AQC0451

Nanopublication — Computational Image Analysis - AQC0451

by Arnaud Quercy · Unbridled Spirit · 2023

Claim 1: Computational Image Analysis - AQC0451

> The artwork Unbridled [1] Spirit (AQC0451) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		322830	16.5	red-violet	very dark gray
2		EBBB82	16.5	orange	burlywood
3		BA3B41	11.7	red-orange	brown
4		91A2BE	11.4	blue-violet	steel gray
5		727F9E	10.8	blue-violet	grayish purple
6		E7697D	10.1	red	lightcoral
7		CFCBCA	7.6	white	lightgray
8		59586C	7.1	violet	dusty mauve
9		A6657F	6.5	red	dusty mauve
10		EB9D13	1.8	orange	goldenrod
11		B6B092	0.3	yellow	steel gray [Accent]
12		B8AB8F	0.3	yellow-orange	tan [Accent]
13		ACC9E1	0.3	blue	lightsteelblue [Accent]
14		E2EDE3	0.3	yellow-green	white [Accent]

Color Families:

Family	%
blue-violet	22.2
orange	18.2
red	16.6
red-violet	16.5
red-orange	11.7
white	7.6
violet	7.1
yellow	0.3
yellow-orange	0.3
blue	0.3
yellow-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
B6B092	yellow	steel gray	16.3
B8AB8F	yellow-orange	tan	16.0
ACC9E1	blue	lightsteelblue	15.8
E2EDE3	yellow-green	white	6.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.212
Mean Local Roughness	0.032
Roughness Uniformity	0.024
Edge Density	0.182
Mean Gradient Magnitude	0.231
Gradient Variance	0.059
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.643
Spatial Variation	0.111
Texture Consistency	0.854

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.513
Brightness Variance	0.212
Brightness Uniformity	0.586
Brightness Skewness	-0.24
Brightness Entropy	7.591
Rms Contrast	0.212
Michelson Contrast	1.0
Weber Contrast	0.766
Mean Local Contrast	0.031
Contrast Uniformity	0.301
Dynamic Range	1.0
Effective Dynamic Range	0.675
Shadow Percentage	21.639
Midtone Percentage	50.619
Highlight Percentage	27.742
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.347
Fine Contrast	0.019
Medium Contrast	0.039
Coarse Contrast	0.051
Multiscale Contrast Ratio	0.371
Edge Contrast	0.231

Metric	Value
Contrast Clustering	0.146

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.701
Color Clustering	0.405
Color Transition Smoothness	0.413
Transition Uniformity	0.607
Sharp Transition Ratio	0.1
Transition Directionality	0.008
Mean Saturation	0.398
Saturation Variance	0.049
Low Saturation Ratio	0.373
Medium Saturation Ratio	0.526
High Saturation Ratio	0.1
Saturation Clustering	0.999
Hue Concentration	0.432
Complementary Balance	0.196
Analogous Dominance	0.684
Temperature Bias	0.412

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). Unbridled Spirit — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0451.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/unbridled-spirit_53m.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

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

6ecda60fb368aa3d798752833fedbdd6b007183b743f20332c4c64aab5-ab49d4

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