

# Nanopublication — Computational Image Analysis - AQC0661

by Arnaud Quercy · Ab Major - Research on Harmony - Variation 6 · 2024

## Claim 1: Computational Image Analysis - AQC0661

The artwork Ab Major [1] - Research on Harmony - Variation 6 (AQC0661) [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]: 1919x2560 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		39.4	violet	dusty mauve
2		13.3	blue-violet	grayish purple
3		12.1	orange	darksalmon
4		12.0	violet	very dark gray
5		12.0	gray	darkslategray
6		11.1	red-orange	orangered
7		9.4	red-orange	tan
8		9.1	violet	dusty mauve
9		2.9	blue	cadetblue
10		2.0	orange	burnt sienna
11		0.3	yellow-orange	wheat [Accent]
12		0.3	yellow	wheat [Accent]
13		0.3	red-violet	dusty mauve [Accent]
14		0.3	red	dimgray [Accent]

### Color Families:

Family	%
violet	37.3
red-orange	20.5
orange	14.1
blue-violet	13.3
gray	12.0
blue	2.9
yellow-orange	0.3
yellow	0.3
red-violet	0.3
red	0.3

### Accent Colors:

Hex	Family	Name	Chroma
F2E3BE	yellow-orange	wheat	20.0
E1D6B4	yellow	wheat	18.1
573863	red-violet	dusty mauve	29.7
955A62	red	dimgray	25.7

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.195
Mean Local Roughness	0.01
Roughness Uniformity	0.021
Edge Density	0.024
Mean Gradient Magnitude	0.068
Gradient Variance	0.033
Gradient Smoothness	0.0
Directional Coherence	0.312
Pattern Complexity	0.109
Pattern Repetition	1.0
Detail Frequency Ratio	0.645
Spatial Variation	0.098
Texture Consistency	0.706

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.398
Brightness Variance	0.195
Brightness Uniformity	0.511
Brightness Skewness	0.344
Brightness Entropy	7.224
Rms Contrast	0.195
Michelson Contrast	1.0
Weber Contrast	0.817
Mean Local Contrast	0.01
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.616
Shadow Percentage	39.821
Midtone Percentage	44.869
Highlight Percentage	15.311
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.013
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.068

Metric	Value
Contrast Clustering	0.294

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**SPATIAL DISTRIBUTION ANALYSIS**


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Metric	Value
Spatial Coherence	0.726
Color Clustering	0.48
Color Transition Smoothness	0.806
Transition Uniformity	0.764
Sharp Transition Ratio	0.1
Transition Directionality	0.301
Mean Saturation	0.45
Saturation Variance	0.056
Low Saturation Ratio	0.28
Medium Saturation Ratio	0.593
High Saturation Ratio	0.127
Saturation Clustering	1.0
Hue Concentration	0.353
Complementary Balance	0.138
Analogous Dominance	0.528
Temperature Bias	0.102

## 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.

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**REFERENCES**


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- [1] Arnaud Quercy (2024). Ab Major - Research on Harmony - Variation 6 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0661.html>
- [2] Quercy, A. (2024). Ab Major - Research on Harmony - Variation 6 - Gallery. [https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony-variation-6\\_7da.html](https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony-variation-6_7da.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025. <https://multimodal.institute/en/publications/2025/10/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

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**EPISTEMIC PROFILE**


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<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

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**CHECKSUM (SHA-256)**


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<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20240705-0157
<b>Asset code</b>	AQC0661
<b>Version</b>	1
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