

Nanopublication – Computational Image Analysis –
AQC0733

by Arnaud Quercy · E Major – Research on Harmony – Variation 4 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0733

The artwork E Major [1] – Research on Harmony – Variation 4 (AQC0733) [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]: 2972x3962 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		667891	15.0	blue-violet	grayish purple
2		3A344C	15.0	violet	dusty mauve
3		4F88D0	13.4	blue-violet	steelblue
4		E5D5B7	13.3	yellow-orange	wheat
5		312627	12.8	red-orange	very dark gray
6		D5B78B	11.1	yellow-orange	tan
7		4E5069	7.3	violet	dusty mauve
8		B09A4B	4.6	yellow-orange	peru
9		3955B0	3.8	violet	darkslateblue
10		DCBF35	3.7	yellow-orange	goldenrod
11		634313	0.3	orange	russet [Accent]
12		D5D25E	0.3	yellow	ochre [Accent]

Color Families:

Family	%
yellow-orange	32.8
blue-violet	28.4
violet	26.0
red-orange	12.8
orange	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
634313	orange	russet	34.2
D5D25E	yellow	ochre	58.7

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.232
Mean Local Roughness	0.011
Roughness Uniformity	0.013
Edge Density	0.018
Mean Gradient Magnitude	0.089
Gradient Variance	0.022
Gradient Smoothness	0.0
Directional Coherence	0.042
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.608
Spatial Variation	0.181
Texture Consistency	0.408

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.477
Brightness Variance	0.232
Brightness Uniformity	0.513
Brightness Skewness	0.197
Brightness Entropy	7.351
Rms Contrast	0.232
Michelson Contrast	1.0
Weber Contrast	0.789
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.698
Shadow Percentage	33.973
Midtone Percentage	38.196
Highlight Percentage	27.831
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.055
Fine Contrast	0.006
Medium Contrast	0.015
Coarse Contrast	0.023
Multiscale Contrast Ratio	0.25
Edge Contrast	0.089
Contrast Clustering	0.592

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.796
Color Clustering	0.633
Color Transition Smoothness	0.762
Transition Uniformity	0.848
Sharp Transition Ratio	0.1
Transition Directionality	0.052
Mean Saturation	0.379
Saturation Variance	0.032
Low Saturation Ratio	0.449
Medium Saturation Ratio	0.493
High Saturation Ratio	0.059
Saturation Clustering	1.0
Hue Concentration	0.201
Complementary Balance	0.272
Analogous Dominance	0.551
Temperature Bias	0.057

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). E Major - Research on Harmony - Variation 4 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0733.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/e-major-research-on-harmony-variation-4_85a.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>

WHERE THIS WORK LIVES

THEMATIC ELEMENTS

chromesthetic mapping

E Major triad

synesthetic art

piano   tude translation

harmonic color relationships

blue-violet composition

acrylic wood panel

Synesthetic Explorations

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

ec17abf9b8bad14e1c9da16b1a4a1e4e923c533ac09dde60033481b64d6d4746

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