AQC0777

Nanopublication — Computational Image Analysis - AQC0777

by Arnaud Quercy · Db Major - Research on Harmony - Variation 10 · 2024

Claim 1: Computational Image Analysis - AQC0777

> Computational image analysis [3] of artwork Db Major [1] - Research on Harmony - Variation 10 (AQC0777) [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]: 2299x3449 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		3889D7	20.5	blue-violet	royalblue
2		4E3557	13.7	red-violet	dusty mauve
3		2B293B	12.3	violet	very dark gray
4		49A3BE	11.0	blue	steelblue
5		1B1B27	10.4	violet	very dark gray
6		5F4570	10.2	violet	dusty mauve
7		C2BBA8	8.8	yellow	silver
8		5FB0E1	6.0	blue	cornflowerblue
9		79628C	4.0	violet	dusty mauve
10		2B346C	3.1	violet	dusty mauve
11		928245	0.3	yellow-orange	olivedrab [Accent]
12		85C8D9	0.3	blue-green	skyblue [Accent]
13		C4D1CD	0.3	green	lightgray [Accent]
14		CBD4C6	0.3	yellow-green	lightgray [Accent]

Color Families:

Family	%
violet	40.0
blue-violet	20.5
blue	17.0
red-violet	13.7
yellow	8.8
yellow-orange	0.3
blue-green	0.3
green	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
928245	yellow-orange	olivedrab	35.1
85C8D9	blue-green	skyblue	22.7
C4D1CD	green	lightgray	5.1
CBD4C6	yellow-green	lightgray	8.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.192
Mean Local Roughness	0.013
Roughness Uniformity	0.013
Edge Density	0.056
Mean Gradient Magnitude	0.135
Gradient Variance	0.031
Gradient Smoothness	0.0
Directional Coherence	0.022
Pattern Complexity	0.107
Pattern Repetition	1.0
Detail Frequency Ratio	0.574
Spatial Variation	0.143
Texture Consistency	0.599

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.385
Brightness Variance	0.192
Brightness Uniformity	0.502
Brightness Skewness	0.229
Brightness Entropy	7.346
Rms Contrast	0.192
Michelson Contrast	1.0
Weber Contrast	0.779
Mean Local Contrast	0.017
Contrast Uniformity	0.002
Dynamic Range	1.0
Effective Dynamic Range	0.616
Shadow Percentage	46.005
Midtone Percentage	45.278
Highlight Percentage	8.716
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.083
Fine Contrast	0.006
Medium Contrast	0.02
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.15
Edge Contrast	0.135

Metric	Value
Contrast Clustering	0.401

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.78
Color Clustering	0.631
Color Transition Smoothness	0.628
Transition Uniformity	0.767
Sharp Transition Ratio	0.1
Transition Directionality	0.029
Mean Saturation	0.463
Saturation Variance	0.045
Low Saturation Ratio	0.232
Medium Saturation Ratio	0.581
High Saturation Ratio	0.187
Saturation Clustering	1.0
Hue Concentration	0.808
Complementary Balance	0.005
Analogous Dominance	0.784
Temperature Bias	-0.499

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 10 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0777.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/db-major-research-on-harmony-variation-10_8me.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)

75b7f706913844743ed2e141f2c4dbc9499e4-fa39c8ed0d957a1ea7518d3ba11

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