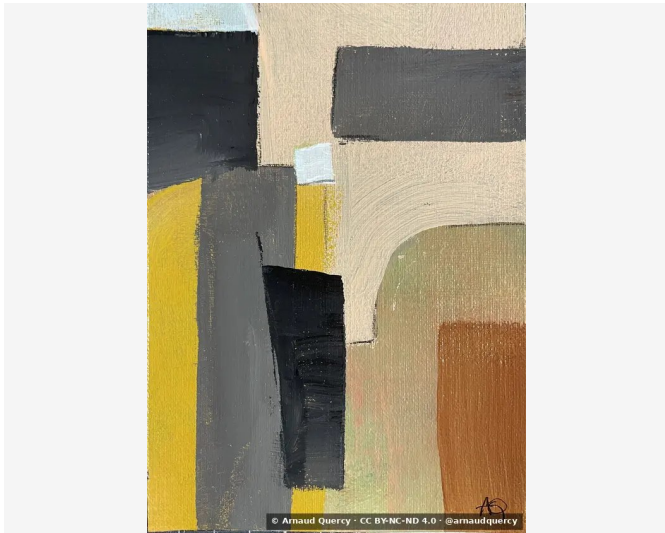


Nanopublication – Computational Image Analysis – AQC0524

by Arnaud Quercy · D Major9 - Research on Harmony - Variation 4 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0524

The artwork D Major9 - Research [1] on Harmony - Variation 4 (AQC0524) [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]: 2629x3683 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		5E5E5D	17.6	gray	dimgray
2		D6C7AA	14.0	yellow-orange	silver
3		D4B335	10.1	yellow-orange	goldenrod
4		E5DCC8	9.5	yellow-orange	gainsboro
5		2E3235	9.4	gray	grayish purple
6		C1AF86	9.3	yellow-orange	tan
7		A99269	8.8	yellow-orange	ochre
8		71716F	8.7	gray	dimgrey
9		9A6031	8.3	orange	burnt sienna
10		16191C	4.5	gray	black
11		FFFAED	0.3	yellow	white [Accent]
12		C9E0E6	0.3	blue-green	gainsboro [Accent]
13		BBCCD3	0.3	blue	lightsteelblue [Accent]

Color Families:

Family	%
yellow-orange	51.6
gray	40.1
orange	8.3
yellow	0.3
blue-green	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
FFFAED	yellow	white	7.1
C9E0E6	blue-green	gainsboro	7.8
BBCCD3	blue	lightsteelblue	6.4

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.227
Mean Local Roughness	0.019
Roughness Uniformity	0.019
Edge Density	0.081
Mean Gradient Magnitude	0.161
Gradient Variance	0.042
Gradient Smoothness	0.0
Directional Coherence	0.014
Pattern Complexity	0.109
Pattern Repetition	1.0
Detail Frequency Ratio	0.624
Spatial Variation	0.139
Texture Consistency	0.739

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.538
Brightness Variance	0.227
Brightness Uniformity	0.579
Brightness Skewness	-0.209
Brightness Entropy	7.562
Rms Contrast	0.227
Michelson Contrast	1.0
Weber Contrast	0.763
Mean Local Contrast	0.021
Contrast Uniformity	0.054
Dynamic Range	1.0
Effective Dynamic Range	0.71
Shadow Percentage	16.12
Midtone Percentage	46.351
Highlight Percentage	37.529
Shadow Clipping	0.009
Highlight Clipping	0.005
Tonal Balance	0.21
Fine Contrast	0.01
Medium Contrast	0.026
Coarse Contrast	0.043
Multiscale Contrast Ratio	0.224
Edge Contrast	0.161
Contrast Clustering	0.261

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.731
Color Clustering	0.708
Color Transition Smoothness	0.592
Transition Uniformity	0.731
Sharp Transition Ratio	0.1
Transition Directionality	0.016
Mean Saturation	0.275
Saturation Variance	0.059
Low Saturation Ratio	0.659
Medium Saturation Ratio	0.228
High Saturation Ratio	0.113
Saturation Clustering	1.0
Hue Concentration	0.794
Complementary Balance	0.094
Analogous Dominance	0.9
Temperature Bias	0.791

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 Major9 - Research on Harmony - Variation 4 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0524.html>

[2] Quercy, A. (2024). D Major9 - Research on Harmony - Variation 4 - Gallery. https://artquamanima.com/en/art-works/2024/01/d-major9-research-on-harmony-variation-4_5w0.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

synesthetic color mapping D Major9 chord

circle of fifths jazz harmony visualization

geometric abstraction acrylic on paper

musical color translation Synesthetic Explorations

EPISTEMIC PROFILE

Claim type computational analysis

Voice third person

Epistemic status empirical measurement

Methodology computational analysis

Certainty high

CHECKSUM (SHA-256)

4a03d2dbe98fd426f7c0d5857ac64d2af95599fbf34a2389202d21a926c75ae8

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Artist Arnaud Quercy

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