AQC0776

Nanopublication — Computational Image Analysis - AQC0776

by Arnaud Quercy · Db Major - Research on Harmony - Variation 9 · 2024

Claim 1: Computational Image Analysis - AQC0776

> Computational image analysis [3] of artwork Db Major [1] - Research on Harmony - Variation 9 (AQC0776) [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]: 2307x3460 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		529DAA	18.3	blue-green	cadetblue
2		BA658B	18.1	red	dusty mauve
3		19162C	17.1	violet	very dark purple
4		5FACBF	15.6	blue-green	mediumaquamarine
5		D277A1	14.7	red	palevioletred
6		2F89C6	6.1	blue-violet	grayish purple
7		922745	4.3	red	brown
8		3E3C41	3.1	gray	dusty mauve
9		1C57A9	1.7	blue-violet	darkslateblue
10		CBC4B9	1.0	yellow-orange	silver
11		636D46	0.3	yellow-green	dark brown [Accent]
12		3F030E	0.3	red-orange	very dark red [Accent]
13		E5E0D1	0.3	yellow	gainsboro [Accent]
14		1E4962	0.3	blue	grayish purple [Accent]

Color Families:

Family	%
red	37.2
blue-green	33.8
violet	17.1
blue-violet	7.8
gray	3.1
yellow-orange	1.0
yellow-green	0.3
red-orange	0.3
yellow	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
636D46	yellow-green	dark brown	22.8
3F030E	red-orange	very dark red	29.7
E5E0D1	yellow	gainsboro	8.1
1E4962	blue	grayish purple	19.9

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.184
Mean Local Roughness	0.009
Roughness Uniformity	0.009
Edge Density	0.023
Mean Gradient Magnitude	0.1
Gradient Variance	0.018
Gradient Smoothness	0.0
Directional Coherence	0.027
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.564
Spatial Variation	0.132
Texture Consistency	0.373

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.45
Brightness Variance	0.184
Brightness Uniformity	0.591
Brightness Skewness	-1.028
Brightness Entropy	6.702
Rms Contrast	0.184
Michelson Contrast	1.0
Weber Contrast	0.825
Mean Local Contrast	0.012
Contrast Uniformity	0.012
Dynamic Range	1.0
Effective Dynamic Range	0.541
Shadow Percentage	24.439
Midtone Percentage	73.676
Highlight Percentage	1.885
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.014
Coarse Contrast	0.03
Multiscale Contrast Ratio	0.15

Metric	Value
Edge Contrast	0.1
Contrast Clustering	0.627

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.779
Color Clustering	0.555
Color Transition Smoothness	0.735
Transition Uniformity	0.863
Sharp Transition Ratio	0.1
Transition Directionality	0.034
Mean Saturation	0.504
Saturation Variance	0.024
Low Saturation Ratio	0.086
Medium Saturation Ratio	0.774
High Saturation Ratio	0.14
Saturation Clustering	1.0
Hue Concentration	0.418
Complementary Balance	0.005
Analogous Dominance	0.563
Temperature Bias	-0.056

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). Db Major - Research on Harmony - Variation 9 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0776.html

[2] Quercy, A. (2024). Db Major - Research on Harmony - Variation 9 - Gallery. https://artquamanima.com/en/artworks/2024/01/db-major-research-on-harmony-variation-9_8m0.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)

f4f280991b7f3580927bfdd82d501509eae95b386cf3543db21-fa8fc154109cf

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