

Nanopublication — Computational Image Analysis - AQC0667

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

Claim 1: Computational Image Analysis - AQC0667

The artwork C+ - Research [1] on Harmony - Variation 1 (AQC0667) [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]: 2563x3417 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	E1A992	29.0	orange	burlywood
2	E7B9A9	25.0	orange	lightpink
3	CD8F6F	8.3	orange	darksalmon
4	B8AEAB	7.3	gray	steel gray
5	7E4F3A	6.8	orange	burnt sienna
6	969292	6.6	gray	lightslategray
7	4B3834	6.1	red-orange	darkslategray
8	A96C4D	5.5	orange	indianred
9	6A7278	3.7	gray	dimgray
10	D99C24	1.7	yellow-orange	goldenrod
11	27171C	0.3	red	very dark gray [Accent]
12	30526A	0.3	blue	grayish purple [Accent]
13	282417	0.3	yellow	very dark gray [Accent]
14	3A5367	0.3	blue-violet	grayish purple [Accent]
15	D2E1E0	0.3	green	gainsboro [Accent]

Color Families:

Family	%
orange	74.5
gray	17.6
red-orange	6.1
yellow-orange	1.7
red	0.3
blue	0.3
yellow	0.3
blue-violet	0.3
green	0.3

Accent Colors:

Hex	Family	Name	Chroma
27171C	red	very dark gray	9.1
30526A	blue	grayish purple	18.7
282417	yellow	very dark gray	9.1
3A5367	blue-violet	grayish purple	15.5
D2E1E0	green	gainsboro	5.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.161
Mean Local Roughness	0.016
Roughness Uniformity	0.014
Edge Density	0.07
Mean Gradient Magnitude	0.136
Gradient Variance	0.027
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.612
Spatial Variation	0.099
Texture Consistency	0.529

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.636
Brightness Variance	0.161
Brightness Uniformity	0.747
Brightness Skewness	-1.233
Brightness Entropy	6.848
Rms Contrast	0.161
Michelson Contrast	1.0
Weber Contrast	0.535
Mean Local Contrast	0.017
Contrast Uniformity	0.162
Dynamic Range	1.0
Effective Dynamic Range	0.506
Shadow Percentage	8.169
Midtone Percentage	31.339
Highlight Percentage	60.492
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.022
Coarse Contrast	0.034
Multiscale Contrast Ratio	0.256

Metric	Value
Edge Contrast	0.136
Contrast Clustering	0.471

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.777
Color Clustering	0.434
Color Transition Smoothness	0.653
Transition Uniformity	0.82
Sharp Transition Ratio	0.1
Transition Directionality	0.009
Mean Saturation	0.322
Saturation Variance	0.027
Low Saturation Ratio	0.414
Medium Saturation Ratio	0.562
High Saturation Ratio	0.024
Saturation Clustering	1.0
Hue Concentration	0.963
Complementary Balance	0.016
Analogous Dominance	0.982
Temperature Bias	0.967

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+ - Research on Harmony - Variation 1 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0667.html>
- [2] Quercy, A. (2024). C+ - Research on Harmony - Variation 1 - Gallery. https://artquamanima.com/en/artworks/2024/01/c-research-on-harmony-variation-1_7fm.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)

44e23657da661db68f8baf5df453a198e409c2ef2f174a1870c5cb-c6e5511a2a

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20240718-0163
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