10.6	yellow	khaki
6		3B2662	9.4	violet	indigo
7		C8CEDB	9.1	blue-violet	lightgray
8		563982	7.2	violet	darkslateblue
9		ACB5C8	6.8	blue-violet	lightsteelblue
10		858494	1.4	violet	dusty mauve
11		987064	0.3	red-orange	gray [Accent]
12		867069	0.3	orange	gray [Accent]
13		8F9761	0.3	yellow-green	gray [Accent]

Color Families:

Family	%
yellow	44.4
violet	39.7
blue-violet	15.9
red-orange	0.3
orange	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
987064	red-orange	gray	19.1
867069	orange	gray	9.9
8F9761	yellow-green	gray	29.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.306
Mean Local Roughness	0.021
Roughness Uniformity	0.032
Edge Density	0.068
Mean Gradient Magnitude	0.129
Gradient Variance	0.062
Gradient Smoothness	0.0
Directional Coherence	0.076
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.652
Spatial Variation	0.229
Texture Consistency	0.414

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.543
Brightness Variance	0.306
Brightness Uniformity	0.436
Brightness Skewness	-0.497
Brightness Entropy	6.943
Rms Contrast	0.306
Michelson Contrast	0.992
Weber Contrast	0.882
Mean Local Contrast	0.019
Contrast Uniformity	0.0
Dynamic Range	0.988
Effective Dynamic Range	0.78
Shadow Percentage	37.033
Midtone Percentage	3.757
Highlight Percentage	59.21
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.015
Medium Contrast	0.025
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.129
Contrast Clustering	0.586

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.739
Color Clustering	0.829

Metric	Value
Color Transition Smoothness	0.646
Transition Uniformity	0.576
Sharp Transition Ratio	0.1
Transition Directionality	0.072
Mean Saturation	0.47
Saturation Variance	0.052
Low Saturation Ratio	0.289
Medium Saturation Ratio	0.6
High Saturation Ratio	0.111
Saturation Clustering	0.998
Hue Concentration	0.188
Complementary Balance	0.088
Analogous Dominance	0.505
Temperature Bias	0.396

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 (2023). Tritone (E, Bb) - Reflexions 9 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0457.html

[2] Quercy, A. (2023). Tritone (E, Bb) - Reflexions 9 - Gallery. https://artquamanima.com/en/artworks/2023/01/tritone-e-bb-reflexions-9_55y.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 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)

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