AQC0716

Nanopublication — Computational Image Analysis - AQC0716

by Arnaud Quercy · Bb Minor - Research on Harmony - Variation 7 · 2024

Claim 1: Computational Image Analysis - AQC0716

> Computational image analysis [3] of artwork Bb Minor [1] - Research on Harmony - Variation 7 (AQC0716) [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 2026-02-04.

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]: 2977x3970 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		AB5579	19.4	red	dusty mauve
2		9B436B	17.0	red	indianred
3		94324A	15.7	red	brown
4		BF6889	9.2	red	dusty mauve
5		55302A	8.9	red-orange	dark brown
6		3D1618	8.4	red-orange	very dark red
7		A8CACA	8.0	blue-green	lightsteelblue
8		EEB899	7.4	orange	burlywood
9		87ABB9	4.3	blue	steel gray
10		ECACC5	1.7	red	lightpink
11		0D1727	0.3	blue-violet	very dark gray [Accent]
12		D7E9E4	0.3	green	white [Accent]
13		5E4061	0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
red	63.0
red-orange	17.2
blue-green	8.0
orange	7.4
blue	4.3
blue-violet	0.3
green	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
0D1727	blue-violet	very dark gray	12.2
D7E9E4	green	white	7.0
5E4061	red-violet	dusty mauve	23.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.189
Mean Local Roughness	0.025
Roughness Uniformity	0.02
Edge Density	0.152
Mean Gradient Magnitude	0.196
Gradient Variance	0.043
Gradient Smoothness	0.0
Directional Coherence	0.009
Pattern Complexity	0.123
Pattern Repetition	1.0
Detail Frequency Ratio	0.655
Spatial Variation	0.145
Texture Consistency	0.6

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.443
Brightness Variance	0.189
Brightness Uniformity	0.573
Brightness Skewness	0.377
Brightness Entropy	7.362
Rms Contrast	0.189
Michelson Contrast	1.0
Weber Contrast	0.734
Mean Local Contrast	0.027
Contrast Uniformity	0.268
Dynamic Range	1.0
Effective Dynamic Range	0.631
Shadow Percentage	26.45
Midtone Percentage	55.072
Highlight Percentage	18.478
Shadow Clipping	0.001
Highlight Clipping	0.0
Tonal Balance	0.075
Fine Contrast	0.014
Medium Contrast	0.033
Coarse Contrast	0.045
Multiscale Contrast Ratio	0.317
Edge Contrast	0.196
Contrast Clustering	0.4

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.742
Color Clustering	0.71
Color Transition Smoothness	0.51
Transition Uniformity	0.73
Sharp Transition Ratio	0.1
Transition Directionality	0.012
Mean Saturation	0.499
Saturation Variance	0.026
Low Saturation Ratio	0.13
Medium Saturation Ratio	0.798
High Saturation Ratio	0.072
Saturation Clustering	0.999
Hue Concentration	0.881
Complementary Balance	0.042
Analogous Dominance	0.958
Temperature Bias	0.916

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). Bb Minor - Research on Harmony - Variation 7 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0716.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/bb-minor-research-on-harmony-variation-7_7yo.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)

e76e9caddb81974fc8e42e794a5c9af46af023870495ca75f07851b56fd-b917c

Artist	Arnaud Quercy
Date	2024
Collection	Synesthetic Explorations
Certificate	20241201-0212
Asset code	AQC0716
Version	1
Published	2026-03-25

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-03-27

Persistent URI: https://multimodal.institute/en/nanopubs/2026/03/AQC0716-computational-image-analysis-aqc0716.pdf