

# Nanopublication — Computational Image Analysis - AQC0648

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

## Claim 1: Computational Image Analysis - AQC0648

Analysis record [3]: A minor - Research [1] on Harmony - Variation 1 (AQC0648) [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]: 2385x3577 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		C62A1D 22.8	red-orange	firebrick
2		E99B24 22.4	orange	goldenrod
3		E5C82B 16.5	yellow-orange	gold
4		D04544 7.9	red-orange	indianred
5		44301F 7.8	orange	darkslategray
6		20150C 6.0	orange	black
7		744320 5.9	orange	russet
8		A4874B 4.1	yellow-orange	peru
9		6D5E4F 3.8	orange	dimgray
10		E1AE8C 2.7	orange	burlywood
11		F7E565 0.3	yellow	khaki [Accent]
12		E37D92 0.3	red	palevioletred [Accent]
13		3D434D 0.3	blue-violet	grayish purple [Accent]

### Color Families:

Family	%
orange	48.7
red-orange	30.7
yellow-orange	20.6
yellow	0.3
red	0.3
blue-violet	0.3

### Accent Colors:

Hex	Family	Name	Chroma
F7E565	yellow	khaki	63.6
E37D92	red	palevioletred	42.4
3D434D	blue-violet	grayish purple	7.0

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.211
Mean Local Roughness	0.039
Roughness Uniformity	0.044
Edge Density	0.164
Mean Gradient Magnitude	0.307
Gradient Variance	0.176
Gradient Smoothness	0.0
Directional Coherence	0.015
Pattern Complexity	0.118
Pattern Repetition	1.0
Detail Frequency Ratio	0.668
Spatial Variation	0.129
Texture Consistency	0.646

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.478
Brightness Variance	0.211
Brightness Uniformity	0.559
Brightness Skewness	-0.109
Brightness Entropy	7.429
Rms Contrast	0.211
Michelson Contrast	1.0
Weber Contrast	0.73
Mean Local Contrast	0.042
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.643
Shadow Percentage	25.742
Midtone Percentage	48.496
Highlight Percentage	25.762
Shadow Clipping	0.028
Highlight Clipping	0.004
Tonal Balance	0.081
Fine Contrast	0.022
Medium Contrast	0.052
Coarse Contrast	0.072
Multiscale Contrast Ratio	0.309
Edge Contrast	0.307
Contrast Clustering	0.354

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.732
Color Clustering	0.415

Metric	Value
Color Transition Smoothness	0.215
Transition Uniformity	0.0
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.738
Saturation Variance	0.047
Low Saturation Ratio	0.078
Medium Saturation Ratio	0.176
High Saturation Ratio	0.746
Saturation Clustering	0.995
Hue Concentration	0.935
Complementary Balance	0.002
Analogous Dominance	0.995
Temperature Bias	0.994

## 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). A minor - Research on Harmony - Variation 1 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0648.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/a-minor-research-on-harmony-variation-1\\_788.html](https://artquamanima.com/en/artworks/2024/01/a-minor-research-on-harmony-variation-1_788.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

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

## CHECKSUM (SHA-256)

d9f60c58362c3dd7383880c9ed97b02a644f41dc93ea07d28175350096baad-fc

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20240615-0144
<b>Asset code</b>	AQC0648
<b>Version</b>	1
<b>Published</b>	2026-03-25

© 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/AQC0648-computational-image-analysis-aqc0648.pdf>

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