Nanopublication — Computational Image Analysis - AQC0523

by Arnaud Quercy · D Major9 - Research on Harmony - Variation 3 · 2024

Claim 1: Computational Image Analysis - AQC0523

> Analysis record [3]: D Major9 - Research [1] on Harmony - Variation 3 (AQC0523) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 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]: 2121x2828 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E1E0DC	25.6	white	gainsboro
2		D2D0CC	14.6	white	lightgray
3		6D6967	9.3	gray	dimgray
4		8C5538	9.0	orange	burnt sienna
5		B88E67	8.9	orange	rosybrown
6		4D4E52	8.7	gray	grayish purple
7		A47453	7.2	orange	indianred
8		B0ADA8	5.9	gray	steel gray
9		CCA984	5.7	orange	tan
10		817D7A	4.9	gray	gray
11		2E1D19	0.3	red-orange	very dark gray [Accent]
12		2B2225	0.3	red	very dark gray [Accent]
13		87A8B6	0.3	blue	steel gray [Accent]

Color Families:

Family	%
white	40.3
orange	30.8
gray	28.9
red-orange	0.3
red	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
2E1D19	red-orange	very dark gray	10.0
2B2225	red	very dark gray	5.0
87A8B6	blue	steel gray	13.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.208
Mean Local Roughness	0.023
Roughness Uniformity	0.024
Edge Density	0.13
Mean Gradient Magnitude	0.182
Gradient Variance	0.056
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.131
Pattern Repetition	1.0
Detail Frequency Ratio	0.665
Spatial Variation	0.129
Texture Consistency	0.708

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.639
Brightness Variance	0.208
Brightness Uniformity	0.674
Brightness Skewness	-0.193
Brightness Entropy	7.203
Rms Contrast	0.208
Michelson Contrast	0.992
Weber Contrast	0.597
Mean Local Contrast	0.025
Contrast Uniformity	0.01
Dynamic Range	0.996
Effective Dynamic Range	0.584
Shadow Percentage	6.365
Midtone Percentage	45.513
Highlight Percentage	48.122
Shadow Clipping	0.0
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.031
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.32
Edge Contrast	0.182
Contrast Clustering	0.292

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.741
Color Clustering	0.83

Metric	Value
Color Transition Smoothness	0.54
Transition Uniformity	0.646
Sharp Transition Ratio	0.1
Transition Directionality	0.015
Mean Saturation	0.179
Saturation Variance	0.046
Low Saturation Ratio	0.705
Medium Saturation Ratio	0.294
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.989
Complementary Balance	0.001
Analogous Dominance	0.999
Temperature Bias	0.998

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). D Major9 - Research on Harmony - Variation 3 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0523.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/d-major9-research-on-harmony-variation-3_5vm.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)

```
0070ad53195ddebd391cffcd0cc92351736fadb0839d689cb3ce-
be6361ed67ff
```

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240220-0019
Asset code	AQC0523
Version	1
Published	2026-03-25