

Nanopublication — Computational Image Analysis - AQC0960

by Arnaud Quercy · D sus4 - Research on Harmony · 2026

Claim 1: Computational Image Analysis - AQC0960

Computational image analysis [3] of artwork D sus4 - Research [1] on Harmony (AQC0960) [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 2026-03-05.

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]: 1846x2769 pixels. Analysis date: 2026-03-05.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D3C7B3	15.5	yellow-orange	silver
2	C99D48	15.1	yellow-orange	peru
3	DCB25E	14.1	yellow-orange	sandybrown
4	AF7B5A	13.0	orange	indianred
5	E0D9CA	12.0	yellow-orange	lightgray
6	C7B599	10.8	yellow-orange	tan
7	C2926E	7.7	orange	rosybrown
8	1F2022	6.4	gray	very dark gray
9	333435	3.9	gray	grayish purple
10	D36940	1.5	orange	chocolate

Color Families:

Family	%
yellow-orange	67.5
orange	22.2
gray	10.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.193
Mean Local Roughness	0.022
Roughness Uniformity	0.017
Edge Density	0.091
Mean Gradient Magnitude	0.18
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.007
Pattern Complexity	0.116
Pattern Repetition	1.0

Metric Value

Detail Frequency Ratio	0.629
Spatial Variation	0.097
Texture Consistency	0.524

BRIGHTNESS & CONTRAST ANALYSIS

Metric Value

Mean Brightness	0.639
Brightness Variance	0.193
Brightness Uniformity	0.698
Brightness Skewness	-1.403
Brightness Entropy	7.121
Rms Contrast	0.193
Michelson Contrast	1.0
Weber Contrast	0.67
Mean Local Contrast	0.025
Contrast Uniformity	0.23
Dynamic Range	1.0
Effective Dynamic Range	0.71
Shadow Percentage	10.209
Midtone Percentage	35.301
Highlight Percentage	54.49
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.03
Coarse Contrast	0.041
Multiscale Contrast Ratio	0.255
Edge Contrast	0.18
Contrast Clustering	0.476

SPATIAL DISTRIBUTION ANALYSIS

Metric Value

Spatial Coherence	0.702
Color Clustering	0.662
Color Transition Smoothness	0.547
Transition Uniformity	0.709
Sharp Transition Ratio	0.1
Transition Directionality	0.006
Mean Saturation	0.364
Saturation Variance	0.045
Low Saturation Ratio	0.463
Medium Saturation Ratio	0.514
High Saturation Ratio	0.022
Saturation Clustering	0.999
Hue Concentration	0.923

Metric	Value
Complementary Balance	0.033
Analogous Dominance	0.966
Temperature Bias	0.934

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). D sus4 - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0960.html>
- [2] Quercy, A. (2026). D sus4 - Research on Harmony - Gallery. https://artquamanima.com/en/artworks/2026/03/d-sus4-research-on-harmony_1ylg.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)

8e4c5a11d545c779868dd52f3d783394bb9d-
 de70c7706d6d5de0e8eaaff49529

Artist	Arnaud Quercy
Date	2026
Collection	Synesthetic Explorations
Certificate	20260305-0012
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