

Nanopublication – Computational Image Analysis – AQC0759

by Arnaud Quercy · F Major – Research on Harmony – Variation 5 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0759

The artwork F Major [1] – Research on Harmony – Variation 5 (AQC0759) [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]: 2956x3941 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		AD3246	18.1	red-orange	brown
2		6C2227	17.1	red-orange	russet
3		CFC7BC	14.2	yellow-orange	silver
4		913C38	13.8	red-orange	burnt sienna
5		26222B	12.4	violet	very dark gray
6		BBB6AB	10.5	yellow-orange	steel gray
7		A96848	4.8	orange	burnt sienna
8		D8B386	4.7	yellow-orange	burlywood
9		ECD1DA	2.4	red	gainsboro
10		CA9E4C	1.9	yellow-orange	peru

Color Families:

Family	%
red-orange	48.9
yellow-orange	31.4
violet	12.4
orange	4.8
red	2.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.238
Mean Local Roughness	0.008
Roughness Uniformity	0.01
Edge Density	0.012
Mean Gradient Magnitude	0.084
Gradient Variance	0.02
Gradient Smoothness	0.0
Directional Coherence	0.028
Pattern Complexity	0.113
Pattern Repetition	1.0
Detail Frequency Ratio	0.573
Spatial Variation	0.194
Texture Consistency	0.29

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.444
Brightness Variance	0.238
Brightness Uniformity	0.464
Brightness Skewness	0.397
Brightness Entropy	7.18
Rms Contrast	0.238
Michelson Contrast	1.0
Weber Contrast	0.785
Mean Local Contrast	0.01
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.671
Shadow Percentage	39.147
Midtone Percentage	28.997
Highlight Percentage	31.856
Shadow Clipping	0.0
Highlight Clipping	0.002
Tonal Balance	0.0
Fine Contrast	0.004
Medium Contrast	0.013
Coarse Contrast	0.025
Multiscale Contrast Ratio	0.168
Edge Contrast	0.084
Contrast Clustering	0.71

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.799
Color Clustering	0.725
Color Transition Smoothness	0.78
Transition Uniformity	0.866
Sharp Transition Ratio	0.1
Transition Directionality	0.044
Mean Saturation	0.444
Saturation Variance	0.073
Low Saturation Ratio	0.384
Medium Saturation Ratio	0.424
High Saturation Ratio	0.192
Saturation Clustering	1.0
Hue Concentration	0.843
Complementary Balance	0.004
Analogous Dominance	0.904
Temperature Bias	0.887

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). F Major - Research on Harmony - Variation 5 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0759.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/f-major-research-on-harmony-variation-5_8fe.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

F Major harmony

synesthetic art

color-sound translation

harmonic visualization

geometric abstraction

Synesthetic Explorations

musical painting

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

be50353c004f2f38eec7ecdd022999fa771dc42b5f1c3ca8d6df3e2fa085c6cd

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