

Nanopublication – Computational Image Analysis –
AQC0760

by Arnaud Quercy · F Minor – Research on Harmony – Variation 13 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0760

Computational image analysis [3] of artwork F Minor [1] – Research on Harmony – Variation 13 (AQC0760) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 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]: 2975x3967 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		32272B	22.1	red	very dark gray
2		5AA0E6	20.0	blue-violet	cornflowerblue
3		7B4D66	11.5	red	dusty mauve
4		75578D	11.2	violet	dusty mauve
5		886AA2	10.8	violet	dusty mauve
6		76AEE9	10.1	blue-violet	skyblue
7		554548	7.9	red	darkslategray
8		D93E27	2.4	red-orange	chocolate
9		EBAB95	2.3	orange	burlywood
10		373375	1.8	violet	darkslateblue
11		B58F49	0.3	yellow-orange	peru [Accent]
12		98C8E7	0.3	blue	skyblue [Accent]

Color Families:

Family	%
red	41.5
blue-violet	30.1
violet	23.7
red-orange	2.4
orange	2.3
yellow-orange	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
B58F49	yellow-orange	peru	42.4
98C8E7	blue	skyblue	21.5

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.173
Mean Local Roughness	0.009
Roughness Uniformity	0.011
Edge Density	0.025
Mean Gradient Magnitude	0.096
Gradient Variance	0.021
Gradient Smoothness	0.0
Directional Coherence	0.032
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.579
Spatial Variation	0.123
Texture Consistency	0.416

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.413
Brightness Variance	0.173
Brightness Uniformity	0.58
Brightness Skewness	-0.048
Brightness Entropy	7.129
Rms Contrast	0.173
Michelson Contrast	1.0
Weber Contrast	0.738
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.51
Shadow Percentage	31.729
Midtone Percentage	64.02
Highlight Percentage	4.252
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005
Medium Contrast	0.014
Coarse Contrast	0.028
Multiscale Contrast Ratio	0.162
Edge Contrast	0.096
Contrast Clustering	0.584

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.785
Color Clustering	0.47
Color Transition Smoothness	0.741
Transition Uniformity	0.855
Sharp Transition Ratio	0.1
Transition Directionality	0.042
Mean Saturation	0.401
Saturation Variance	0.029
Low Saturation Ratio	0.319
Medium Saturation Ratio	0.653
High Saturation Ratio	0.028
Saturation Clustering	1.0
Hue Concentration	0.551
Complementary Balance	0.008
Analogous Dominance	0.586
Temperature Bias	0.004

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 Minor - Research on Harmony - Variation 13 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0760.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/f-minor-research-on-harmony-variation-13_8fs.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 minor chord

synesthetic art

acrylic on wood panel

harmonic color translation

geometric abstraction

musical visualization

contemporary French art

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

74aa207374d0272927a0d94cfc0768d78b1afc78d0c2db2688c673cc789b9d44

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