

Nanopublication – Computational Image Analysis –
AQC0832

by Arnaud Quercy · F Minor – Research on Harmony – Variation 18 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0832

K-means clustering analysis [3] (10 colors) performed on artwork F Minor [1] – Research on Harmony – Variation 18 (AQC0832) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 2426x3235 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C9CAC7	28.4	white	silver
2		B7BBB9	20.1	gray	steel gray
3		DAD8D3	17.3	white	lightgray
4		99A6AD	8.0	blue	steel gray
5		845E83	6.0	red-violet	dusty mauve
6		857363	5.5	orange	dimgray
7		A78784	5.2	red-orange	rosybrown
8		604F4D	5.1	red-orange	dimgrey
9		2B2121	2.3	red-orange	very dark gray
10		AE4B44	2.2	red-orange	burnt sienna
11		833142	0.3	red	brown [Accent]
12		708BA8	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
white	45.7
gray	20.1
red-orange	14.8
blue	8.0
red-violet	6.0
orange	5.5
red	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
833142	red	brown	37.9
708BA8	blue-violet	grayish purple	18.1

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.177
Mean Local Roughness	0.016
Roughness Uniformity	0.016
Edge Density	0.071
Mean Gradient Magnitude	0.144
Gradient Variance	0.034
Gradient Smoothness	0.0
Directional Coherence	0.006
Pattern Complexity	0.115
Pattern Repetition	1.0
Detail Frequency Ratio	0.606
Spatial Variation	0.115
Texture Consistency	0.634

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.679
Brightness Variance	0.177
Brightness Uniformity	0.739
Brightness Skewness	-1.215
Brightness Entropy	7.022
Rms Contrast	0.177
Michelson Contrast	1.0
Weber Contrast	0.521
Mean Local Contrast	0.018
Contrast Uniformity	0.109
Dynamic Range	1.0
Effective Dynamic Range	0.529
Shadow Percentage	5.036
Midtone Percentage	26.375
Highlight Percentage	68.59
Shadow Clipping	0.005
Highlight Clipping	0.003
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.023
Coarse Contrast	0.038
Multiscale Contrast Ratio	0.223
Edge Contrast	0.144
Contrast Clustering	0.366

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.708
Color Clustering	0.722
Color Transition Smoothness	0.637
Transition Uniformity	0.772
Sharp Transition Ratio	0.1
Transition Directionality	0.006
Mean Saturation	0.119
Saturation Variance	0.02
Low Saturation Ratio	0.891
Medium Saturation Ratio	0.101
High Saturation Ratio	0.008
Saturation Clustering	1.0
Hue Concentration	0.688
Complementary Balance	0.057
Analogous Dominance	0.663
Temperature Bias	0.76

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 (2025). F Minor - Research on Harmony - Variation 18 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0832.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/f-minor-research-on-harmony-variation-18_97s.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 art

F minor visualization

synesthesia painting

watercolor harmony

Synesthetic Explorations

musical color mapping

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

81ae0462a79f709891737d7eb92b0845ba850f0c0efba84f42e4078e87be9ed1

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