AQC0652

Nanopublication — Computational Image Analysis - AQC0652

by Arnaud Quercy · D Major - Research on Harmony - Variation 1 · 2024

Claim 1: Computational Image Analysis - AQC0652

> The artwork D Major [1] - Research on Harmony - Variation 1 (AQC0652) [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]: 2480x3307 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		CCBCA2	18.5	yellow-orange	tan
2		D1963D	17.0	yellow-orange	peru
3		DFAC53	13.0	yellow-orange	sandybrown
4		E2D6C7	10.9	yellow-orange	lightgray
5		728075	8.6	yellow-green	gray
6		2F303C	8.1	blue-violet	grayish purple
7		B89C72	7.4	yellow-orange	ochre
8		1D1717	7.1	gray	black
9		545343	5.9	yellow	dark brown
10		A67622	3.6	yellow-orange	darkgoldenrod
11		5A3606	0.3	orange	russet [Accent]
12		524B6F	0.3	violet	dusty mauve [Accent]

Color Families:

Family	%
yellow-orange	70.4
yellow-green	8.6
blue-violet	8.1
gray	7.1
yellow	5.9
orange	0.3
violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
5A3606	orange	russet	36.4
524B6F	violet	dusty mauve	22.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.224
Mean Local Roughness	0.029
Roughness Uniformity	0.025
Edge Density	0.157
Mean Gradient Magnitude	0.226
Gradient Variance	0.084
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.107
Pattern Repetition	1.0
Detail Frequency Ratio	0.631
Spatial Variation	0.134
Texture Consistency	0.569

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.573
Brightness Variance	0.224
Brightness Uniformity	0.609
Brightness Skewness	-0.841
Brightness Entropy	7.529
Rms Contrast	0.224
Michelson Contrast	1.0
Weber Contrast	0.777
Mean Local Contrast	0.032
Contrast Uniformity	0.164
Dynamic Range	1.0
Effective Dynamic Range	0.722
Shadow Percentage	18.787
Midtone Percentage	38.426
Highlight Percentage	42.787
Shadow Clipping	0.035
Highlight Clipping	0.026
Tonal Balance	0.148
Fine Contrast	0.016
Medium Contrast	0.039
Coarse Contrast	0.056
Multiscale Contrast Ratio	0.297
Edge Contrast	0.226
Contrast Clustering	0.431

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.715
Color Clustering	0.66

Metric	Value
Color Transition Smoothness	0.421
Transition Uniformity	0.418
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.384
Saturation Variance	0.066
Low Saturation Ratio	0.488
Medium Saturation Ratio	0.371
High Saturation Ratio	0.141
Saturation Clustering	0.998
Hue Concentration	0.74
Complementary Balance	0.06
Analogous Dominance	0.861
Temperature Bias	0.753

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). D Major - Research on Harmony - Variation 1 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0652.html

[2] Quercy, A. (2024). D Major - Research on Harmony - Variation 1 - Gallery. https://artquamanima.com/en/artworks/2024/01/d-major-research-on-harmony-variation-1_79s.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)

f9e3cc18c6c5c2c07fd-d347f9133be6b4ac0d4f3f41657cf728a5040fee402f1

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240615-0148
Asset code	AQC0652
Version	1
Published	2026-02-03

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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/AQC0652-computational-image-analysis-aqc0652.pdf

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