

Nanopublication — Computational Image Analysis - AQC0553

by Arnaud Quercy · C Major9 - Research on Harmony - Variation 5 · 2024













Claim 1: Computational Image Analysis - AQC0553

The artwork C Major9 - Research [1] on Harmony - Variation 5 (AQC0553) [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]: 3024x4032 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		3B3B39	15.9 gray	darkslategray
2		D87B70	15.4 red-orange	lightcoral
3		BE9656	15.1 yellow-orange	peru
4		222126	10.7 gray	very dark gray
5		D4AA65	8.5 yellow-orange	ochre
6		E4D2BE	7.9 yellow-orange	wheat
7		55534F	7.2 gray	darkslategrey
8		A5814A	6.9 yellow-orange	burnt sienna
9		DFA1A0	6.5 red-orange	tan
10		80651C	5.9 yellow-orange	russet
11		412A04	0.3 orange	very dark orange [Accent]
12		110413	0.3 red-violet	black [Accent]
13		BDB6C4	0.3 violet	silver [Accent]
14		967074	0.3 red	gray [Accent]

Color Families:

Family	%
yellow-orange	44.4
gray	33.7
red-orange	21.9
orange	0.3
red-violet	0.3
violet	0.3
red	0.3

Accent Colors:

Hex	Family	Name	Chroma
412A04	orange	very dark orange	26.9

Hex	Family	Name	Chroma
110413	red-violet	black	7.8
BDB6C4	violet	silver	7.8
967074	red	gray	16.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.217
Mean Local Roughness	0.017
Roughness Uniformity	0.013
Edge Density	0.084
Mean Gradient Magnitude	0.168
Gradient Variance	0.026
Gradient Smoothness	0.038
Directional Coherence	0.013
Pattern Complexity	0.117
Pattern Repetition	1.0
Detail Frequency Ratio	0.603
Spatial Variation	0.169
Texture Consistency	0.438

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.489
Brightness Variance	0.217
Brightness Uniformity	0.555
Brightness Skewness	-0.246
Brightness Entropy	7.476
Rms Contrast	0.217
Michelson Contrast	1.0
Weber Contrast	0.755
Mean Local Contrast	0.02
Contrast Uniformity	0.273
Dynamic Range	1.0
Effective Dynamic Range	0.682
Shadow Percentage	31.354
Midtone Percentage	48.505
Highlight Percentage	20.14
Shadow Clipping	0.002
Highlight Clipping	0.002
Tonal Balance	0.112
Fine Contrast	0.008
Medium Contrast	0.025
Coarse Contrast	0.046
Multiscale Contrast Ratio	0.174
Edge Contrast	0.168
Contrast Clustering	0.562

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.762
Color Clustering	0.687
Color Transition Smoothness	0.557
Transition Uniformity	0.816
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.375
Saturation Variance	0.049
Low Saturation Ratio	0.408
Medium Saturation Ratio	0.537
High Saturation Ratio	0.055
Saturation Clustering	0.999
Hue Concentration	0.808
Complementary Balance	0.02
Analogous Dominance	0.907
Temperature Bias	0.889

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). C Major9 - Research on Harmony - Variation 5 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0553.html>
- [2] Quercy, A. (2024). C Major9 - Research on Harmony - Variation 5 - Gallery. https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-5_67a.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)

0ae0eee6ec9798f9c4f67d3f13ed6603ab5dab081c5b8c6cb7c7308d-f689ce9f

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240306-0049
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