

# Nanopublication — Computational Image Analysis - AQC0665

by Arnaud Quercy · C# Major - Research on Harmony - Variation 3 · 2024

## Claim 1: Computational Image Analysis - AQC0665

The artwork C# Major [1] - Research on Harmony - Variation 3 (AQC0665) [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]: 2281x3041 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	D9D9D6	16.9	white	gainsboro
2	A2BFBA	15.3	green	steel gray
3	BECC9	14.3	green	silver
4	8AADAB	14.0	green	steel gray
5	709999	12.3	blue-green	lightslategray
6	568380	8.0	green	blue gray
7	2D6B5F	6.9	green	darkslategray
8	AA9471	4.6	yellow-orange	rosybrown
9	CBC592	4.6	yellow	tan
10	2E302C	3.1	gray	darkslategrey
11	806550	0.3	orange	dimgray [Accent]
12	695954	0.3	red-orange	dimgray [Accent]
13	768650	0.3	yellow-green	dimgray [Accent]

### Color Families:

Family	%
green	58.4
white	16.9
blue-green	12.3
yellow-orange	4.6
yellow	4.6
gray	3.1
orange	0.3
red-orange	0.3
yellow-green	0.3

### Accent Colors:

Hex	Family	Name	Chroma
806550	orange	dimgray	17.9
695954	red-orange	dimgray	7.8
768650	yellow-green	dimgray	30.9

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.171
Mean Local Roughness	0.024
Roughness Uniformity	0.018
Edge Density	0.147
Mean Gradient Magnitude	0.201
Gradient Variance	0.046
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.618
Spatial Variation	0.108
Texture Consistency	0.699

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.652
Brightness Variance	0.171
Brightness Uniformity	0.737
Brightness Skewness	-0.866
Brightness Entropy	7.283
Rms Contrast	0.171
Michelson Contrast	1.0
Weber Contrast	0.521
Mean Local Contrast	0.026
Contrast Uniformity	0.297
Dynamic Range	1.0
Effective Dynamic Range	0.549
Shadow Percentage	5.734
Midtone Percentage	40.274
Highlight Percentage	53.992
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.04
Fine Contrast	0.013
Medium Contrast	0.032
Coarse Contrast	0.049
Multiscale Contrast Ratio	0.268
Edge Contrast	0.201
Contrast Clustering	0.301

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.696
Color Clustering	0.795
Color Transition Smoothness	0.499
Transition Uniformity	0.692
Sharp Transition Ratio	0.1
Transition Directionality	0.009
Mean Saturation	0.214
Saturation Variance	0.027
Low Saturation Ratio	0.743
Medium Saturation Ratio	0.248
High Saturation Ratio	0.009
Saturation Clustering	1.0
Hue Concentration	0.655
Complementary Balance	0.017
Analogous Dominance	0.792
Temperature Bias	-0.648

## 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# Major - Research on Harmony - Variation 3 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0665.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/c-major-research-on-harmony-variation-3\\_7eu.html](https://artquamanima.com/en/artworks/2024/01/c-major-research-on-harmony-variation-3_7eu.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)

40a79a5455b98f9f7a8083e858af2853c613a349e5e34b39b-f51c6a267a2f432

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