

# Nanopublication — Computational Image Analysis - AQC0668

by Arnaud Quercy · C+ - Research on Harmony - Variation 2 · 2024

## Claim 1: Computational Image Analysis - AQC0668

The artwork C+ - Research [1] on Harmony - Variation 2 (AQC0668) [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]: 2610x3480 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	C3C6C4	18.2	white	silver
2	D7D8D8	17.7	white	gainsboro
3	AFB1AC	14.9	gray	steel gray
4	9C9D91	12.1	yellow-green	steel gray
5	CFB57F	11.2	yellow-orange	tan
6	C59549	7.4	yellow-orange	peru
7	878B6B	7.0	yellow-green	gray
8	312F2D	5.5	gray	darkslategray
9	4D6B60	3.4	green	dimgray
10	82602A	2.6	yellow-orange	burnt sienna
11	241809	0.3	orange	very dark gray [Accent]
12	A6AA5E	0.3	yellow	ochre [Accent]
13	6F8890	0.3	blue	blue gray [Accent]
14	6C868B	0.3	blue-green	blue gray [Accent]
15	758697	0.3	blue-violet	grayish purple [Accent]

### Color Families:

Family	%
white	35.9
yellow-orange	21.2
gray	20.4
yellow-green	19.2
green	3.4
orange	0.3
yellow	0.3
blue	0.3
blue-green	0.3

Family	%
blue-violet	0.3

### Accent Colors:

Hex	Family	Name	Chroma
241809	orange	very dark gray	10.4
A6AA5E	yellow	ochre	40.2
6F8890	blue	blue gray	9.9
6C868B	blue-green	blue gray	10.0
758697	blue-violet	grayish purple	11.2

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.171
Mean Local Roughness	0.017
Roughness Uniformity	0.015
Edge Density	0.082
Mean Gradient Magnitude	0.154
Gradient Variance	0.032
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.597
Spatial Variation	0.085
Texture Consistency	0.631

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.665
Brightness Variance	0.171
Brightness Uniformity	0.743
Brightness Skewness	-1.309
Brightness Entropy	7.17
Rms Contrast	0.171
Michelson Contrast	1.0
Weber Contrast	0.481
Mean Local Contrast	0.019
Contrast Uniformity	0.204
Dynamic Range	1.0
Effective Dynamic Range	0.612
Shadow Percentage	6.831
Midtone Percentage	33.433
Highlight Percentage	59.735
Shadow Clipping	0.006
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.009

Metric	Value
Medium Contrast	0.024
Coarse Contrast	0.04
Multiscale Contrast Ratio	0.225
Edge Contrast	0.154
Contrast Clustering	0.369

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.73
Color Clustering	0.705
Color Transition Smoothness	0.614
Transition Uniformity	0.785
Sharp Transition Ratio	0.1
Transition Directionality	0.011
Mean Saturation	0.185
Saturation Variance	0.042
Low Saturation Ratio	0.743
Medium Saturation Ratio	0.228
High Saturation Ratio	0.029
Saturation Clustering	1.0
Hue Concentration	0.822
Complementary Balance	0.007
Analogous Dominance	0.89
Temperature Bias	0.639

## 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 2 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0668.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/c-research-on-harmony-variation-2\\_7g0.html](https://artquamanima.com/en/artworks/2024/01/c-research-on-harmony-variation-2_7g0.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

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

## CHECKSUM (SHA-256)

7b332432298299dc8fbfe8b12af1785fc58b5af622a5f6b053ff638cd5c4f-fa2

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20240718-0164
<b>Asset code</b>	AQC0668
<b>Version</b>	1
<b>Published</b>	2026-03-25