AQC0532

Nanopublication — Computational Image Analysis - AQC0532

by Arnaud Quercy · Ab Major 9 - Research on Harmony · 2024

Claim 1: Computational Image Analysis - AQC0532

> Computational image analysis [3] of artwork Ab Major [1] 9 - Research on Harmony (AQC0532) [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]: 2132x2843 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		091D4E	14.7	violet	very dark purple
2		0D2B73	14.0	violet	indigo
3		3A3F54	13.8	violet	dusty mauve
4		505A73	12.3	blue-violet	grayish purple
5		242337	11.7	violet	very dark gray
6		E87F84	10.7	red-orange	lightcoral
7		CE6D72	10.1	red-orange	indianred
8		707890	5.5	blue-violet	grayish purple
9		C9CDCF	4.3	white	lightgray
10		9C6157	2.9	red-orange	burnt sienna
11		765945	0.3	orange	dimgray [Accent]
12		E2EFF4	0.3	blue	white [Accent]
13		AB9599	0.3	red	rosybrown [Accent]
14		997390	0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
violet	54.2
red-orange	23.7
blue-violet	17.8
white	4.3
orange	0.3
blue	0.3
red	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
765945	orange	dimgray	18.4
E2EFF4	blue	white	5.0
AB9599	red	rosybrown	9.1
997390	red-violet	dusty mauve	22.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.205
Mean Local Roughness	0.03
Roughness Uniformity	0.024
Edge Density	0.173
Mean Gradient Magnitude	0.245
Gradient Variance	0.065
Gradient Smoothness	0.0
Directional Coherence	0.012
Pattern Complexity	0.121
Pattern Repetition	1.0
Detail Frequency Ratio	0.657
Spatial Variation	0.137
Texture Consistency	0.589

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.332
Brightness Variance	0.205
Brightness Uniformity	0.381
Brightness Skewness	0.679
Brightness Entropy	7.323
Rms Contrast	0.205
Michelson Contrast	1.0
Weber Contrast	0.816
Mean Local Contrast	0.033
Contrast Uniformity	0.251
Dynamic Range	1.0
Effective Dynamic Range	0.573
Shadow Percentage	57.762
Midtone Percentage	36.772
Highlight Percentage	5.466
Shadow Clipping	0.0
Highlight Clipping	0.003
Tonal Balance	0.003
Fine Contrast	0.015
Medium Contrast	0.041
Coarse Contrast	0.057
Multiscale Contrast Ratio	0.27
Edge Contrast	0.245

Metric	Value
Contrast Clustering	0.411

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.711
Color Clustering	0.7
Color Transition Smoothness	0.338
Transition Uniformity	0.541
Sharp Transition Ratio	0.1
Transition Directionality	0.016
Mean Saturation	0.511
Saturation Variance	0.076
Low Saturation Ratio	0.227
Medium Saturation Ratio	0.488
High Saturation Ratio	0.285
Saturation Clustering	0.998
Hue Concentration	0.547
Complementary Balance	0.002
Analogous Dominance	0.703
Temperature Bias	-0.348

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). Ab Major 9 - Research on Harmony — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0532.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-major-9-research-on-harmony_5z4.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)

`e9709e36d6ff8cd3d7f4ed8a2e5e2a0d76f88b7509f51b0674da43b-d05f27a98`

Artist	Arnaud Quercy
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