

Contents

Part I Data Collection and Technology	
Terrestrial Laser Scanning in the Age of Sensing	3
Nicola Lercari	
Airborne Laserscanning in Archaeology: Maturing Methods and Democratizing Applications	35
Rachel Opitz	
Part II Image and Digital Processing	
Terrestrial Lidar and GPR Investigations into the Third Line of Battle at Guilford Courthouse National Military Park, Guilford County, North Carolina	53
Stacy Curry, Roy Stine, Linda Stine, Jerry Nave, Richard Burt and Jacob Turner	
Applying UAS Photogrammetry to Analyze Spatial Patterns of Indigenous Settlement Sites in the Northern Dominican Republic . . .	71
Till F. Sonnemann, Eduardo Herrera Malatesta and Corinne L. Hofman	
Part III Landscape Representation and Scales	
Towards a Holistic Archaeological Survey Approach for Ancient Cityscapes	91
Frank Vermeulen	
Sensing Ruralscapes. Third-Wave Archaeological Survey in the Mediterranean Area.	113
Stefano Campana	
What Do the Patterns Mean? Archaeological Distributions and Bias in Survey Data.	147
David C. Cowley	

3D Tool Evaluation and Workflow for an Ecological Approach to Visualizing Ancient Socio-environmental Landscapes	171
Heather Richards-Rissetto, Shona Sanford-Long and Jack Kirby-Miller	
Visualizing Medieval Iberia's Contested Space Through Multiple Scales of Visibility Analysis	199
Edward Triplett	
Pre- and Proto-Historic Anthropogenic Landscape Modifications in Siem Reap Province (Cambodia) as Seen Through Satellite Imagery	229
Kasper Hanus and Emilia Smagur	
The Ambivalence of Maps: A Historical Perspective on Sensing and Representing Space in Mesoamerica	247
John K. Millhauser and Christopher T. Morehart	
Part IV Simulation, Visualization and Computing	
Cyber Archaeology: 3D Sensing and Digital Embodiment	271
Maurizio Forte	
Emergent Relationality System/The Insight Engine	291
Bill Seaman	
Using 3D GIS Platforms to Analyse and Interpret the Past	305
Nicoló Dell'Unto	
Archaeology in the Age of Supercomputing	323
Devin A. White	
Part V Interpretation and Discussion	
Measuring the Face of the Past and Facing the Measurement	349
William Fred Limp	
An Integrated Archaeological Prospection and Excavation Approach at a Middle Neolithic Circular Ditch Enclosure in Austria	371
Jakob Kainz	
Creating a Chronological Model for Historical Roads and Paths Extracted from Airborne Laser Scanning Data	405
Willem F. Vletter and Sandra R. Schloen	

**Part VI Cultural Resource Management: Communication
and Society**

**From Remote to Embodied Sensing: New Perspectives
for Virtual Museums and Archaeological Landscape
Communication** 437
Eva Pietroni

Cultural Heritage and Digital Technologies 475
Riccardo Olivito, Emanuele Taccola and Niccolò Albertini

Index 495

Digital Methods and Remote Sensing in Archaeology

Archaeology in the Age of Sensing

Forte, M.; Campana, S.R.L. (Eds.)

2016, XIX, 496 p. 223 illus., 175 illus. in color.,

Hardcover

ISBN: 978-3-319-40656-5