

Contents

Chapter 1	Jackson Pollock's Drip Paintings: Tracing the Introduction of Alkyds Through Non-invasive Analysis of Mid-1940s Paintings	1
	<i>Francesca Rosi, Costanza Miliani, John Delaney, Kathryn Dooley, Lena Stringari, Grazina Subelyte and Luciano Pensabene Buemi</i>	
1.1	Introduction	1
1.2	Jackson Pollock's Search for New Methods of Expression	2
1.3	The Evolution of Jackson Pollock's Methods Reflected in the Works of the Peggy Guggenheim Collection, Venice	4
1.4	Dripping as a Revolutionary Material Choice	4
1.5	Non-invasive Identification of Alkyd Resins	5
1.6	Discussion	12
1.7	Conclusions and Perspectives	15
	References	16
Chapter 2	Piero Manzoni, <i>Achromes</i>: An Initial Investigation into the Chemical and Technical Characterization of the Artist's Materials[†]	19
	<i>Rosalia Pasqualino di Marineo, Luca Bochicchio and Luisa Mensi</i>	
2.1	<i>Achrome</i> : What Lies Underneath	19
2.2	<i>Achrome</i> : White Is Not a Colour	29
2.3	Conclusion	36

Acknowledgements	37
References	37
Chapter 3 1949–1968 <i>Concetti spaziali</i> by Lucio Fontana: A Historical-artistic and Technical Study	39
<i>Barbara Ferriani, Luca Massimo Barbero and Francesca Caterina Izzo</i>	
3.1 Introduction	39
3.2 Lucio Fontana Upon his Return From Argentina at the End of the 1940s	40
3.3 The <i>Concetto Spaziale</i> Cycle	41
3.3.1 The <i>Buchi</i> (Holes), <i>Pietre</i> (Stones), and <i>Barocchi</i> Series	41
3.3.2 The <i>Tagli</i> (Cuts) Series	43
3.3.3 The <i>Teatrini</i> (Little Theatres) Series	44
3.3.4 The <i>Olii</i> (Oils) Series	44
3.3.5 The <i>Venezie</i> Sub-series	46
3.4 A Technical Study on Selected <i>Concetti Spaziali</i> From the <i>Olii</i> Series	47
3.4.1 <i>Concetto Spaziale</i> (60 O 81)	48
3.4.2 The Pink Oil: <i>Concetto Spaziale</i> (62 O 66), <i>Concetto Spaziale</i> (1737/92), <i>Concetto Spaziale</i> , <i>La Fine di Dio</i> (63 FD 14)	51
3.4.3 <i>Concetto Spaziale</i> , <i>La Fine Di Dio</i> (63 FD 23), <i>Concetto Spaziale</i> , <i>La Fine Di Dio</i> (64 FD 5)	57
3.5 Conclusion	63
3.6 Details of the Experimental Method	64
Acknowledgements	64
References	65
Chapter 4 Josef Albers' Use of 20th Century Pigments: A Non-invasive Analytical Approach	67
<i>Gianluca Poldi, Chiara Anselmi, Alessia Daveri and Manuela Vagnini</i>	
4.1 Introduction and Aims	67
4.2 On Albers' Technique	70
4.3 The Performed Analyses	73
4.4 Results	73
4.4.1 IR Imaging: Underdrawing and Other Technical Aspects	73
4.4.2 Spectroscopic Analyses: Pigments and Organic Compounds	81
4.5 Conclusion	91

<i>Contents</i>	xi
Appendix: Materials & Methods	91
Acknowledgements	92
References	92
Chapter 5 From Identification to a New Insight of Preservation Theory for Contemporary Art: Innovative Approaches to Complex Care in Alina Szapocznikow Case Studies	95
<i>Iwona Szmelter and Joanna Kurkowska</i>	
5.1 Introduction	95
5.2 The Specifics of Alina Szapocznikow's Visual Art Legacy	97
5.3 Identification of Materials/Analytical Methods	98
5.4 Alina Szapocznikow—If Plastic is Fantastic!? Condition Reports: Searching for Ideas Before the Conservation/Restoration of Szapocznikow's Works	100
5.5 Case Studies: Searching for a Strategy for Decision-making in Preservation	101
5.6 Innovative Conservation/Preservation Issues	108
5.6.1 The Problems of Presentation and Re-installation	108
5.6.2 Ephemeral Art and Simulacra	109
5.6.3 Replacement of a Destroyed Ready-made Element	109
5.6.4 How to Preserve the Utilitarian Function of Objects	110
5.6.5 Arrangement and Exhibiting	110
5.6.6 Towards a New Philosophy of Preservation: Ethical Considerations	111
5.6.7 Final Thoughts towards a New Philosophy on the Care of Contemporary Art	111
5.7 Extending Preservation Theory for Modern and Contemporary Art	112
5.8 Final Thoughts: Conclusion	114
References	115
Chapter 6 The Colors of Lina Bo Bardi: Analytical Investigations of Lina's Felt-tip Pens	117
<i>Antonio Mirabile, Giulia Germinario, Inez D. van der Werf, Luigia Sabbatini, Brenda Doherty and Patrizia Moretti</i>	
6.1 Introduction	117
6.2 Lina Bo Bardi	119
6.3 Felt-tip Pens	120
6.4 Scientific Analyses	121

6.5	Dyes	124
6.5.1	Xanthenes	124
6.5.2	Indigoids	125
6.5.3	Triarylmethanes	126
6.5.4	Azo and Azine Dyes	128
6.6	Binders and Additives	130
6.7	Aging Behaviour	131
6.8	Conclusions	132
	Appendix	133
	X-ray Fluorescence	133
	Micro-Raman Spectroscopy	133
	Reflection Infrared Spectroscopy	134
	Aging	134
	Spectrophotometry	135
	Pyrolysis–Gas Chromatography–Mass Spectrometry	135
	Gas Chromatography–Mass Spectrometry	135
	References	136
Chapter 7	“Art is Not Science”: A Study of Materials and Techniques in Five of Enrico Baj’s <i>Nuclear</i> Paintings	139
	<i>Luca Boichichio, Patrizia Moretti, Annalisa Chieli, Aldo Romani, Chiara Ruberto, Lisa Castelli, Brunetto Giovanni Brunetti, Antonio Sgamellotti and Laura Cartechini</i>	
7.1	Introduction: Art is Not Science (in Enrico Baj’s Philosophy)	139
7.2	Inside and Beyond the Nuclear Epistemology of Enrico Baj: Non-invasive Investigations Applied to the Study of Five Paintings From the Archivio Baj Collection (1951–1956)	142
7.2.1	<i>Quamisado II</i>	149
7.2.2	<i>Bambino Magico</i> (Magic Child)	150
7.2.3	<i>Personaggio</i> (Character)	152
7.2.4	<i>Due bambini nella notte nucleare</i> (Two Children in the Nuclear Night)	156
7.2.5	<i>Spettacolo</i> (Spectacle)	159
7.3	Analytical Approach and Methodology	161
7.4	Conclusions	164
	Appendix I: Experimental Methods	164
	Point X-ray Fluorescence Spectroscopy (pXRF)	164
	MA-XRF	164
	Reflection FT-IR	164
	Raman	165

<i>Contents</i>		xiii
	UV-Vis-NIR Reflectance and Emission	165
	Vis-NIR Reflectance and Fluorescence Hyperspectral Imaging	165
	Acknowledgements	166
	References	166
Chapter 8	On Video Art Preservation: A Conversation with Fabrizio Plessi	169
	<i>Cosetta Saba and Lisa Parolo</i>	
	8.1 Introduction	169
	8.2 The Interview	170
	8.3 Final Remarks	186
	References	189
Chapter 9	Arte Concreto Invención: Towards Industrialized Surface Aesthetics	191
	<i>Fernando Marte, Pino Monkes, Florencia Castellá and Marcos Tascon</i>	
	9.1 Introduction	191
	9.1.1 Arte Concreto: Influences and Contributions	194
	9.1.2 Polygonality: The First Approach	196
	9.1.3 Towards Another Aesthetic of the Surface	199
	9.2 Material Characterization	200
	9.2.1 Organic Components: Binding, Additives and Markers	201
	9.2.2 Inorganic Compounds: Pigments and Fillers	204
	9.3 Conclusion	205
	Acknowledgements	206
	References	206
Chapter 10	Judith Lauand: Art and Technology of a Brazilian Concrete Painter	208
	<i>Luiz Antonio Cruz Souza, Alessandra Rosado, Yacy-Ara Froner Gonçalves, Rita Lages Rodrigues, Humberto Farias de Carvalho, Maria Alice Sanna Castelo Branco, Giulia Giovani and Vítor Paixão Amaral</i>	
	10.1 Introduction	208
	10.2 Methodology	211
	10.3 The Contribution of Women Artists in the Brazilian Concrete Art	212
	10.3.1 Materials and Techniques	214
	10.3.2 Aesthetics and State of Conservation	221

10.4	Final Considerations	222
	Acknowledgements	223
	References	223
Chapter 11	A New Substance Under the Sun: How Synthetic Polymers Were Selected and Transformed Into Works of Art by Ângelo de Sousa, Julião Sarmento and Lourdes Castro	225
	<i>Maria Joao Melo, Joana Lia Ferreira, Sara Babo, Ana Isabel Pereira, Maria Elvira Callapez, María Jesús Àvila and Julião Sarmento</i>	
11.1	Introduction	225
11.2	The Artists	227
11.3	The Polymers	228
11.4	Ângelo de Sousa on Colour: Exploring Space and Shape With Vinyl Emulsion and Acrylic Sheet	229
11.4.1	PVAc Like an Enamel	229
11.4.2	PMMA in Motion	233
11.5	PMMA “Shadows” by Lourdes Castro: “I Made the Shadows Come Out of the Shadow, I Gave Them Colours, an Independent Life”	235
11.5.1	Why Was PMMA Selected?	236
11.5.2	What Is Depicted by These Shadows?	238
11.5.3	The Making of the PMMA “Shadows”	238
11.5.4	How the Work Should be Displayed in an Exhibition	239
11.6	Julião Sarmento's Making of the <i>Frozen Leopard</i> (1991): “Everything Is a Pigment”	239
11.6.1	Fundamentals of an Artist at Work	240
11.6.2	Reproducing the White Background for the <i>Frozen Leopard</i>	244
11.6.3	Reproducing the Drawing of the <i>Frozen Leopard</i>	245
11.7	Final Thoughts	246
	Acknowledgements	247
	References	247
Chapter 12	Miquel Barceló: The Rotten and the Waste as a Fundamental Part of the Process	249
	<i>Irene Biolchini</i>	
12.1	An Introduction to Barceló's Practice and to his Aesthetic of the Waste	249
12.2	Case Studies	256
12.2.1	Painting on Cardboard	256
12.2.2	Painting on Canvas	262

	12.2.3 Technique and Construction in Barceló's Largest Projects and Sculpture	266
	References	268
Chapter 13	Explosive Beauty: The Art of Cai Guo-Qiang	269
	<i>Rachel Rivenc, Michael Doutre, Vincent Dion and Tom Learner</i>	
	13.1 Introduction: From Paint to Gunpowder	269
	13.2 Materials and Process	272
	13.2.1 Gunpowder and Fireworks	272
	13.2.2 Daytime Fireworks	274
	13.2.3 Painting Process	275
	13.3 Findings From Analyses and Interviews	276
	13.3.1 Black Gunpowder Works	276
	13.3.2 Colored Paintings	280
	13.4 Aging Studies	283
	13.4.1 Microfadeometry	283
	13.4.2 Artificial Weathering	284
	13.4.3 Results	284
	13.5 Conclusion	287
	Appendix 1. Experimental Details	288
	References	290
Chapter 14	There Are: Fabre's Visual Art	292
	<i>Giacinto di Pietrantonio</i>	
	Acknowledgements	313
	References	313
Chapter 15	Hockney, Hume and Chandra: Surface, Change and Conservation	316
	<i>Bronwyn Ormsby, Rachel Scott, Helen Brett, Judith Lee and Rebecca Hellen</i>	
	15.1 Introduction	316
	15.2 Acrylic Paints and Varnishes: David Hockney	317
	15.2.1 Man in Shower in Beverley Hills, 1964 (Tate, T03074)	318
	15.2.2 <i>Mr and Mrs Clark and Percy</i> , 1970–71 (Tate, T01269)	322
	15.3 Oil-modified Alkyd Paints: Gary Hume	324
	15.3.1 <i>Water Painting</i> , 1999 (Tate, T07618)	325
	15.4 Modern Oil Paints: Avinash Chandra	330
	15.4.1 Avinash Chandra, <i>Hills of Gold</i> , 1965 (Tate, T00724)	330

	15.5 Conclusions	335
	Acknowledgements	335
	References	335
Chapter 16	The Deep Meaning of Poetry: Eduardo Kac's Art of the Fundamental Processes	338
	<i>Pier Luigi Capucci</i>	
	16.1 Networks, Interactive Arts, Telepresence, Robotics	338
	16.2 The Art of the Living	340
	16.3 Genesis	344
	16.4 Looking into the Future	346
	16.5 Interview with Eduardo Kac	347
	References	354
Chapter 17	When Surgery Meets Conservation: The Treatment of the Multi-material Sculpture <i>Love Me</i> by Sarah Lucas	356
	<i>Fabiola Rocco, Tommaso Poli, Oscar Chiantore and Antonio Mirabile</i>	
	17.1 Introduction	356
	17.2 Love Me	358
	17.2.1 Description of the Artwork and Artistic Meaning	358
	17.2.2 Executive Technique: the Artist's Interview	359
	17.3 Materials and Characterization	361
	17.4 Conservation Concept	362
	17.5 Experimentation	364
	17.5.1 Reinforcing Agents	364
	17.5.2 Mock-up Preparation	364
	17.5.3 Application of Cellulose	365
	17.5.4 Testing Method	365
	17.6 Results and Discussion	365
	17.6.1 Realization and Tuning of the Traction System	365
	17.6.2 Evaluation of the Traction System	366
	17.6.3 Mechanical Properties of the Reinforced Newspaper Samples	367
	17.7 Treatment	369
	17.8 Conclusion	371
	Acknowledgements	372
	References	372

<i>Contents</i>	xvii
Chapter 18	
Diagrams, Technology and New Materials: The Scientific Nature of Loris Cecchini's Artworks	374
<i>Mattia Patti, Luca Bindi, Loris Cecchini and Biancalucia Maglione</i>	
18.1 Introduction	374
18.2 Dialogue	376
References	388
Chapter 19	
Spectral Revisions: A Colourful Expert Conversation	390
<i>Tim Otto Roth and Konrad Scheurmann</i>	
19.1 Introduction	390
19.2 The Interview	392
References	403
Chapter 20	
Painting with Acrylics: José Gutiérrez, Gunther Gerzso and the Material Innovation in Mexican Contemporary Painting	404
<i>Sandra Zetina, José Luis Ruvalcaba-Sil, Rebeca Barquera, Nitziné Ocampo-Ávila, Alejandro Mitrani, Miguel Maynez, Eumelia Hernández, Edgar Casanova, Adrián Mejía-González and Nuria Esturau</i>	
20.1 Early Use of Industrial Paint in Mexico and Development of a Mexican Brand of Artists' Acrylic Paint	405
20.1.1 Siqueiros and the Agency of Industrial Technology and Collectivism in Modern Art	405
20.1.2 José López Gutiérrez: the Artist's Technical Advisor	407
20.1.3 Painting With Acrylics and Politec®, the First Mexican Acrylic Artists' Paint	409
20.1.4 The Mexican Art Scene During the 1950s and 1960s: Gunther Gerzso and the Rupture	410
20.2 Material Study of Gunther Gerzso Paintings	411
20.2.1 General Analytical Procedure	412
20.2.2 Analytical Techniques	414
20.2.3 Paisaje de Papantla, 1955	415
20.2.4 Muro Azul (Chiapas), 1977	421
20.3 Discussion and Conclusions	427
Acknowledgements	428
References	428

Chapter 21	Industrial Design Objects in the Museum Environment	431
	<i>L. Toniolo and A. Nevin</i>	
21.1	Italian Industrial Design	431
21.2	Italian Design Icons From the 1960s	432
21.3	A General Overview of the Deterioration of Plastic	434
21.4	Case Studies: The Deterioration of ABS and PVAc in Design Icons of the 1960s	437
21.4.1	Mechanistic Investigations of the Photo-oxidation of ABS	437
21.4.2	An Iconic Object in ABS: The Grillo Folding Telephone (1965, Zanuso and Sapper)	440
21.4.3	The Case of Cocoon® Resin: Plasticized Polyvinyl-acetate (PVAc) in the Fantasma Lamp (1959, Castiglioni Brothers)	442
21.5	Conclusions	448
	References	448
Chapter 22	From Context to Content: On the Preservation of Net-based Art	452
	<i>Domenico Quaranta</i>	
22.1	Form Art	452
22.2	Net-based Art and the Loss of Context	456
22.3	Preserving Net-based Art: Saving the Context	463
22.4	Preserving Net-based Art: Saving the Artwork	467
22.5	<i>Rhizome®</i> , Webrecorder and the <i>Net Art Anthology</i>	472
	References	475
Chapter 23	Painted Surfaces in Contemporary Architecture	477
	<i>Mosè Ricci, Alessandra Battisti, Aldo Aymonino, Pio Baldi, Franco Summa and Kay Bea Jones</i>	
23.1	Framework	477
23.2	Concepts	480
23.3	Performative	480
23.3.1	Innovative Colors for Climate Mitigation in Contemporary Architecture	482
23.3.2	Ephemeral, Changeable, Unstable	485
23.3.3	The Color Masterplan of Historical Architecture	486

<i>Contents</i>	xix
23.4 Social	487
23.4.1 Color as a Social Tool for Understanding the Different Dimensions of Architecture and Urban Sites	489
23.5 Narrative	491
23.5.1 Prodromes of Neo-Fauvism	495
23.5.2 Some Italian Tales	496
References	498
Subject Index	500