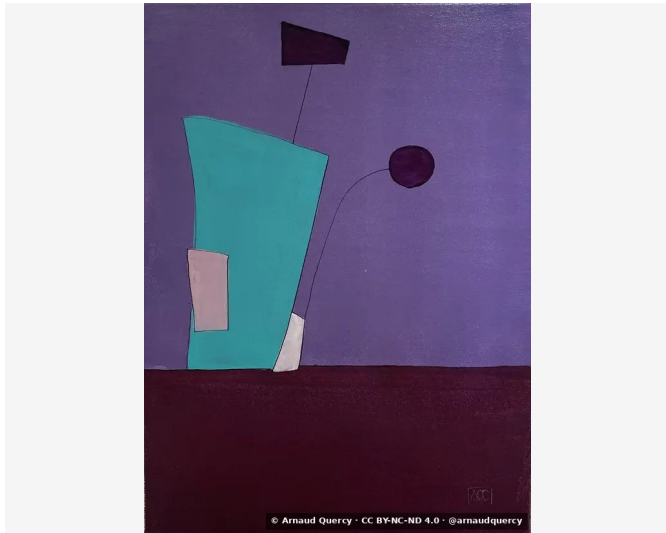


# Nanopublication – Computational Image Analysis – AQC0612

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



## CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0612

K-means clustering analysis [3] (10 colors) performed on artwork Bb minor - Research [1] on Harmony (AQC0612) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

## 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]: 1885x2591 pixels. Analysis date: 2026-02-04.

## COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		66538B	15.8	violet	dusty mauve
2		380E20	15.5	red	very dark red
3		5E4C7C	15.2	violet	dusty mauve
4		53426D	13.4	violet	dusty mauve
5		2D0817	12.5	red	very dark red
6		368E96	11.7	blue-green	steelblue
7		6F5C98	8.6	violet	dusty mauve
8		41172E	5.3	red	very dark red
9		A48B99	1.5	red-violet	rosybrown
10		C1B6BD	0.5	red-violet	silver
11		07142D	0.3	blue-violet	very dark indigo [Accent]
12		062029	0.3	blue	very dark gray [Accent]

## Color Families:

Family	%
violet	52.9
red	33.3
blue-green	11.7
red-violet	2.1
blue-violet	0.3
blue	0.3

## Accent Colors:

Hex	Family	Name	Chroma
07142D	blue-violet	very dark indigo	19.4
062029	blue	very dark gray	11.4

## TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.142
Mean Local Roughness	0.014
Roughness Uniformity	0.017
Edge Density	0.026
Mean Gradient Magnitude	0.096
Gradient Variance	0.024
Gradient Smoothness	0.0
Directional Coherence	0.072
Pattern Complexity	0.132
Pattern Repetition	1.0
Detail Frequency Ratio	0.669
Spatial Variation	0.112
Texture Consistency	0.374

## BRIGHTNESS &amp; CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.289
Brightness Variance	0.142
Brightness Uniformity	0.509
Brightness Skewness	-0.11
Brightness Entropy	6.444
Rms Contrast	0.142
Michelson Contrast	1.0
Weber Contrast	0.8
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.388
Shadow Percentage	50.192
Midtone Percentage	49.263
Highlight Percentage	0.545
Shadow Clipping	0.002
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.008
Medium Contrast	0.018
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.096
Contrast Clustering	0.626

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.749
Color Clustering	0.713
Color Transition Smoothness	0.733
Transition Uniformity	0.824
Sharp Transition Ratio	0.1
Transition Directionality	0.083
Mean Saturation	0.539
Saturation Variance	0.035
Low Saturation Ratio	0.025
Medium Saturation Ratio	0.71
High Saturation Ratio	0.265
Saturation Clustering	0.999
Hue Concentration	0.701
Complementary Balance	0.0
Analogous Dominance	0.854
Temperature Bias	0.209

## 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 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0612.html>

[2] Quercy, A. (2024). Bb minor - Research on Harmony - Gallery. [https://artquamanima.com/en/artworks/2024/01/bb-minor-research-on-harmony\\_6u8.html](https://artquamanima.com/en/artworks/2024/01/bb-minor-research-on-harmony_6u8.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 mapping   Bb minor chord   circle of fifths  
 acrylic on canvas   Synesthetic Explorations  
 geometric color fields   violet palette  
 minimalist composition   harmonic color translation  
 piano etudes   Research on Harmony

## EPISTEMIC PROFILE

**Claim type** computational analysis

**Voice** third person

**Epistemic status** empirical measurement

**Methodology** computational analysis

**Certainty** high

## CHECKSUM (SHA-256)

373f43021d0047c4b19734894cb2362d477ba7ea27c2872a3c7ec48989392aee

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**Artist** Arnaud Quercy

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