

# Nanopublication — Computational Image Analysis - AQC0606

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

## Claim 1: Computational Image Analysis - AQC0606

The artwork Ab Major [1] - Research on Harmony (AQC0606) [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]: 2711x3615 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	706E75	37.7	gray	dusty mauve
2	827F84	19.2	gray	dusty mauve
3	B09C98	11.1	red-orange	rosybrown
4	D2B7A8	9.1	orange	tan
5	625265	7.2	red-violet	dusty mauve
6	200C1E	4.4	red-violet	very dark gray
7	962D0C	4.2	red-orange	russet
8	EFE4D8	3.5	orange	white
9	B2C5C7	2.1	blue-green	silver
10	BE5D3A	1.6	orange	burnt sienna
11	ECDAAE	0.3	yellow-orange	wheat [Accent]
12	478356	0.3	yellow-green	seagreen [Accent]

### Color Families:

Family	%
gray	56.9
red-orange	15.2
orange	14.2
red-violet	11.5
blue-green	2.1
yellow-orange	0.3
yellow-green	0.3

### Accent Colors:

Hex	Family	Name	Chroma
ECDAAE	yellow-orange	wheat	24.0
478356	yellow-green	seagreen	35.0

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.171
Mean Local Roughness	0.038
Roughness Uniformity	0.04
Edge Density	0.138
Mean Gradient Magnitude	0.278
Gradient Variance	0.152
Gradient Smoothness	0.0
Directional Coherence	0.022
Pattern Complexity	0.126
Pattern Repetition	1.0
Detail Frequency Ratio	0.662
Spatial Variation	0.071
Texture Consistency	0.446

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.497
Brightness Variance	0.171
Brightness Uniformity	0.655
Brightness Skewness	0.191
Brightness Entropy	7.079
Rms Contrast	0.171
Michelson Contrast	1.0
Weber Contrast	0.545
Mean Local Contrast	0.039
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.584
Shadow Percentage	9.988
Midtone Percentage	72.752
Highlight Percentage	17.261
Shadow Clipping	0.01
Highlight Clipping	0.219
Tonal Balance	0.0
Fine Contrast	0.023
Medium Contrast	0.049
Coarse Contrast	0.072
Multiscale Contrast Ratio	0.324
Edge Contrast	0.278
Contrast Clustering	0.554

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.725
Color Clustering	0.64

Metric	Value
Color Transition Smoothness	0.3
Transition Uniformity	0.074
Sharp Transition Ratio	0.1
Transition Directionality	0.025
Mean Saturation	0.173
Saturation Variance	0.053
Low Saturation Ratio	0.848
Medium Saturation Ratio	0.081
High Saturation Ratio	0.072
Saturation Clustering	0.999
Hue Concentration	0.686
Complementary Balance	0.022
Analogous Dominance	0.599
Temperature Bias	0.626

## 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 - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0606.html>
- [2] Quercy, A. (2024). Ab Major - Research on Harmony - Gallery. [https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony\\_6rw.html](https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony_6rw.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)

5a6f2613fab3b61ba898c09f5e15c4d3990160fd38ce6c-ab48d1c414a6b6cb1e

**Artist** Arnaud Quercy

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