

Nanopublication — Computational Image Analysis - AQC0884

by Arnaud Quercy · G Major - Research on Harmony - Variations 10 · 2025











Claim 1: Computational Image Analysis - AQC0884

Computational image analysis [3] of artwork G Major [1] - Research on Harmony - Variations 10 (AQC0884) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2025-12-11.

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]: 1939x2909 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		E5C798	17.0	yellow-orange burlywood
2		E5AC60	15.1	orange sandybrown
3		EDB86F	12.9	yellow-orange lightsalmon
4		EE8523	11.9	orange goldenrod
5		625B4F	11.6	yellow-orange dimgray
6		C7AF35	10.3	yellow-orange peru
7		E3E0D4	8.8	yellow gainsboro
8		C3CD5F	8.0	yellow ochre
9		403525	2.4	yellow-orange darkslategray
10		AD9E85	1.9	yellow-orange rosybrown

Color Families:

Family	%
yellow-orange	56.1
orange	27.0
yellow	16.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.161
Mean Local Roughness	0.013
Roughness Uniformity	0.018
Edge Density	0.022
Mean Gradient Magnitude	0.12
Gradient Variance	0.042
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.109

Metric	Value
Pattern Repetition	1.0
Detail Frequency Ratio	0.599
Spatial Variation	0.102
Texture Consistency	0.653

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.676
Brightness Variance	0.161
Brightness Uniformity	0.763
Brightness Skewness	-1.241
Brightness Entropy	6.937
Rms Contrast	0.161
Michelson Contrast	1.0
Weber Contrast	0.557
Mean Local Contrast	0.015
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.545
Shadow Percentage	5.339
Midtone Percentage	27.192
Highlight Percentage	67.469
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.019
Coarse Contrast	0.035
Multiscale Contrast Ratio	0.196
Edge Contrast	0.12
Contrast Clustering	0.347

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.771
Color Clustering	0.455
Color Transition Smoothness	0.694
Transition Uniformity	0.716
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.476
Saturation Variance	0.058
Low Saturation Ratio	0.237
Medium Saturation Ratio	0.553
High Saturation Ratio	0.21
Saturation Clustering	0.999

Metric	Value
Hue Concentration	0.981
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	0.886

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 (2025). G Major - Research on Harmony - Variations 10 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0884.html>
- [2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/g-major-research-on-harmony-variations-10_i4k.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)

b9ac77062e72d84c37945a97965fa0d097016c897b24df -
b254e036d41b3d2f03

Artist	Arnaud Quercy
Date	2025
Collection	Synesthetic Explorations
Certificate	20251123-0118
Asset code	AQC0884
Version	1
Published	2026-04-09

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-04-09

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0884-computational-image-analysis-aqc0884.pdf>

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