

# Nanopublication — Computational Image Analysis - AQC0558

by Arnaud Quercy · C Major9 - Research on Harmony - Variation 10 · 2024

## Claim 1: Computational Image Analysis - AQC0558

Analysis record [3]: C Major9 - Research [1] on Harmony - Variation 10 (AQC0558) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 2026-02-04.

### 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	0E0E19	18.6	violet	black
2	CB5D2E	16.0	orange	chocolate
3	DAA78E	12.5	orange	tan
4	BE8D77	11.0	orange	rosybrown
5	25242E	10.4	violet	very dark gray
6	B74A1C	9.4	orange	burnt sienna
7	DF7042	8.1	orange	peru
8	DDCFC1	6.2	yellow-orange	lightgray
9	BFB2A6	5.2	orange	steel gray
10	544C4F	2.6	gray	dusty mauve
11	F6F5EA	0.3	yellow-green	white [Accent]

#### Color Families:

Family	%
orange	62.2
violet	29.0
yellow-orange	6.2
gray	2.6
yellow-green	0.3

#### Accent Colors:

Hex	Family	Name	Chroma
F6F5EA	yellow-green	white	5.4

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.251
Mean Local Roughness	0.018
Roughness Uniformity	0.014
Edge Density	0.103
Mean Gradient Magnitude	0.183

Metric	Value
Gradient Variance	0.03
Gradient Smoothness	0.057
Directional Coherence	0.005
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.6
Spatial Variation	0.215
Texture Consistency	0.414

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.436
Brightness Variance	0.251
Brightness Uniformity	0.424
Brightness Skewness	-0.27
Brightness Entropy	7.538
Rms Contrast	0.251
Michelson Contrast	1.0
Weber Contrast	0.915
Mean Local Contrast	0.021
Contrast Uniformity	0.321
Dynamic Range	1.0
Effective Dynamic Range	0.745
Shadow Percentage	31.092
Midtone Percentage	47.2
Highlight Percentage	21.708
Shadow Clipping	0.041
Highlight Clipping	0.001
Tonal Balance	0.236
Fine Contrast	0.01
Medium Contrast	0.027
Coarse Contrast	0.051
Multiscale Contrast Ratio	0.193
Edge Contrast	0.183
Contrast Clustering	0.586

### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.741
Color Clustering	0.741
Color Transition Smoothness	0.532
Transition Uniformity	0.787
Sharp Transition Ratio	0.1
Transition Directionality	0.004
Mean Saturation	0.477
Saturation Variance	0.064

Metric	Value
Low Saturation Ratio	0.247
Medium Saturation Ratio	0.435
High Saturation Ratio	0.318
Saturation Clustering	0.998
Hue Concentration	0.533
Complementary Balance	0.001
Analogous Dominance	0.7
Temperature Bias	0.622

## 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 10 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0558.html>

[2] Quercy, A. (2024). C Major9 - Research on Harmony - Variation 10 - Gallery. [https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-10\\_698.html](https://artquamanima.com/en/artworks/2024/01/c-major9-research-on-harmony-variation-10_698.html)

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h [ttps://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html](https://multimodal.institute/en/publications/2025/11/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)

8280f4fbe8368317bfe983e794-ab7a3ca84d03b7c091f45c65570983eaaa9321

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20240306-0054
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