AQC0680

Nanopublication — Computational Image Analysis - AQC0680

by Arnaud Quercy · Ab+ - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0680

> K-means clustering analysis [3] (10 colors) performed on artwork Ab+ - Research [1] on Harmony - Variation 1 (AQC0680) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 2467x3701 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DADCD8	28.3	white	gainsboro
2		D2C9B8	16.3	yellow-orange	silver
3		92B8AA	13.4	green	darkseagreen
4		3B4040	9.0	gray	darkslategray
5		C6B993	8.5	yellow-orange	tan
6		8B978F	7.8	yellow-green	lightslategray
7		212727	5.9	gray	very dark gray
8		A0B36D	5.4	yellow-green	ochre
9		686E68	3.8	gray	dimgray
10		915221	1.6	orange	burnt sienna
11		B05E44	0.3	red-orange	burnt sienna [Accent]

Color Families:

Family	%
white	28.3
yellow-orange	24.8
gray	18.7
green	13.4
yellow-green	13.2
orange	1.6
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
B05E44	red-orange	burnt sienna	43.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.225
Mean Local Roughness	0.015
Roughness Uniformity	0.022
Edge Density	0.038
Mean Gradient Magnitude	0.134
Gradient Variance	0.081
Gradient Smoothness	0.0
Directional Coherence	0.105
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.595
Spatial Variation	0.138
Texture Consistency	0.524

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.658
Brightness Variance	0.225
Brightness Uniformity	0.658
Brightness Skewness	-1.111
Brightness Entropy	7.075
Rms Contrast	0.225
Michelson Contrast	1.0
Weber Contrast	0.729
Mean Local Contrast	0.017
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.69
Shadow Percentage	15.122
Midtone Percentage	22.087
Highlight Percentage	62.791
Shadow Clipping	0.006
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.008
Medium Contrast	0.022
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.134
Contrast Clustering	0.476

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.731
Color Clustering	0.816
Color Transition Smoothness	0.645
Transition Uniformity	0.438
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.12
Mean Saturation	0.158
Saturation Variance	0.023
Low Saturation Ratio	0.85
Medium Saturation Ratio	0.135
High Saturation Ratio	0.015
Saturation Clustering	0.999
Hue Concentration	0.505
Complementary Balance	0.065
Analogous Dominance	0.524
Temperature Bias	-0.194

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). Ab+ - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0680.html

[2] Quercy, A. (2024). Ab+ - Research on Harmony - Variation 1 - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-research-on-harmony-variation-1_7ko.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)

09b92fdd33035bf-b8b3f0572c0e045b3b43d673478f2975451c8702934b62253

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240718-0176
Asset code	AQC0680
Version	1
Published	2026-02-03

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

Date of publication: 2026-04-20

Persistent URI: https://multimodal.institute/en/nanopubs/2026/02/AQC0680-computational-image-analysis-aqc0680.pdf