

# Nanopublication – Computational Image Analysis – AQC0483

by Arnaud Quercy · The heart of the traveller · 2023



## CLAIM 1: COMPUTATIONAL IMAGE ANALYSIS - AQC0483

Analysis record [3]: The [1] heart of the traveller (AQC0483) [2] by Arnaud Quercy [2]. Method: k-means. Parameters: 10 colors. Metrics: color distribution, texture, brightness, spatial patterns. Completed: 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]: 1366x2048 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

| Rank | Color | Hex    | %    | Family        | Name                  |
|------|-------|--------|------|---------------|-----------------------|
| 1    |       | CFC5C2 | 24.0 | white         | silver                |
| 2    |       | BAAFAF | 17.8 | gray          | steel gray            |
| 3    |       | E2DAD9 | 15.6 | white         | gainsboro             |
| 4    |       | 9B969D | 9.4  | gray          | steel gray            |
| 5    |       | 691E1B | 7.4  | red-orange    | maroon                |
| 6    |       | 525047 | 6.4  | yellow        | darkslategray         |
| 7    |       | 302F30 | 5.9  | gray          | darkslategrey         |
| 8    |       | 74747A | 5.4  | gray          | dusty mauve           |
| 9    |       | 8F201F | 4.4  | red-orange    | brown                 |
| 10   |       | A67D58 | 3.6  | orange        | peru                  |
| 11   |       | B8842E | 0.3  | yellow-orange | peru [Accent]         |
| 12   |       | BFD6EF | 0.3  | blue-violet   | powderblue [Accent]   |
| 13   |       | A35F76 | 0.3  | red           | dusty mauve [Accent]  |
| 14   |       | EOF4FC | 0.3  | blue          | white [Accent]        |
| 15   |       | 98A86F | 0.3  | yellow-green  | darkseagreen [Accent] |

### Color Families:

| Family        | %    |
|---------------|------|
| white         | 39.6 |
| gray          | 38.6 |
| red-orange    | 11.8 |
| yellow        | 6.4  |
| orange        | 3.6  |
| yellow-orange | 0.3  |
| blue-violet   | 0.3  |
| red           | 0.3  |
| blue          | 0.3  |
| yellow-green  | 0.3  |

### Accent Colors:

| Hex    | Family        | Name         | Chroma |
|--------|---------------|--------------|--------|
| B8842E | yellow-orange | peru         | 53.4   |
| BFD6EF | blue-violet   | powderblue   | 15.1   |
| A35F76 | red           | dusty mauve  | 31.0   |
| EOF4FC | blue          | white        | 7.8    |
| 98A86F | yellow-green  | darkseagreen | 31.8   |

TEXTURE ANALYSIS

| Metric                  | Value |
|-------------------------|-------|
| Global Roughness        | 0.239 |
| Mean Local Roughness    | 0.051 |
| Roughness Uniformity    | 0.036 |
| Edge Density            | 0.276 |
| Mean Gradient Magnitude | 0.351 |
| Gradient Variance       | 0.119 |
| Gradient Smoothness     | 0.02  |
| Directional Coherence   | 0.004 |
| Pattern Complexity      | 0.11  |
| Pattern Repetition      | 1.0   |
| Detail Frequency Ratio  | 0.669 |
| Spatial Variation       | 0.13  |
| Texture Consistency     | 0.756 |

BRIGHTNESS & CONTRAST ANALYSIS

| Metric                    | Value  |
|---------------------------|--------|
| Mean Brightness           | 0.607  |
| Brightness Variance       | 0.239  |
| Brightness Uniformity     | 0.607  |
| Brightness Skewness       | -0.648 |
| Brightness Entropy        | 7.484  |
| Rms Contrast              | 0.239  |
| Michelson Contrast        | 1.0    |
| Weber Contrast            | 0.743  |
| Mean Local Contrast       | 0.049  |
| Contrast Uniformity       | 0.342  |
| Dynamic Range             | 1.0    |
| Effective Dynamic Range   | 0.694  |
| Shadow Percentage         | 21.822 |
| Midtone Percentage        | 22.933 |
| Highlight Percentage      | 55.246 |
| Shadow Clipping           | 0.004  |
| Highlight Clipping        | 0.028  |
| Tonal Balance             | 0.15   |
| Fine Contrast             | 0.029  |
| Medium Contrast           | 0.06   |
| Coarse Contrast           | 0.069  |
| Multiscale Contrast Ratio | 0.424  |
| Edge Contrast             | 0.351  |
| Contrast Clustering       | 0.244  |

SPATIAL DISTRIBUTION ANALYSIS

| Metric                      | Value |
|-----------------------------|-------|
| Spatial Coherence           | 0.683 |
| Color Clustering            | 0.879 |
| Color Transition Smoothness | 0.131 |
| Transition Uniformity       | 0.249 |
| Sharp Transition Ratio      | 0.1   |
| Transition Directionality   | 0.004 |
| Mean Saturation             | 0.216 |
| Saturation Variance         | 0.054 |
| Low Saturation Ratio        | 0.789 |
| Medium Saturation Ratio     | 0.118 |
| High Saturation Ratio       | 0.093 |
| Saturation Clustering       | 0.999 |
| Hue Concentration           | 0.507 |
| Complementary Balance       | 0.148 |
| Analogous Dominance         | 0.689 |
| Temperature Bias            | 0.515 |

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 (2023). The heart of the traveller – Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0483.html>

[2] Quercy, A. (2025). Untitled – Gallery. [https://artquamanima.com/en/artworks/2023/01/the-heart-of-the-traveller\\_5g2.html](https://artquamanima.com/en/artworks/2023/01/the-heart-of-the-traveller_5g2.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>

EPISTEMIC PROFILE

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

CHECKSUM (SHA-256)

f495ebe2f886b223e7e0cb204d76231eccf98b80861f38ac0fb5893d2fa3b933

Licensed under Creative Commons Attribution 4.0 International (CC BY 4.0)

|             |                      |
|-------------|----------------------|
| Artist      | Arnaud Quercy        |
| Date        | 2023                 |
| Collection  | Mediterranean Echoes |
| Certificate | 20231231-0070        |
| Asset code  | AQC0483              |
| Identifier  | NAN-COL000441        |
| Version     | 1                    |
| Published   | 2026-02-03           |

ISSN: applied for – U.S. ISSN Center, Library of Congress

© 2026 Ideamorphic Studies

Published by Art Quam Anima Publishing New York,  
an assumed name of AQA Publishing LLC

c/o Northwest Registered Agent, 418 Broadway Ste N  
Albany, NY 12207, USA  
+1 917-764-5470

NY DOS ID 7624376 · Assumed Name ID 7658709

[publishing.artquamanima.com](https://publishing.artquamanima.com)

Last updated: 2026-08-18

Persistent URI: <https://ideamorphism.org/en/nanopubs/2025/10/AQC0483-computational-image-analysis-aqc0483.pdf>