

Nanopublication – Computational Image Analysis – AQC0751

by Arnaud Quercy · D Major – Research on Harmony – Variation 6 · 2024



CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS – AQC0751

The artwork D Major [1] – Research on Harmony – Variation 6 (AQC0751) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

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]: 2998x3998 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		C8A26F	28.2	yellow-orange	ochre
2		D3B288	24.5	yellow-orange	tan
3		B78933	10.6	yellow-orange	peru
4		CD7A10	9.0	orange	chocolate
5		364143	7.0	blue-green	darkslategray
6		23262A	5.8	gray	very dark gray
7		A3A399	5.7	yellow-green	steel gray
8		70432F	4.7	orange	russet
9		748182	2.4	blue-green	gray
10		478454	2.1	yellow-green	seagreen
11		230802	0.3	red-orange	very dark gray [Accent]
12		A6BEC8	0.3	blue	lightsteelblue [Accent]
13		131304	0.3	yellow	black [Accent]

Color Families:

Family	%
yellow-orange	63.2
orange	13.7
blue-green	9.4
yellow-green	7.8
gray	5.8
red-orange	0.3
blue	0.3
yellow	0.3

Accent Colors:

Hex	Family	Name	Chroma
230802	red-orange	very dark gray	13.0
A6BEC8	blue	lightsteelblue	10.0
131304	yellow	black	7.3

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.176
Mean Local Roughness	0.013
Roughness Uniformity	0.011
Edge Density	0.045
Mean Gradient Magnitude	0.129
Gradient Variance	0.022
Gradient Smoothness	0.0
Directional Coherence	0.011
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.595
Spatial Variation	0.137
Texture Consistency	0.48

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.566
Brightness Variance	0.176
Brightness Uniformity	0.69
Brightness Skewness	-1.16
Brightness Entropy	6.955
Rms Contrast	0.176
Michelson Contrast	1.0
Weber Contrast	0.652
Mean Local Contrast	0.016
Contrast Uniformity	0.195
Dynamic Range	1.0
Effective Dynamic Range	0.561
Shadow Percentage	16.342
Midtone Percentage	45.596
Highlight Percentage	38.063
Shadow Clipping	0.004
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.02
Coarse Contrast	0.034
Multiscale Contrast Ratio	0.192
Edge Contrast	0.129
Contrast Clustering	0.52

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.785
Color Clustering	0.502
Color Transition Smoothness	0.674
Transition Uniformity	0.851
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.451
Saturation Variance	0.05
Low Saturation Ratio	0.228
Medium Saturation Ratio	0.607
High Saturation Ratio	0.166
Saturation Clustering	1.0
Hue Concentration	0.773
Complementary Balance	0.093
Analogous Dominance	0.871
Temperature Bias	0.749

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). D Major - Research on Harmony - Variation 6 - Catalog raisonn  . <https://arnaudquercy.art/en/catalogue-raisonne/AQC0751.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/d-major-research-on-harmony-variation-6_8ca.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

D Major triad

synesthetic art

sound-color translation

harmonic visualization

geometric abstraction

acrylic painting

Synesthetic Explorations

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

67d13b826e0383a7f47d1f78fbf86db7e05283f3a7822d9dac52acf168246291

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