

# Nanopublication — Computational Image Analysis - AQC0700

by Arnaud Quercy · D minor - Research on Harmony - Variation 1 · 2024

## Claim 1: Computational Image Analysis - AQC0700

The artwork D minor - Research [1] on Harmony - Variation 1 (AQC0700) [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]: 2061x2061 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	B57C22	27.7	orange	darkgoldenrod
2	EA916F	13.2	orange	darksalmon
3	C68F36	11.1	yellow-orange	peru
4	E6872A	10.3	orange	goldenrod
5	DCC592	8.9	yellow-orange	burlywood
6	9F6432	8.4	orange	burnt sienna
7	B0703E	7.1	orange	burnt sienna
8	653B30	6.3	red-orange	russet
9	CAB382	6.1	yellow-orange	tan
10	4C7660	0.9	yellow-green	dimgray
11	EFE2AC	0.3	yellow	palegoldenrod [Accent]

### Color Families:

Family	%
orange	66.7
yellow-orange	26.1
red-orange	6.3
yellow-green	0.9
yellow	0.3

### Accent Colors:

Hex	Family Name	Chroma
EFE2AC	yellow	palegoldenrod 28.3

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.123
Mean Local Roughness	0.007
Roughness Uniformity	0.02

Metric	Value
Edge Density	0.011
Mean Gradient Magnitude	0.049
Gradient Variance	0.029
Gradient Smoothness	0.0
Directional Coherence	0.329
Pattern Complexity	0.1
Pattern Repetition	1.0
Detail Frequency Ratio	0.651
Spatial Variation	0.073
Texture Consistency	0.334

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.562
Brightness Variance	0.123
Brightness Uniformity	0.781
Brightness Skewness	-0.345
Brightness Entropy	6.728
Rms Contrast	0.123
Michelson Contrast	0.992
Weber Contrast	0.406
Mean Local Contrast	0.007
Contrast Uniformity	0.0
Dynamic Range	0.988
Effective Dynamic Range	0.475
Shadow Percentage	5.365
Midtone Percentage	74.591
Highlight Percentage	20.043
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.009
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.049
Contrast Clustering	0.666

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.838
Color Clustering	0.356
Color Transition Smoothness	0.867
Transition Uniformity	0.806
Sharp Transition Ratio	0.1
Transition Directionality	0.336

Metric	Value
Mean Saturation	0.649
Saturation Variance	0.031
Low Saturation Ratio	0.015
Medium Saturation Ratio	0.48
High Saturation Ratio	0.505
Saturation Clustering	0.999
Hue Concentration	0.972
Complementary Balance	0.0
Analogous Dominance	0.991
Temperature Bias	0.982

## 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 1 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0700.html>

[2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2025/09/d-minor-research-on-harmony-variation-1\\_7sg.html](https://artquamanima.com/en/artworks/2025/09/d-minor-research-on-harmony-variation-1_7sg.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)

a80476cb18d02d54ee0121b0a7a63582915d8ca040be154f421de87b231e0811

**Artist** Arnaud Quercy

**Date** 2024

**Collection** Synesthetic Explorations

**Certificate** 20240718-0196

**Asset code** AQC0700

**Version** 1

**Published** 2026-03-27

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — [publishing.artquamanima.com](https://publishing.artquamanima.com)

Date of publication: 2026-03-27

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/03/AQC0700-computational-image-analysis-aqc0700.pdf>

Content available under Creative Commons Attribution-NonCommercial 4.0 License (CC BY-NC 4.0)