AQC0650

Nanopublication — Computational Image Analysis - AQC0650

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

Claim 1: Computational Image Analysis - AQC0650

> Computational image analysis [3] of artwork Bb minor - Research [1] on Harmony - Variation 2 (AQC0650) [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]: 1757x2636 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		487074	17.8	blue-green	dimgray
2		376B64	15.9	green	seagreen
3		57447B	14.4	violet	dusty mauve
4		4C2F2F	12.9	red-orange	darkslategray
5		0C0605	9.9	black	black
6		72598D	8.9	violet	dusty mauve
7		604A4B	6.8	red-orange	dimgrey
8		5D8684	6.4	green	blue gray
9		E7D9D9	5.2	red-orange	gainsboro
10		8BA7AB	1.8	blue-green	steel gray
11		0A2933	0.3	blue	very dark gray [Accent]
12		CDB5B8	0.3	red	silver [Accent]
13		C9BAC2	0.3	red-violet	silver [Accent]

Color Families:

Family	%
red-orange	24.9
violet	23.4
green	22.3
blue-green	19.5
black	9.9
blue	0.3
red	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
0A2933	blue	very dark gray	12.2
CDB5B8	red	silver	9.2
C9BAC2	red-violet	silver	7.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.177
Mean Local Roughness	0.026
Roughness Uniformity	0.031
Edge Density	0.109
Mean Gradient Magnitude	0.204
Gradient Variance	0.099
Gradient Smoothness	0.0
Directional Coherence	0.04
Pattern Complexity	0.111
Pattern Repetition	1.0
Detail Frequency Ratio	0.636
Spatial Variation	0.109
Texture Consistency	0.485

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.349
Brightness Variance	0.177
Brightness Uniformity	0.494
Brightness Skewness	0.901
Brightness Entropy	6.823
Rms Contrast	0.177
Michelson Contrast	1.0
Weber Contrast	0.724
Mean Local Contrast	0.028
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.769
Shadow Percentage	39.535
Midtone Percentage	54.656
Highlight Percentage	5.809
Shadow Clipping	0.042
Highlight Clipping	0.004
Tonal Balance	0.0
Fine Contrast	0.014
Medium Contrast	0.036
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.204
Contrast Clustering	0.515

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.768
Color Clustering	0.832
Color Transition Smoothness	0.458
Transition Uniformity	0.361
Sharp Transition Ratio	0.1
Transition Directionality	0.05
Mean Saturation	0.421
Saturation Variance	0.029
Low Saturation Ratio	0.149
Medium Saturation Ratio	0.775
High Saturation Ratio	0.077
Saturation Clustering	0.998
Hue Concentration	0.29
Complementary Balance	0.203
Analogous Dominance	0.452
Temperature Bias	-0.181

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 2 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0650.html

[2] Quercy, A. (2024). Bb minor - Research on Harmony - Variation 2 - Gallery. https://artquamanima.com/en/artworks/2024/01/bb-minor-research-on-harmony-variation-2_790.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

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

63eee2d1f5446b49bd93dd5a725700305bdf6cf85e548d09fd-d2e579f24504d3

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