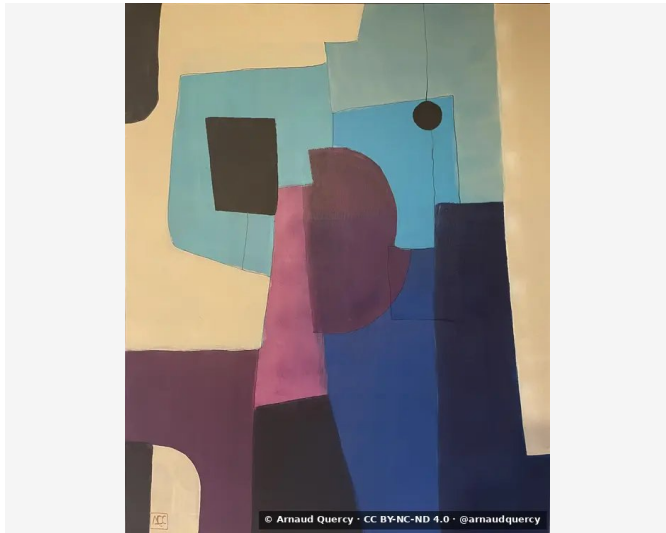


Nanopublication – Computational Image Analysis – AQC0701

by Arnaud Quercy · Db Major – Research on Harmony – Variation 3 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0701

K-means clustering analysis [3] (10 colors) performed on artwork Db Major [1] – Research on Harmony – Variation 3 (AQC0701) [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]: 2840x3550 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DFC293	21.4	yellow-orange	burlywood
2		2C2A3B	17.8	violet	very dark gray
3		674451	14.2	red	dusty mauve
4		85A79F	11.7	green	darkseagreen
5		334779	10.3	blue-violet	grayish purple
6		4B403A	6.7	orange	darkslategray
7		7C8D7F	5.8	yellow-green	gray
8		5A99AE	4.6	blue	cadetblue
9		AE6478	4.3	red	indianred
10		C3A579	3.3	yellow-orange	ochre
11		2E1003	0.3	red-orange	very dark red [Accent]
12		447C89	0.3	blue-green	steelblue [Accent]
13		D8D5C8	0.3	yellow	lightgray [Accent]
14		755979	0.3	red-violet	dusty mauve [Accent]

Color Families:

Family	%
yellow-orange	24.7
red	18.5
violet	17.8
green	11.7
blue-violet	10.3
orange	6.7
yellow-green	5.8
blue	4.6
red-orange	0.3
blue-green	0.3
yellow	0.3
red-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
2E1003	red-orange	very dark red	18.4
447C89	blue-green	steelblue	19.8
D8D5C8	yellow	lightgray	7.1
755979	red-violet	dusty mauve	22.8

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.224
Mean Local Roughness	0.006
Roughness Uniformity	0.013
Edge Density	0.006
Mean Gradient Magnitude	0.042
Gradient Variance	0.017
Gradient Smoothness	0.0
Directional Coherence	0.243
Pattern Complexity	0.102
Pattern Repetition	1.0
Detail Frequency Ratio	0.62
Spatial Variation	0.148
Texture Consistency	0.503

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.459
Brightness Variance	0.224
Brightness Uniformity	0.512
Brightness Skewness	0.201
Brightness Entropy	7.027
Rms Contrast	0.224
Michelson Contrast	1.0
Weber Contrast	0.768
Mean Local Contrast	0.006
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.639
Shadow Percentage	45.747
Midtone Percentage	30.802
Highlight Percentage	23.45
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.003
Medium Contrast	0.008
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.042
Contrast Clustering	0.497

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.755
Color Clustering	0.801
Color Transition Smoothness	0.88
Transition Uniformity	0.885
Sharp Transition Ratio	0.1
Transition Directionality	0.264
Mean Saturation	0.337
Saturation Variance	0.017
Low Saturation Ratio	0.353
Medium Saturation Ratio	0.646
High Saturation Ratio	0.001
Saturation Clustering	1.0
Hue Concentration	0.206
Complementary Balance	0.089
Analogous Dominance	0.573
Temperature Bias	0.239

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). Db Major - Research on Harmony - Variation 3 - Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0701.html>
- [2] Quercy, A. (2024). Db Major - Research on Harmony - Variation 3 - Gallery. https://artquamanima.com/en/art-works/2024/01/db-major-research-on-harmony-variation-3_7su.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 Db Major chord synesthetic art
 piano étude translation acrylic geometric composition
 musical color theory harmonic visualization
 contemporary abstract painting

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

203b3070e37b8daa31bf9e75d1d97eb3d1f7929f6991fc3aeec54f411684594

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