

# Nanopublication — Computational Image Analysis - AQC0528

by Arnaud Quercy · D Major9 - Research on Harmony - Variation 8 · 2024

## Claim 1: Computational Image Analysis - AQC0528

The artwork D Major9 - Research [1] on Harmony - Variation 8 (AQC0528) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

### 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]: 2572x3692 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	787771	15.3	gray	gray
2	D1AB30	13.6	yellow-orange	goldenrod
3	B88436	12.0	yellow-orange	peru
4	303234	11.0	gray	grayish purple
5	CBBA2	10.5	yellow-orange	tan
6	E8D8BF	10.0	yellow-orange	wheat
7	9E6B24	9.7	orange	burnt sienna
8	BF966A	9.4	orange	ochre
9	E0B378	5.7	yellow-orange	burlywood
10	87BDD5	2.8	blue	skyblue
11	1E0C0A	0.3	red-orange	black [Accent]
12	5A563B	0.3	yellow	dark brown [Accent]
13	AED3DD	0.3	blue-green	lightblue [Accent]

### Color Families:

Family	%
yellow-orange	51.9
gray	26.2
orange	19.1
blue	2.8
red-orange	0.3
yellow	0.3
blue-green	0.3

### Accent Colors:

Hex	Family	Name	Chroma
1E0C0A	red-orange	black	7.2
5A563B	yellow	dark brown	16.3

### Hex Family Name Chroma

AED3DD blue-green lightblue 13.5

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.187
Mean Local Roughness	0.031
Roughness Uniformity	0.024
Edge Density	0.184
Mean Gradient Magnitude	0.253
Gradient Variance	0.066
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.107
Pattern Repetition	1.0
Detail Frequency Ratio	0.645
Spatial Variation	0.116
Texture Consistency	0.574

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.575
Brightness Variance	0.187
Brightness Uniformity	0.674
Brightness Skewness	-0.487
Brightness Entropy	7.361
Rms Contrast	0.187
Michelson Contrast	1.0
Weber Contrast	0.684
Mean Local Contrast	0.034
Contrast Uniformity	0.317
Dynamic Range	1.0
Effective Dynamic Range	0.667
Shadow Percentage	11.095
Midtone Percentage	54.435
Highlight Percentage	34.47
Shadow Clipping	0.002
Highlight Clipping	0.01
Tonal Balance	0.102
Fine Contrast	0.018
Medium Contrast	0.043
Coarse Contrast	0.063
Multiscale Contrast Ratio	0.278
Edge Contrast	0.253
Contrast Clustering	0.426

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.716
Color Clustering	0.599
Color Transition Smoothness	0.372
Transition Uniformity	0.598
Sharp Transition Ratio	0.1
Transition Directionality	0.01
Mean Saturation	0.408
Saturation Variance	0.083
Low Saturation Ratio	0.462
Medium Saturation Ratio	0.271
High Saturation Ratio	0.267
Saturation Clustering	0.999
Hue Concentration	0.895
Complementary Balance	0.019
Analogous Dominance	0.95
Temperature Bias	0.899

## 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 8 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0528.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/d-major9-research-on-harmony-variation-8\\_5xk.html](https://artquamanima.com/en/artworks/2024/01/d-major9-research-on-harmony-variation-8_5xk.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

74502d6e9f1da5779cf9195372ad3e3b8c96d5c99e393a6270d46730807b-d12

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