

Nanopublication — Computational Image Analysis - AQC0663

by Arnaud Quercy · Ab Major - Research on Harmony - Variation 8 · 2024

Claim 1: Computational Image Analysis - AQC0663

The artwork Ab Major [1] - Research on Harmony - Variation 8 (AQC0663) [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]: 2265x3020 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	E8AF8E	18.9	orange	burlywood
2	E8996F	18.4	orange	darksalmon
3	E3C4B1	17.1	orange	wheat
4	E77B45	10.0	orange	coral
5	827C87	8.5	red-violet	dusty mauve
6	A59D9F	7.8	gray	steel gray
7	605868	6.9	violet	dusty mauve
8	396D8E	4.9	blue	grayish purple
9	9E7668	4.1	orange	gray
10	2F2F37	3.5	violet	darkslategray
11	784D41	0.3	red-orange	burnt sienna [Accent]
12	0B141D	0.3	blue-violet	black [Accent]
13	F3F1E8	0.3	yellow	white [Accent]

Color Families:

Family	%
orange	68.5
violet	10.3
red-violet	8.5
gray	7.8
blue	4.9
red-orange	0.3
blue-violet	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
784D41	red-orange	burnt sienna	22.0

Hex	Family	Name	Chroma
0B141D	blue-violet	black	7.0
F3F1E8	yellow	white	5.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.161
Mean Local Roughness	0.02
Roughness Uniformity	0.018
Edge Density	0.095
Mean Gradient Magnitude	0.164
Gradient Variance	0.037
Gradient Smoothness	0.0
Directional Coherence	0.01
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.626
Spatial Variation	0.092
Texture Consistency	0.487

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.623
Brightness Variance	0.161
Brightness Uniformity	0.742
Brightness Skewness	-0.957
Brightness Entropy	7.158
Rms Contrast	0.161
Michelson Contrast	1.0
Weber Contrast	0.515
Mean Local Contrast	0.021
Contrast Uniformity	0.167
Dynamic Range	1.0
Effective Dynamic Range	0.51
Shadow Percentage	6.259
Midtone Percentage	43.603
Highlight Percentage	50.138
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.011
Medium Contrast	0.027
Coarse Contrast	0.039
Multiscale Contrast Ratio	0.289
Edge Contrast	0.164
Contrast Clustering	0.513

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.751
Color Clustering	0.492
Color Transition Smoothness	0.583
Transition Uniformity	0.751
Sharp Transition Ratio	0.1
Transition Directionality	0.007
Mean Saturation	0.362
Saturation Variance	0.041
Low Saturation Ratio	0.399
Medium Saturation Ratio	0.543
High Saturation Ratio	0.058
Saturation Clustering	1.0
Hue Concentration	0.744
Complementary Balance	0.071
Analogous Dominance	0.859
Temperature Bias	0.765

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). Ab Major - Research on Harmony - Variation 8 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0663.html>
- [2] Quercy, A. (2024). Ab Major - Research on Harmony - Variation 8 - Gallery. https://artquamanima.com/en/artworks/2024/01/ab-major-research-on-harmony-variation-8_7e2.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)

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00da1bb2cef4657f92d529ba7afc5625f11580d8e64a658a4d-
dd0a84ea161d0a
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Artist	Arnaud Quercy
Date	2024
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