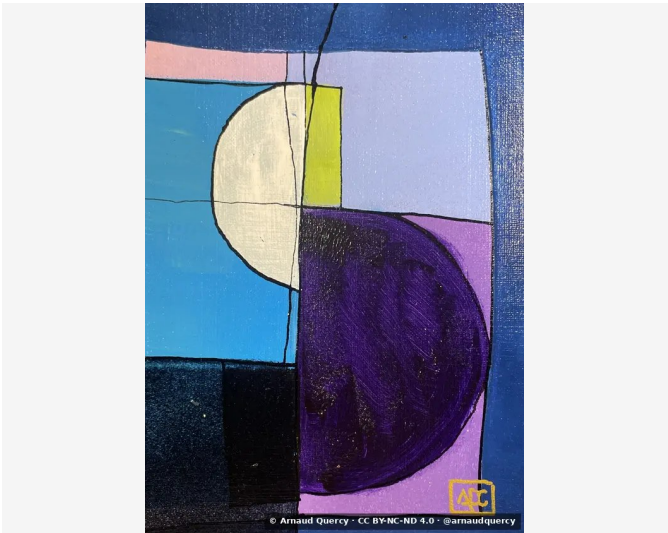


Nanopublication – Computational Image Analysis –
AQC0937

by Arnaud Quercy · Ab Minor – Research on Harmony – Variations 15 · 2025



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0937

Computational image analysis [3] of artwork Ab Minor [1] – Research on Harmony – Variations 15 (AQC0937) [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]: 1988x2783 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		231436	15.6	violet	very dark purple
2		4098CA	14.0	blue	steelblue
3		2E4881	13.8	blue-violet	grayish purple
4		B6BDE3	13.1	blue-violet	lightsteelblue
5		0C0A15	12.1	violet	black
6		E8D6C1	9.4	yellow-orange	wheat
7		382659	9.0	violet	dusty mauve
8		AE7EC3	5.6	red-violet	mediumpurple
9		566495	5.1	violet	dusty mauve
10		C8C444	2.4	yellow	ochre
11		827568	0.3	orange	gray [Accent]
12		E7B0AA	0.3	red-orange	lightpink [Accent]
13		A1A76B	0.3	yellow-green	ochre [Accent]
14		846A76	0.3	red	dusty mauve [Accent]
15		66A8B6	0.3	blue-green	cadetblue [Accent]

Color Families:

Family	%
violet	41.8
blue-violet	26.9
blue	14.0
yellow-orange	9.4
red-violet	5.6
yellow	2.4
orange	0.3
red-orange	0.3
yellow-green	0.3
red	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
827568	orange	gray	9.5
E7B0AA	red-orange	lightpink	22.0
A1A76B	yellow-green	ochre	32.3
846A76	red	dusty mauve	12.4
66A8B6	blue-green	cadetblue	22.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.278
Mean Local Roughness	0.024
Roughness Uniformity	0.03
Edge Density	0.085
Mean Gradient Magnitude	0.192
Gradient Variance	0.098
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.126
Pattern Repetition	1.0
Detail Frequency Ratio	0.635
Spatial Variation	0.192
Texture Consistency	0.701

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.401
Brightness Variance	0.278
Brightness Uniformity	0.307
Brightness Skewness	0.284
Brightness Entropy	7.585
Rms Contrast	0.278
Michelson Contrast	1.0
Weber Contrast	0.914
Mean Local Contrast	0.026
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.816
Shadow Percentage	49.717
Midtone Percentage	25.431
Highlight Percentage	24.851
Shadow Clipping	0.011
Highlight Clipping	0.001
Tonal Balance	0.24
Fine Contrast	0.012
Medium Contrast	0.033
Coarse Contrast	0.05
Multiscale Contrast Ratio	0.245
Edge Contrast	0.192
Contrast Clustering	0.299

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.753
Color Clustering	0.764
Color Transition Smoothness	0.478
Transition Uniformity	0.32
Sharp Transition Ratio	0.1
Transition Directionality	0.013
Mean Saturation	0.508
Saturation Variance	0.059
Low Saturation Ratio	0.29
Medium Saturation Ratio	0.463
High Saturation Ratio	0.247
Saturation Clustering	0.997
Hue Concentration	0.759
Complementary Balance	0.031
Analogous Dominance	0.866
Temperature Bias	-0.495

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 (2025). Ab Minor - Research on Harmony - Variations 15 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0937.html>

[2] Quercy, A. (2025). Ab Minor - Research on Harmony - Variations 15 - Gallery. https://artquamanima.com/en/art-works/2025/12/ab-minor-research-on-harmony-variations-15_1i11.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

Ab minor chord

synesthetic art

acrylic on paper

harmonic translation

piano studies

violet tones

steelblue

compact format

musical visualization

spread voicing

Synesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

6061431844aec94faecfb15ef6e3b3ce9006e6f4cded9eb24474f8e8845b299

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Collection	Synesthetic Explorations
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Asset code	AQC0937
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Version	1
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