Nanopublication — Computational Image Analysis - AQC0881

by Arnaud Quercy · F#Minor - Research on Harmony - Variations 7 · 2025

Claim 1: Computational Image Analysis - AQC0881

> Analysis record [3]: F#Minor [1] - Research on Harmony - Variations 7 (AQC0881) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 2025-12-11.

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]: 1953x2930 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		ADB8B1	15.0	yellow-green	steel gray
2		DCAD6B	14.1	yellow-orange	sandybrown
3		71DDD9	13.2	green	skyblue
4		C89656	11.9	orange	peru
5		EAC384	11.2	yellow-orange	burlywood
6		485140	8.9	yellow-green	darkslategray
7		627B5A	8.7	yellow-green	dimgray
8		80AA75	6.9	yellow-green	darkseagreen
9		E7E3D8	6.2	yellow-orange	gainsboro
10		1C1B13	3.9	yellow	very dark gray
11		9BF0F0	0.3	blue-green	paleturquoise [Accent]
12		7A8AA7	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
yellow-green	39.5
yellow-orange	31.5
green	13.2
orange	11.9
yellow	3.9
blue-green	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
9BF0F0	blue-green	paleturquoise	27.2
7A8AA7	blue-violet	grayish purple	17.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.191
Mean Local Roughness	0.039
Roughness Uniformity	0.038
Edge Density	0.183
Mean Gradient Magnitude	0.315
Gradient Variance	0.158
Gradient Smoothness	0.0
Directional Coherence	0.007
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.644
Spatial Variation	0.085
Texture Consistency	0.814

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.631
Brightness Variance	0.191
Brightness Uniformity	0.697
Brightness Skewness	-1.169
Brightness Entropy	7.283
Rms Contrast	0.191
Michelson Contrast	1.0
Weber Contrast	0.595
Mean Local Contrast	0.043
Contrast Uniformity	0.109
Dynamic Range	1.0
Effective Dynamic Range	0.616
Shadow Percentage	10.502
Midtone Percentage	31.928
Highlight Percentage	57.57
Shadow Clipping	0.025
Highlight Clipping	0.004
Tonal Balance	0.0
Fine Contrast	0.022
Medium Contrast	0.053
Coarse Contrast	0.078
Multiscale Contrast Ratio	0.278
Edge Contrast	0.315
Contrast Clustering	0.186

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.701
Color Clustering	0.689
Color Transition Smoothness	0.206
Transition Uniformity	0.0

Metric	Value
Sharp Transition Ratio	0.1
Transition Directionality	0.007
Mean Saturation	0.363
Saturation Variance	0.04
Low Saturation Ratio	0.377
Medium Saturation Ratio	0.607
High Saturation Ratio	0.016
Saturation Clustering	0.997
Hue Concentration	0.54
Complementary Balance	0.026
Analogous Dominance	0.642
Temperature Bias	0.329

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 - Variations 7 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0881.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/fminor-research-on-harmony-variations-7_i3h.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/10/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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259e25ae110a7b29982f497ef1d91ed3c37c2252ad-
f933715a840194c1b354ec
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Artist	Arnaud Quercy
Date	2025
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