

# Nanopublication — Computational Image Analysis - AQC0756

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

## Claim 1: Computational Image Analysis - AQC0756

Analysis record [3]: D Minor [1] - Research on Harmony - Variation 3 (AQC0756) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	282424	17.5	gray	very dark gray
2	E6932E	16.9	orange	goldenrod
3	ECA043	13.1	orange	sandybrown
4	CC9548	10.9	orange	peru
5	B9792C	10.4	orange	chocolate
6	E18016	8.3	orange	darkorange
7	BEB4A7	7.4	yellow-orange	steel gray
8	D9A968	6.2	yellow-orange	darksalmon
9	A84A32	5.0	red-orange	burnt sienna
10	8D3722	4.6	red-orange	russet
11	6B633B	0.3	yellow	dark brown [Accent]

### Color Families:

Family	%
orange	59.4
gray	17.5
yellow-orange	13.6
red-orange	9.5
yellow	0.3

### Accent Colors:

Hex	Family Name	Chroma
6B633B	yellow	dark brown 24.2

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.198
Mean Local Roughness	0.011
Roughness Uniformity	0.012
Edge Density	0.036
Mean Gradient Magnitude	0.109

Metric	Value
Gradient Variance	0.025
Gradient Smoothness	0.0
Directional Coherence	0.028
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.591
Spatial Variation	0.168
Texture Consistency	0.304

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.518
Brightness Variance	0.198
Brightness Uniformity	0.618
Brightness Skewness	-0.974
Brightness Entropy	6.855
Rms Contrast	0.198
Michelson Contrast	1.0
Weber Contrast	0.78
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	0.996
Effective Dynamic Range	0.584
Shadow Percentage	20.731
Midtone Percentage	58.769
Highlight Percentage	20.5
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005
Medium Contrast	0.017
Coarse Contrast	0.03
Multiscale Contrast Ratio	0.183
Edge Contrast	0.109
Contrast Clustering	0.696

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.725
Color Clustering	0.431
Color Transition Smoothness	0.724
Transition Uniformity	0.84
Sharp Transition Ratio	0.1
Transition Directionality	0.035
Mean Saturation	0.578
Saturation Variance	0.09

Metric	Value
Low Saturation Ratio	0.238
Medium Saturation Ratio	0.254
High Saturation Ratio	0.509
Saturation Clustering	1.0
Hue Concentration	0.989
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	1.0

## 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 Minor - Research on Harmony - Variation 3 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0756.html>

[2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/d-minor-research-on-harmony-variation-3\\_8e8.html](https://artquamanima.com/en/artworks/2024/01/d-minor-research-on-harmony-variation-3_8e8.html)

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <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)

b6bae0a50327a0de0c0f730e9aa2c1bb81d3bb695e3633cf9db1e-b0d398874c5

**Artist** Arnaud Quercy

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