AQC0783

Nanopublication — Computational Image Analysis - AQC0783

by Arnaud Quercy · Eb Minor - Research on Harmony - Variation 7 · 2024

Claim 1: Computational Image Analysis - AQC0783

> Computational image analysis [3] of artwork Eb Minor [1] - Research on Harmony - Variation 7 (AQC0783) [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]: 2458x3688 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		383A49	26.2	violet	dusty mauve
2		1F232D	11.1	blue-violet	very dark gray
3		80D19F	9.3	yellow-green	mediumaquamarine
4		9E87CA	9.3	violet	mediumpurple
5		CBC6B6	8.7	yellow	silver
6		70BB8A	8.3	yellow-green	darkseagreen
7		A7AFAB	8.2	gray	steel gray
8		6E5B8F	7.9	violet	dusty mauve
9		399263	7.6	yellow-green	seagreen
10		C4BBE9	3.5	violet	lightsteelblue
11		8A7252	0.3	yellow-orange	dimgray [Accent]
12		0D1F1A	0.3	green	very dark gray [Accent]
13		3F6A6B	0.3	blue-green	darkslategray [Accent]

Color Families:

Family	%
violet	46.9
yellow-green	25.2
blue-violet	11.1
yellow	8.7
gray	8.2
yellow-orange	0.3
green	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
8A7252	yellow-orange	dimgray	21.6
0D1F1A	green	very dark gray	9.1
3F6A6B	blue-green	darkslategray	15.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.227
Mean Local Roughness	0.009
Roughness Uniformity	0.011
Edge Density	0.025
Mean Gradient Magnitude	0.1
Gradient Variance	0.027
Gradient Smoothness	0.0
Directional Coherence	0.033
Pattern Complexity	0.114
Pattern Repetition	1.0
Detail Frequency Ratio	0.562
Spatial Variation	0.174
Texture Consistency	0.431

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.464
Brightness Variance	0.227
Brightness Uniformity	0.511
Brightness Skewness	-0.072
Brightness Entropy	7.37
Rms Contrast	0.227
Michelson Contrast	1.0
Weber Contrast	0.758
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.635
Shadow Percentage	37.518
Midtone Percentage	34.897
Highlight Percentage	27.585
Shadow Clipping	0.004
Highlight Clipping	0.0
Tonal Balance	0.067
Fine Contrast	0.004
Medium Contrast	0.014
Coarse Contrast	0.031
Multiscale Contrast Ratio	0.142
Edge Contrast	0.1
Contrast Clustering	0.569

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.774
Color Clustering	0.83
Color Transition Smoothness	0.729
Transition Uniformity	0.808
Sharp Transition Ratio	0.1
Transition Directionality	0.044
Mean Saturation	0.309
Saturation Variance	0.024
Low Saturation Ratio	0.445
Medium Saturation Ratio	0.534
High Saturation Ratio	0.021
Saturation Clustering	1.0
Hue Concentration	0.63
Complementary Balance	0.006
Analogous Dominance	0.62
Temperature Bias	-0.602

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 (2024). Eb Minor - Research on Harmony - Variation 7 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0783.html

[2] Quercy, A. (2024). Eb Minor - Research on Harmony - Variation 7 - Gallery. https://artquamanima.com/en/artworks/2024/01/eb-minor-research-on-harmony-variation-7_8oq.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)

cd9bbe7aae6b4fc191271511f75fe924b62b-b5c8a493ea342f23a4be9c349f12

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