

# Nanopublication — Computational Image Analysis - AQC0694

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

## Claim 1: Computational Image Analysis - AQC0694

Analysis record [3]: Bb Major [1] - Research on Harmony - Variation 2 (AQC0694) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 2026-02-03.

### 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]: 2693x3535 pixels. Analysis date: 2026-02-03.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		AE642C 21.9	orange	burnt sienna
2		4A2D37 16.7	red	dusty mauve
3		E1833F 15.3	orange	peru
4		28211E 14.1	gray	very dark gray
5		CF7C14 9.5	orange	chocolate
6		D0AB74 6.8	yellow-orange	ochre
7		673A39 5.7	red-orange	dark brown
8		89504D 4.6	red-orange	burnt sienna
9		B3756C 3.8	red-orange	indianred
10		D5B79A 1.7	orange	tan

### Color Families:

Family	%
orange	48.4
red	16.7
gray	14.1
red-orange	14.1
yellow-orange	6.8

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.182
Mean Local Roughness	0.006
Roughness Uniformity	0.015
Edge Density	0.007
Mean Gradient Magnitude	0.046
Gradient Variance	0.018
Gradient Smoothness	0.0
Directional Coherence	0.249
Pattern Complexity	0.105

### Metric Value

Pattern Repetition	1.0
Detail Frequency Ratio	0.63
Spatial Variation	0.149
Texture Consistency	0.434

### BRIGHTNESS & CONTRAST ANALYSIS

### Metric Value

Mean Brightness	0.412
Brightness Variance	0.182
Brightness Uniformity	0.559
Brightness Skewness	-0.128
Brightness Entropy	6.822
Rms Contrast	0.182
Michelson Contrast	0.992
Weber Contrast	0.755
Mean Local Contrast	0.007
Contrast Uniformity	0.0
Dynamic Range	0.992
Effective Dynamic Range	0.561
Shadow Percentage	36.349
Midtone Percentage	55.787
Highlight Percentage	7.865
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.003
Medium Contrast	0.009
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.046
Contrast Clustering	0.566

### SPATIAL DISTRIBUTION ANALYSIS

### Metric Value

Spatial Coherence	0.789
Color Clustering	0.451
Color Transition Smoothness	0.871
Transition Uniformity	0.882
Sharp Transition Ratio	0.1
Transition Directionality	0.27
Mean Saturation	0.557
Saturation Variance	0.049
Low Saturation Ratio	0.121
Medium Saturation Ratio	0.451
High Saturation Ratio	0.428
Saturation Clustering	1.0

Metric	Value
Hue Concentration	0.938
Complementary Balance	0.0
Analogous Dominance	0.997
Temperature Bias	1.0

## 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 Major - Research on Harmony - Variation 2 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0694.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/bb-major-research-on-harmony-variation-2\\_7q4.html](https://artquamanima.com/en/artworks/2024/01/bb-major-research-on-harmony-variation-2_7q4.html)

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h  
[tps://multimodal.institute/en/publications/2025/10/mmids-cmp-2025-computational-image-analysis-standard-dg1.html](https://multimodal.institute/en/publications/2025/10/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)

397977a4fca31327e35d92098db651a3f698be6603ab0559cb6b7f7bd-ca72095

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20240718-0190
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