AQC0638 | NAN-COL000308

Nanopublication — Computational Image Analysis - AQC0638

by Arnaud Quercy · F# minor - Research on Harmony - Variation 2 · 2024

CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0638

K-means clustering analysis [3] (10 colors) performed on artwork F# minor - Research [1] on Harmony - Variation 2 (AQC0638) [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]: 2372x3558 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		EB981F	29.3	orange	goldenrod
2		2B6255	16.6	green	darkslategray
3		496D61	13.4	green	dimgray
4		1C150C	9.3	orange	black
5		3D3428	8.4	yellow-orange	darkslategrey
6		C88E4B	5.7	orange	peru
7		539C91	5.2	green	cadetblue
8		69A44B	5.0	yellow-green	olivedrab
9		997C5E	4.8	orange	gray
10		D4D1CA	2.2	white	lightgray
11		9B972A	0.3	yellow	darkgoldenrod [Accent]

Color Families:

Family	%
orange	49.1
green	35.2
yellow-orange	8.4
yellow-green	5.0
white	2.2
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
9B972A	yellow	darkgoldenrod	56.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.195
Mean Local Roughness	0.018
Roughness Uniformity	0.025
Edge Density	0.066
Mean Gradient Magnitude	0.156
Gradient Variance	0.067
Gradient Smoothness	0.0
Directional Coherence	0.026
Pattern Complexity	0.117
Pattern Repetition	1.0
Detail Frequency Ratio	0.619
Spatial Variation	0.134
Texture Consistency	0.69

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.448
Brightness Variance	0.195
Brightness Uniformity	0.565
Brightness Skewness	-0.305
Brightness Entropy	7.238
Rms Contrast	0.195
Michelson Contrast	1.0
Weber Contrast	0.756
Mean Local Contrast	0.02
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.596
Shadow Percentage	31.537
Midtone Percentage	60.251
Highlight Percentage	8.212
Shadow Clipping	0.024
Highlight Clipping	0.009
Tonal Balance	0.0
Fine Contrast	0.009
Medium Contrast	0.026
Coarse Contrast	0.045
Multiscale Contrast Ratio	0.208
Edge Contrast	0.156
Contrast Clustering	0.31

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.761
Color Clustering	0.641
Color Transition Smoothness	0.58
Transition Uniformity	0.528
Sharp Transition Ratio	0.1
Transition Directionality	0.032
Mean Saturation	0.582
Saturation Variance	0.061
Low Saturation Ratio	0.132
Medium Saturation Ratio	0.527
High Saturation Ratio	0.341
Saturation Clustering	0.998
Hue Concentration	0.478
Complementary Balance	0.002
Analogous Dominance	0.63
Temperature Bias	0.22

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 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0638.html

[2] Quercy, A. (2024). F# minor - Research on Harmony - Variation 2 - Gallery. https://artquamanima.com/en/artworks/2024/01/f-minor-research-on-harmony-variation-2_74c.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

Series: F# minor

Collection: Synesthetic Explorations

Technique: Acrylic

EXHIBITIONS

Rencontres au Marché de la Création (2024-04-23 → 2024-12-31, Marché de la Création – Paris Montparnasse, Paris)

Salon d'art contemporain - Metamorphose, Paris (2024-12-26 → 2025-01-05, Halle des Blancs Manteaux, Paris)

Permanent Collection 2025 - Resonance in Form (2025-01-01 → 2025-12-31, arnaudquercy.art, Paris)

Paris Studio Visit (2025-02-18 → 2025-02-18, Artist's Studio, Paris)

OTHER WORKS IN THIS SERIES

F# minor - Research on Harmony

F# minor - Research on Harmony - Variation 1

F# Minor - Research on Harmony - Variation 3

F# Minor - Research on Harmony - Variation 4

F# Minor - Research on Harmony - Variation 5

F# Minor - Research on Harmony - Variation 6

F#Minor - Research on Harmony - Variations 7

F#Minor - Research on Harmony - Variations 8

DOCUMENTED AT

Catalogue Raisonné — F# minor - Research on Harmony - Variation 2 — F# minor - Research on Harmony - Variation 2 — Chromesthetic Translation — Arnaud Quercy (2024)

Gallery — F# minor - Research on Harmony - Variation 2

Nanopublication — F# minor - Research on Harmony - Variation 2 — Digital Image Documentation - aqc0638_img_full_2372x3558_webp

Nanopublication — F# minor - Research on Harmony - Variation 2 — Physical Specifications

THEMATIC ELEMENTS

chromesthetic mapping · F# minor triad · harmonic translation · acrylic on paper · Synesthetic Explorations · color harmony · musical visualization · compact format

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

6fa016414a12efd4113ecf3deeb2e00d620510954985c0c1a00a5143b9005995

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