

Nanopublication — Computational Image Analysis - AQC0950

by Arnaud Quercy · D5 (Power Chord) - Research on Harmony · 2026

Claim 1: Computational Image Analysis - AQC0950

Computational image analysis [3] of artwork Untitled Artwork (AQC0950) [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 2026-03-04.

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]: 1943x2915 pixels. Analysis date: 2026-03-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	DF9265	21.8	orange	darksalmon
2	DCBB88	13.3	yellow-orange	burlywood
3	9F9D9B	11.4	gray	steel gray
4	EDA17B	11.1	orange	lightsalmon
5	8B8988	10.1	gray	gray
6	E2770D	9.6	orange	chocolate
7	EECD9D	8.9	yellow-orange	wheat
8	1D1916	6.9	gray	black
9	E0D8C4	6.0	yellow	lightgray
10	5A4538	1.0	orange	dark brown
11	A86755	0.3	red-orange	indianred [Accent]

Color Families:

Family	%
orange	43.4
gray	28.4
yellow-orange	22.2
yellow	6.0
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
A86755	red-orange	indianred	31.9

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.179
Mean Local Roughness	0.022
Roughness Uniformity	0.018

Metric	Value
Edge Density	0.095
Mean Gradient Magnitude	0.176
Gradient Variance	0.045
Gradient Smoothness	0.0
Directional Coherence	0.004
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.636
Spatial Variation	0.129
Texture Consistency	0.589

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.631
Brightness Variance	0.179
Brightness Uniformity	0.717
Brightness Skewness	-1.62
Brightness Entropy	6.939
Rms Contrast	0.179
Michelson Contrast	1.0
Weber Contrast	0.375
Mean Local Contrast	0.025
Contrast Uniformity	0.175
Dynamic Range	1.0
Effective Dynamic Range	0.741
Shadow Percentage	7.645
Midtone Percentage	47.605
Highlight Percentage	44.75
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.03
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.273
Edge Contrast	0.176
Contrast Clustering	0.411

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.776
Color Clustering	0.577
Color Transition Smoothness	0.564
Transition Uniformity	0.695
Sharp Transition Ratio	0.1
Transition Directionality	0.006

Metric	Value
Mean Saturation	0.378
Saturation Variance	0.072
Low Saturation Ratio	0.336
Medium Saturation Ratio	0.565
High Saturation Ratio	0.098
Saturation Clustering	1.0
Hue Concentration	0.987
Complementary Balance	0.0
Analogous Dominance	0.999
Temperature Bias	0.999

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 (2026). D5 (Power Chord) - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0950.html>

[2] Quercy, A. (2026). B Minor 7 - Research on Harmony - Gallery. https://artquamanima.com/en/artworks/2026/03/d5-power-chord-research-on-harmony_1yg5.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)

a9e0473d7931a490ba6bfa570e1b71a9c790e6058f-
b9f49a3221cb37885a0bbb

Artist Arnaud Quercy

Date 2026

Collection Synesthetic Explorations

Certificate 20260304-0002

Asset code AQC0950

Version 1

Published 2026-03-25

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

Date of publication: 2026-03-27

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/03/AQC0950-computational-image-analysis-aqc0950.pdf>

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