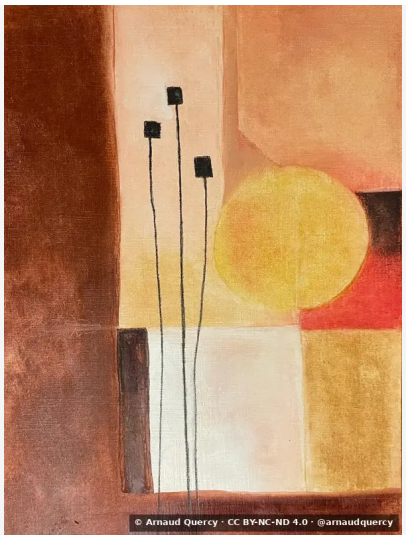
AQC0464 | NAN-COL000449

Nanopublication — Computational Image Analysis - AQC0464

by Arnaud Quercy · New Mexico - The Three Sisters Legend · 2023



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0464

Computational image analysis [3] of artwork New [1] Mexico - The Three Sisters Legend (AQC0464) [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 2026-02-04.

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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E0AB62	17.2	yellow-orange	sandybrown
2		D18E52	15.0	orange	peru
3		E3BC8C	13.0	yellow-orange	burlywood
4		5E220B	11.3	orange	maroon
5		783B23	9.4	orange	russet
6		E3CDB1	9.3	yellow-orange	wheat
7		925742	9.2	orange	burnt sienna
8		AD725F	8.2	red-orange	indianred
9		E7E4D6	5.1	yellow	white
10		DE4D36	2.2	red-orange	chocolate

Color Families:

Family	%
orange	44.9
yellow-orange	39.5
red-orange	10.5
yellow	5.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.218
Mean Local Roughness	0.036
Roughness Uniformity	0.027
Edge Density	0.195
Mean Gradient Magnitude	0.242
Gradient Variance	0.062
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.131
Pattern Repetition	1.0
Detail Frequency Ratio	0.677
Spatial Variation	0.154
Texture Consistency	0.49

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.573
Brightness Variance	0.218
Brightness Uniformity	0.62
Brightness Skewness	-0.441
Brightness Entropy	7.591
Rms Contrast	0.218
Michelson Contrast	1.0
Weber Contrast	0.719
Mean Local Contrast	0.033
Contrast Uniformity	0.28
Dynamic Range	1.0
Effective Dynamic Range	0.671
Shadow Percentage	19.537
Midtone Percentage	37.484
Highlight Percentage	42.979
Shadow Clipping	0.002
Highlight Clipping	0.004
Tonal Balance	0.305
Fine Contrast	0.022
Medium Contrast	0.041
Coarse Contrast	0.049
Multiscale Contrast Ratio	0.458
Edge Contrast	0.242
Contrast Clustering	0.51

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.739
Color Clustering	0.54
Color Transition Smoothness	0.395
Transition Uniformity	0.596
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.527
Saturation Variance	0.051
Low Saturation Ratio	0.152
Medium Saturation Ratio	0.651
High Saturation Ratio	0.197
Saturation Clustering	0.998
Hue Concentration	0.984
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	1.0

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 (2023). New Mexico - The Three Sisters Legend — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0464.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/new-mexico-the-three-sisters-legend_58o.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html

WHERE THIS WORK LIVES

THEMATIC ELEMENTS

Three Sisters legend · oil on paper · American Voyage collection · indigenous agriculture · companion planting · geometric abstraction · earth tones · contemporary interpretation

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

c47b4de69d3d5166decc3719a92ba493d8d40fd722c2676f901f6178e6eccbe8

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