

Nanopublication – Computational Image Analysis –
AQC0585

by Arnaud Quercy · C minor – Research on Harmony – Variation 2 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0585

K-means clustering analysis [3] (10 colors) performed on artwork C minor – Research [1] on Harmony – Variation 2 (AQC0585) [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]: 2717x3623 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E11E09	32.5	red-orange	red
2		E8301A	14.3	red-orange	orangered
3		C42F28	11.5	red-orange	firebrick
4		5A1D44	10.5	red-violet	dusty mauve
5		DC4E46	10.3	red-orange	indianred
6		7A5C7B	7.1	red-violet	dusty mauve
7		F1776F	5.5	red-orange	salmon
8		B3949A	3.7	red	rosybrown
9		260C0F	2.5	red-orange	very dark gray
10		EFBDAD	2.1	red-orange	lightpink
11		E0610F	0.3	orange	chocolate [Accent]

Color Families:

Family	%
red-orange	78.8
red-violet	17.6
red	3.7
orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
E0610F	orange	chocolate	77.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.131
Mean Local Roughness	0.022
Roughness Uniformity	0.026
Edge Density	0.099
Mean Gradient Magnitude	0.189
Gradient Variance	0.071
Gradient Smoothness	0.0
Directional Coherence	0.063
Pattern Complexity	0.124
Pattern Repetition	1.0
Detail Frequency Ratio	0.636
Spatial Variation	0.068
Texture Consistency	0.546

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.382
Brightness Variance	0.131
Brightness Uniformity	0.657
Brightness Skewness	0.747
Brightness Entropy	6.727
Rms Contrast	0.131
Michelson Contrast	1.0
Weber Contrast	0.611
Mean Local Contrast	0.025
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.459
Shadow Percentage	28.152
Midtone Percentage	68.101
Highlight Percentage	3.748
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.013
Medium Contrast	0.031
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.189
Contrast Clustering	0.454

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.771
Color Clustering	0.514
Color Transition Smoothness	0.572
Transition Uniformity	0.604
Sharp Transition Ratio	0.1
Transition Directionality	0.064
Mean Saturation	0.749
Saturation Variance	0.058
Low Saturation Ratio	0.09
Medium Saturation Ratio	0.251
High Saturation Ratio	0.659
Saturation Clustering	0.999
Hue Concentration	0.948
Complementary Balance	0.0
Analogous Dominance	0.978
Temperature Bias	0.972

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). C minor - Research on Harmony - Variation 2 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0585.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/c-minor-research-on-harmony-variation-2_6jq.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 translationC minor triad

synesthetic artharmonic color mapping

geometric abstractionacrylic study

musical visualizationSynesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

7c71aa3efaef8cb92b35044c604bb4b55d10f514f3e2bb7398a6b1922ae91abd

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