

# Nanopublication — Computational Image Analysis - AQC0889

by Arnaud Quercy · Bb Minor - Research on Harmony - Variations 9 · 2025

## Claim 1: Computational Image Analysis - AQC0889

Analysis record [3]: Bb Minor [1] - Research on Harmony - Variations 9 (AQC0889) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 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]: 1952x2928 pixels. Analysis date: 2025-12-11.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	67E2D6	17.4	green	mediumturquoise
2	DEC4DF	14.1	red-violet	thistle
3	C79B8C	12.6	orange	rosybrown
4	A278B1	12.3	red-violet	dusty mauve
5	3A99DD	11.5	blue-violet	dodgerblue
6	5E5753	9.0	gray	dimgray
7	896294	8.6	red-violet	dusty mauve
8	BC97C9	7.3	red-violet	plum
9	E9E9E9	5.1	white	white
10	1E1922	1.9	red-violet	very dark gray
11	90A89B	0.3	yellow-green	darkseagreen [Accent]
12	43C5F7	0.3	blue	mediumturquoise [Accent]
13	507F80	0.3	blue-green	blue gray [Accent]
14	7588C8	0.3	violet	dusty mauve [Accent]
15	E6B2A2	0.3	red-orange	burlywood [Accent]

### Color Families:

Family	%
red-violet	44.3
green	17.4
orange	12.6
blue-violet	11.5
gray	9.0
white	5.1
yellow-green	0.3
blue	0.3
blue-green	0.3
violet	0.3
red-orange	0.3

### Accent Colors:

Hex	Family	Name	Chroma
90A89B	yellow-green	darkseagreen	11.7
43C5F7	blue	mediumturquoise	39.8
507F80	blue-green	blue gray	16.2
7588C8	violet	dusty mauve	36.4
E6B2A2	red-orange	burlywood	22.7

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.176
Mean Local Roughness	0.035
Roughness Uniformity	0.036
Edge Density	0.171
Mean Gradient Magnitude	0.273
Gradient Variance	0.131
Gradient Smoothness	0.0
Directional Coherence	0.024
Pattern Complexity	0.122
Pattern Repetition	1.0
Detail Frequency Ratio	0.66
Spatial Variation	0.101
Texture Consistency	0.751

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.622
Brightness Variance	0.176
Brightness Uniformity	0.718
Brightness Skewness	-0.498
Brightness Entropy	7.403
Rms Contrast	0.176
Michelson Contrast	1.0
Weber Contrast	0.531
Mean Local Contrast	0.038
Contrast Uniformity	0.002
Dynamic Range	1.0
Effective Dynamic Range	0.541
Shadow Percentage	4.988
Midtone Percentage	50.144
Highlight Percentage	44.869
Shadow Clipping	0.008
Highlight Clipping	0.005
Tonal Balance	0.118
Fine Contrast	0.02
Medium Contrast	0.046
Coarse Contrast	None

Metric	Value
Multiscale Contrast Ratio	1.0
Edge Contrast	0.273
Contrast Clustering	0.249

#### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.696
Color Clustering	0.578
Color Transition Smoothness	0.318
Transition Uniformity	0.159
Sharp Transition Ratio	0.1
Transition Directionality	0.028
Mean Saturation	0.356
Saturation Variance	0.044
Low Saturation Ratio	0.435
Medium Saturation Ratio	0.467
High Saturation Ratio	0.098
Saturation Clustering	0.998
Hue Concentration	0.384
Complementary Balance	0.026
Analogous Dominance	0.417
Temperature Bias	-0.185

## 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 distribu-

tion 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). Bb Minor - Research on Harmony - Variations 9 — Catalogue raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0889.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2025/11/bb-minor-research-on-harmony-variations-9\\_i6d.html](https://artquamanima.com/en/artworks/2025/11/bb-minor-research-on-harmony-variations-9_i6d.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

#### EPISTEMIC PROFILE

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

#### CHECKSUM (SHA-256)

c1fad-  
d11eaf97b81f08a27149fc1da52fe0759512b03af57781308e7e9cb7054

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2025
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20251123-0081
<b>Asset code</b>	AQC0889
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