

Nanopublication – Computational Image Analysis –
AQC0922

by Arnaud Quercy · C Minor – Research on Harmony – Variations 14 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0922

Computational image analysis [3] of artwork C Minor [1] – Research on Harmony – Variations 14 (AQC0922) [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 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]: 1736x2604 pixels. Analysis date: 2025-12-11.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		E0CCBA	20.3	orange	wheat
2		E85634	14.7	red-orange	tomato
3		483E48	14.1	red-violet	dusty mauve
4		D8BCA3	12.9	orange	tan
5		A47EBE	11.2	violet	dusty mauve
6		E9D8CE	10.8	orange	gainsboro
7		615171	7.5	violet	dusty mauve
8		BC733A	3.9	orange	peru
9		E78978	2.6	red-orange	darksalmon
10		2E191D	2.2	red	very dark gray
11		FFFAE3	0.3	yellow	lightyellow [Accent]
12		A89F8E	0.3	yellow-orange	rosybrown [Accent]

Color Families:

Family	%
orange	47.9
violet	18.6
red-orange	17.3
red-violet	14.1
red	2.2
yellow	0.3
yellow-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
FFFAE3	yellow	lightyellow	12.2
A89F8E	yellow-orange	rosybrown	10.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.223
Mean Local Roughness	0.025
Roughness Uniformity	0.029
Edge Density	0.096
Mean Gradient Magnitude	0.196
Gradient Variance	0.096
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.64
Spatial Variation	0.079
Texture Consistency	0.703

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.596
Brightness Variance	0.223
Brightness Uniformity	0.625
Brightness Skewness	-0.377
Brightness Entropy	7.3
Rms Contrast	0.223
Michelson Contrast	1.0
Weber Contrast	0.684
Mean Local Contrast	0.027
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.627
Shadow Percentage	19.002
Midtone Percentage	36.35
Highlight Percentage	44.648
Shadow Clipping	0.0
Highlight Clipping	0.006
Tonal Balance	0.0
Fine Contrast	0.014
Medium Contrast	0.034
Coarse Contrast	0.049
Multiscale Contrast Ratio	0.28
Edge Contrast	0.196
Contrast Clustering	0.297

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.718
Color Clustering	0.656
Color Transition Smoothness	0.499
Transition Uniformity	0.338
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.332
Saturation Variance	0.058
Low Saturation Ratio	0.556
Medium Saturation Ratio	0.279
High Saturation Ratio	0.164
Saturation Clustering	0.999
Hue Concentration	0.652
Complementary Balance	0.0
Analogous Dominance	0.677
Temperature Bias	0.68

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). C Minor - Research on Harmony - Variations 14 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0922.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/11/c-minor-research-on-harmony-variations-14_ihx.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 acrylic translationC minor visualization

Synesthetic Explorationsgeometric abstraction

Miles Davis Solarcircle of fifths mapping

orange violet compositionArnaud Quercy

jazz-inspired paintingminor key chromesthesia

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

8aa85a7836b27f9a47c76e55ade1e9b0ec9c06b5fd46c3ef89af2f8715d97157

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