AQC0557

Nanopublication — Computational Image Analysis - AQC0557

by Arnaud Quercy · C Major9 - Research on Harmony - Variation 9 · 2024

Claim 1: Computational Image Analysis - AQC0557

> Computational image analysis [3] of artwork C Major9 - Research [1] on Harmony - Variation 9 (AQC0557) [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]: 1027x1369 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		575870	17.4	violet	dusty mauve
2		444761	16.1	violet	dusty mauve
3		6C6980	13.7	violet	dusty mauve
4		CB503A	11.5	red-orange	indianred
5		303451	11.0	violet	dusty mauve
6		DBD4D2	9.5	white	lightgray
7		848196	5.7	violet	dusty mauve
8		D29A91	5.6	red-orange	rosybrown
9		C1C0C2	5.0	gray	silver
10		181B37	4.5	violet	very dark purple
11		A86C4E	0.3	orange	indianred [Accent]
12		250A11	0.3	red	very dark red [Accent]
13		9DA9AF	0.3	blue	steel gray [Accent]

Color Families:

Family	%
violet	68.3
red-orange	17.2
white	9.5
gray	5.0
orange	0.3
red	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
A86C4E	orange	indianred	34.2
250A11	red	very dark red	15.1
9DA9AF	blue	steel gray	5.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.203
Mean Local Roughness	0.057
Roughness Uniformity	0.033
Edge Density	0.276
Mean Gradient Magnitude	0.398
Gradient Variance	0.109
Gradient Smoothness	0.17
Directional Coherence	0.006
Pattern Complexity	0.131
Pattern Repetition	1.0
Detail Frequency Ratio	0.707
Spatial Variation	0.143
Texture Consistency	0.619

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.433
Brightness Variance	0.203
Brightness Uniformity	0.531
Brightness Skewness	0.644
Brightness Entropy	7.427
Rms Contrast	0.203
Michelson Contrast	1.0
Weber Contrast	0.739
Mean Local Contrast	0.056
Contrast Uniformity	0.452
Dynamic Range	1.0
Effective Dynamic Range	0.682
Shadow Percentage	33.638
Midtone Percentage	48.472
Highlight Percentage	17.89
Shadow Clipping	0.007
Highlight Clipping	0.0
Tonal Balance	0.105
Fine Contrast	0.036
Medium Contrast	0.069
Coarse Contrast	0.081
Multiscale Contrast Ratio	0.45
Edge Contrast	0.398
Contrast Clustering	0.381

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.756
Color Clustering	0.741
Color Transition Smoothness	0.0
Transition Uniformity	0.166
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.318
Saturation Variance	0.047
Low Saturation Ratio	0.569
Medium Saturation Ratio	0.327
High Saturation Ratio	0.104
Saturation Clustering	0.994
Hue Concentration	0.558
Complementary Balance	0.0
Analogous Dominance	0.716
Temperature Bias	-0.153

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). C Major9 - Research on Harmony - Variation 9 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0557.html

[2] Quercy, A. (2024). C Major9 - Research on Harmony - Variation 9 - Gallery. https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-9_68u.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)

649da60f3405abd50ef6f2cfd0b-b085288c0543962ae8c16cb6394a3578e6506

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240306-0053
Asset code	AQC0557
Version	1
Published	2026-02-03

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-04-20

Persistent URI: https://multimodal.institute/en/nanopubs/2026/02/AQC0557-computational-image-analysis-aqc0557.pdf