

July 2000

Cover and front matter

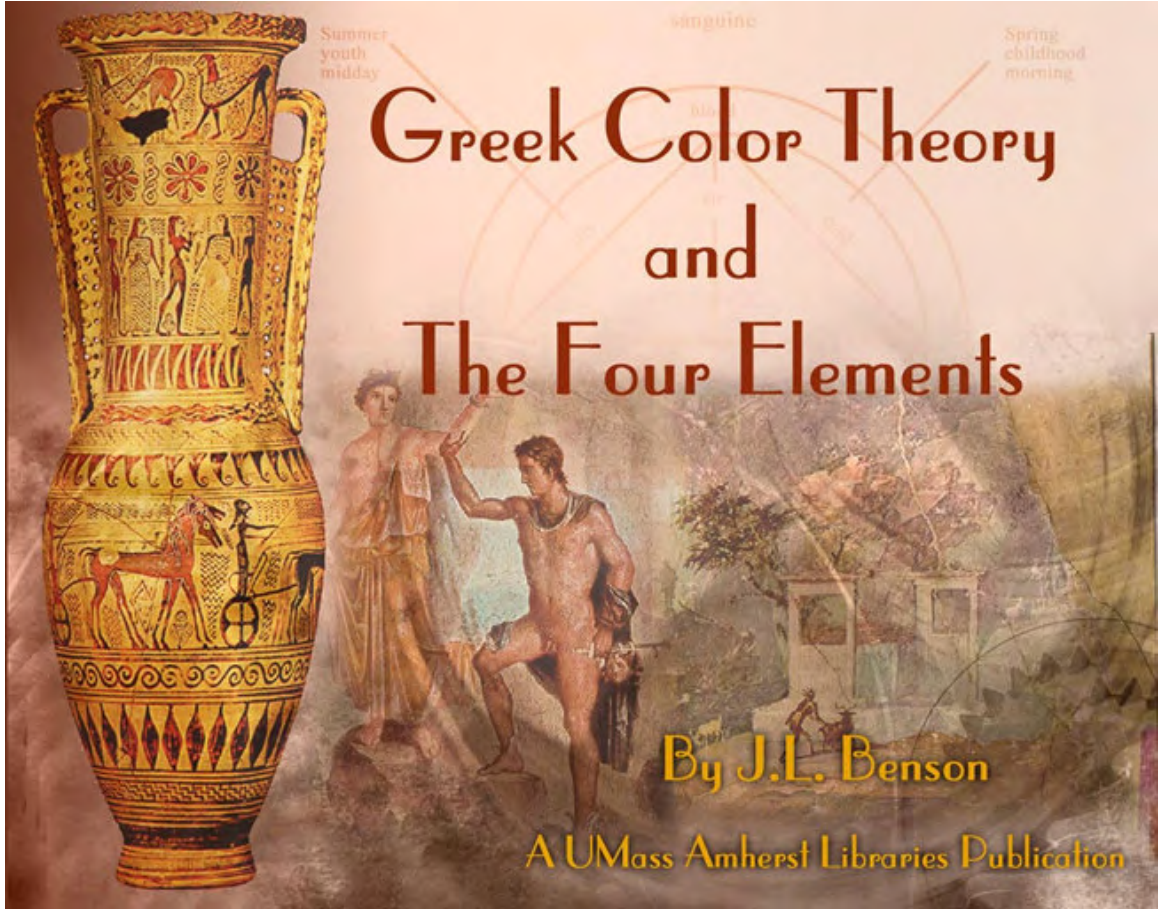
J.L. Benson

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/art_jbgc

Benson, J.L., "Cover and front matter" (2000). *Greek Color Theory and the Four Elements*. 2.
Retrieved from https://scholarworks.umass.edu/art_jbgc/2

This Article is brought to you for free and open access by the Art at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Greek Color Theory and the Four Elements by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.



Cover design by Jeff Belizaire

ABOUT THIS BOOK

Why does earlier Greek painting (Archaic/Classical) seem so clear and—deceptively—simple while the latest painting (Hellenistic/Graeco-Roman) is so much more complex but also familiar to us? Is there a single, coherent explanation that will cover this remarkable range? What can we recover from ancient documents and practices that can objectively be called “Greek color theory”?

Present day historians of ancient art consistently conceive of color in terms of triads: red, yellow, blue or, less often, red, green, blue. This habitude derives ultimately from the color wheel invented by J.W. Goethe some two centuries ago. So familiar and useful is his system that it is only natural to judge the color orientation of the Greeks on its basis. To do so, however, assumes, consciously or not, that the color understanding of our age is the definitive paradigm for that subject.

But could it be that the Greek understanding of color, if we can recover it in rational terms, has itself a paradigmatic quality offering unformulated but real reaches of meaning? And if so could we expand our consciousness of the nature of color and its evolving manifestations in history?

Greek philosophers thought in terms not of three, but of four, basic colors: black, red, yellow and white: yet little or no attention has been paid to this conception as a system of thought. Almost ironically, it is again Goethe's experiments in color, made in quite conscious opposition to Newtonian principles, which not only led him to color triads, but which also reveal that the Greek system of four colors is theoretically balanced by a second group of four colors: white, blue, violet and black. The earlier Greek painters were thoroughly absorbed in the first “tesserad” of colors, while later painters increasingly experimented with the second group.

Professor Benson has for the first time formulated in scientific terms a comprehensive explanation of four-color painting as well as of the larger issue of a Greek color theory implied in the cosmological vision of Empedokles. The theory itself is anchored in the essentially Greek concepts of polarity and complementation, which of themselves foster definite parameters of meaning for each color. This allows a completely new interpretation of Greek painting.

Copyright 2000, J. L. Benson. *With appropriate attribution, permission is granted for the scholarly use, distribution and reproduction of this work in full, excepting those illustrations and figures for which the author does not hold the copyright. (See Credits in the text for image copyright owners.)* A complete listing of all of the Figures used in the text is available for easy viewing from:

<http://www.library.umass.edu/benson/jbgcimages.html>

**GREEK COLOR THEORY
AND THE FOUR ELEMENTS**

A Cosmological Interpretation

J. L. Benson

Amherst, Massachusetts: University of Massachusetts Amherst Libraries, 2000

HYMN TO THE FOUR ELEMENTS

Sirenen

Welch feuriges Wunder verklärt uns die Wellen,
Die gegeneinander sich funkelnd zerschellen?
So leuchtet's und schwanket und hellet hinan:
Die Körper, sie glühen auf nächtlicher Bahn,
Und ringsum ist alles vom Feuer umronnen;
So herrsche denn Eros, der alles begonnen!

Heil dem Meer! Heil den Wogen!
Von dem heiligen Feuer umzogen!
Heil dem Wasser! Heil dem Feuer!
Heil dem seltnen Abenteuer!

All-Alle

Heil den mildgewognen Lüften!
Heil geheimnisreichen Grüften!
Hoch gefeiert seid allhier,
Element' ihr alle vier!

Sirens

The waves are transfigured with fire-laden wonder,
They glitter in impact, in flame leap asunder
Here's shining and swaying, and spurting of light,
With forms all aglow in the track of the night,
And lapping of fire touches all things around:
Let Eros who wrought it be honoured and crowned!

Hail to the Ocean! Hail to the wave!
The flood with holy fire to lave!
Waters hail! All hail the fire!
The strange event hail we in choir!

All voices in concert

Hail light airs now floating free!
Hail earth's caves of mystery!
Held in honour evermore
Be the elemental four!

— JOHANN WOLFGANG VON GOETHE

Faust II, Act 2, "Klassische Walpurgisnacht"

Translated by Philip Wayne

TABLE OF CONTENTS

- Preface
- List of figures
- List of schematic illustrations
- Credits
- Introduction
- Chapter I: How May We Understand Four Elements Philosophy Today? The Idea of Macrocosmos (World) and Microcosmos (Human Being)
 - The Concept of a Fourfold World
 - The Four Elements
 - The Four Members
- Chapter II: Greek Color Theory
 - Prologue: What is Greek Color Theory? An Attempt to Systematize the Dynamics of a Four Elements/Four Colors Theory
 - The Problem
 - The Ancient Sources (Testimonia)
 - Basic Considerations
 - The Four Elements and the Four Colors in their Macrocosmic and Microcosmic Relationship
 - Paradigms and Explanations
- Chapter III: Aspects of Ancient and Modern Understanding of Color
 - The Evolutionary Aspect of Colors
 - Color Usage and Microcosmic Periodicity
 - Clarification of Color Relationship
 - The Emergence of Redfigure Style
 - The Other Colors
 - The Two Spectra of Goethe's Color Theory
 - An Attempt at a Holistic Interpretation of Color Meaning
 - Expanding the Basic Four Color Paradigm
 - Concentrating on Black and White
 - Preliminary Remarks on the Meaning of White in the Classical Period
 - Hellenistic Painting in the Light of the Cycles
- Chapter IV: Greek Artists and their Colors (apart from ceramics)
 - General Considerations
 - Panel Painting and Wall Painting: Mainland Greece
 - The (Late) Archaic Period
 - The Classical Period (with the Use of White and Yellow by Polygnotos and Some Aspects of the Use of Blue)
 - The Protohellenistic and Early Hellenistic Period (with The Art Historical Setting, The Coloristic Complexity of the Lefkadia

Facade, The Still Conservative Cast of Beginning Protohellenistic,
The Fluid Boundary between Late Classical and Proto-hellenistic)

- Summary
- Panel Painting and Wall Painting: Italy
 - Introductory Observations on Hellenistic and Graeco-Roman Painting
 - Color Analyses of Selected Graeco-Roman Paintings (of Second and Third Style)
 - Conclusions
- Chapter V: Observations on the Coloration of Sculpture
 - Introduction
 - Archaic and Protoclassical Periods
 - Classical Period (and Protohellenistic)
 - Hellenistic Period
- Appendix A: Observations on the Technique of Paintings and Mosaics
- Appendix B: Color Technicalities: An Introduction to Goethe's Theory of Color for Non-Specialists
- Appendix C: The Four Elements and the Origin of Fixed Colors
- Bibliography
- Notes

LIST OF FIGURES

Abbreviations follow Select Bibliography.

HALF-TONES

- Fig. 1** Alabaster vessel Iraq Museum, Baghdad from Warka Third quarter of fourth millennium B.C. H.o.92.

COLOR REPRODUCTIONS

- Fig. 2** Sample of Mediterranean marbles Antikenmuseum Berlin. After H. Mielsch, *Buntmarmore aus Rom im Antikenmuseum Berlin* (1985) pl. 15.
- Fig. 3** As fig. 85 (pl. 11)
- Fig. 4** Attic Protogeometric amphora British Museum London. 11th century B.C.
- Fig. 5** Attic Geometric amphora Kerameikos Museum inv. 2146 Athens. 9th century B.C.
- Fig. 6** Attic Geometric amphora NM inv. 804 Athens: detail of frieze. 8th century B.C.
- Fig. 7** Middle Protocorinthian IB kotyle British Museum 60.4–4.18: crouching hound by the Hound Painter. 2nd quarter 7th century B.C.
- Fig. 8** Protoattic amphora (loutrophoros) Louvre inv. CA 2985 Paris: procession, etc by the Analatos Painter. First quarter 7th century B.C.
- Fig. 9** Attic neck-amphora British Museum inv. B210: Achilles killing Penthesilea, attributed to Exekias. 3rd quarter 6th century B.C.
- Fig. 10** Attic blackfigure amphora Vatican Museum: Achilles and Ajax by Exekias. Ca. 530 B.C.
- Fig. 11** Opposite side of fig. 93 with Return of the Dioskouroi.
- Fig. 12** Attic bilingual amphora Staatliche Antikensammlung, Munich: symposia, attributed to the Andokides Painter Ca. 525 B.C.
- Fig. 13** Attic redfigure shoulder amphora Antikenmuseum Berlin: satyr and Hermes; attributed to the Berlin Painter. 500–490 B.C.
- Fig. 14** Attic blackfigure krater on white ground Badisches Landesmuseum Karlsruhe: Odysseus and ram. Late 6th century B.C.
- Fig. 15** Attic white ground cup Staatliche Antikensammlungen inv. 2645 Munich: maenad; attributed to the Brygos Painter. 500–490 B.C.
- Fig. 16** Attic white ground lekythos NM inv. 1818 Athens: deceased and living; attributed to the Achilles Painter. 3rd quarter 5th century B.C.
- Fig. 17** Roman mosaic NM Naples: Battle of Issos. 1st century B.C.

- Fig. 18** Terracotta pediment plaque NM Syracuse: Gorgo holding offspring. Late 7th century B.C.
- Fig. 19** Wooden panel NM Athens from Pitsa: scene of sacrifice. 3rd quarter 6th century B.C. H. EAA V, opp. p. 202.
- Fig. 19 bis** Domenico Veneziano Panel Uffizi Gallery, Florence “Madonna and Child with Saints”, ca. 1445
- Fig. 20** Attic white ground lekythos NM Athens: figure and stele, assigned to R Group. Ca. 430 B.C.
- Fig. 21** Hellenistic tomb painting at Kazanlak.
- Fig. 22** Hellenistic tomb painting at Kazanlak.
- Fig. 23** Limestone tomb facade Lefkadia, Greece Painted architectural forms. Ca. 300–275 B.C. H.8.15.
- Fig. 24** Detail of fig. 23: Hermes.
- Fig. 25** Limestone tomb facade Vergina, Greece Painted architectural forms of “Philip’s Tomb”. Ca. 340–330 B.C. H.5.3. See M. Andronicos 1989, fig. 57.
- Fig. 26** Interior tomb wall Vergina, Greece Portion of “Tomb of Persephone” showing Demeter. H.2.50. Ca. 350–340 B.C. Andronicos 1989, fig. 46.
- Fig. 27** Interior tomb wall. Detail from “Tomb of Persephone”: head of Hades. Andronicos 1989, fig. 51.
- Fig. 28** Detail of fig. 23: bust of Rhadamanthys.
- Fig. 29** Roman fresco NM Naples from Pompeii: Perseus liberating Andromeda. 1st century B.C./1st A.D.
- Fig. 30** Roman fresco NM Naples from Pompeii: Theseus triumphant. 1st century B.C./1st A.D.
- Fig. 31** Roman fresco Vatican Museum Vatican City: Odyssey Landscape I. Second style, 1st century B.C.
- Fig. 32** Roman fresco Vatican Museum Vatican City: Aldobrandini Wedding. 1st century B.C./1st A.D.
- Fig. 33** Oil on canvas Galleria Doria Pamphili: Aldobrandini Wedding by N. Poussin 17th century A.D. H.2.42 G. Torselli, La Galleria Doria Pamphili (Rome 1969) fig. 385.
- Fig. 34** Roman mosaic NM Naples from Pompeii: stage scene. 1st century B.C.
- Fig. 35** Mosaic Terme Museum Rome inv. 171. Nilotic scene from Via di Porta Lavernate, Rome. Ca. 250 A.D. H. (field) 1.85
- Fig. 36** Roman fresco NM Naples from Pompeii: Rocky sanctuary. 1st century. A.D.
- Fig. 37** Terracotta figurine NM Athens inv. 1986.271 Pella: lady in heavy garments. Hellenistic period. See *The Search for Alexander* (1981) New York Graphic Society, number 148, pl. 22-D.
- Fig. 38** Goethe’s Dark Spectrum Photo Hetzel

- Fig. 39** Goethe's Dark Spectrum Photo Hetzel
Fig. 40 Goethe's Light Spectrum Photo Hetzel
Fig. 41 Goethe's Light Spectrum Photo Hetzel
Fig. 42 Diagram clarifying rule of atmospheric colors in light/dark conditions Photo Hetzel.
Fig. 43 View illustrating principle: red results from dark before light Photo Hetzel.
Fig. 44 View illustrating principle: blue results from light before dark Photo Hetzel.
Fig. 45 Diagram illustrating additive colors Photo Hetzel
Fig. 46 Diagram illustrating subtractive colors Photo Hetzel.
Fig. 47 Preliminary form of Goethe's color wheel Photo Hetzel.
Fig. 48 Diagrammatic articulation of Goethe's color wheel Photo Hetzel.

LIST OF SCHEMATIC ILLUSTRATIONS

- Ill. 1** Directionality of water
Ill. 2 Directionality of air
Ill. 3 Combination of water-air directionality
Ill. 4 Density of the directions
Ill. 5 The four elements in form of a rectangle
Ill. 6 Indications of density added to rectangle of Ill. 5
Ill. 7 Sense qualities of the four elements
Ill. 8 Five elements in the form of a circle
Ill. 9 Kandinsky's axes
Ill.10 Sense qualities and elements in circular scheme
Ill.11 Sevenfold organization of man and heaven
Ill.12 Macrocosmic processes
Ill.13 Microcosmic processes
Ill.14 Comparison of macrocosmic and Hippokratean microcosmic processes
Ill.15 Hippokratean processes after Schlepperges
Ill.15 bis Black and white as bridge colors
Ill.16 Qualities associable with the Dark and Light spectrums
Ill.17 Expanded version of the basic, four color paradigm
Ill.18 Color relationships in the Classical period

CREDITS

- Hirmer Fotoarchiv, Munich: 1, 8–10, 17, 20, 34
- Staatliche Museen zu Berlin: 2–3, 13
- British Museum, London: 4, 7, 37
- Saskia Cultural Enterprises, Freeport (Maine): 6, 19 bis
- Deutsches Archaeologisches Institut, Athens: 5
- Smeets Lithographers, Weert (Holland): 11
- Staatliche Antikensammlungen und Glyptothek, Munich: 12a-b, 15
- Badisches Landesmuseum, Karlsruhe: 14
- National Archaeological Museum, Athens: 19 copyright Greek Office of State Policy (Department of Revenues for Electronic Works)
- Museo Regionale Archeologico “Paolo Orsi.” Siracus: 18 (su concessione dell’ Assessorato Regionale Beni Culturali e Attivita della Regione Sicilia)
- Author’s sketches: 16, 21, 25, 37
- Prof. Vincent Bruno, Brooklyn: 22, 28
- Dr. Photias Petsas, Athens: 23–24
- The Archeological Society at Athens: 26–27
- Soprintendenza Archeologico delle Provincie di Napoli e Caserta: 29–30, 36
- Biblioteca Apostolica Vaticana: 31
- Éditions d’Art Albert Skira, Geneva: 32
- Galleria Doria Pamphili, Rome (www.doriapamphili.it): 33
- Museo Nazionale Terme, Rome: 35
- Hans-Georg Hetzler, Basel: 38–48

Besides individuals mentioned in the above list, I wish to acknowledge the generous cooperation of the following in establishing my illustrations:

Dr. Gertrud Platz (Berlin); Dr. Dyfri Williams (London); Dr. Friedrich Hamsdorf (Munich); Dr. Jutta Stroszeck (Athens); Prof. Dr. Klaus Fittschen (Athens); Dr. Michael Maas (Karlsruhe); Dr. Vincent Brinkmann (Munich); Dott. Giuseppe Voza (Siracusa); Stephano de Caro (Naples); Don Raffaele Farina sdb (Vatican); Prof. Ronald Wiedenhoef (Littleton, Colorado).