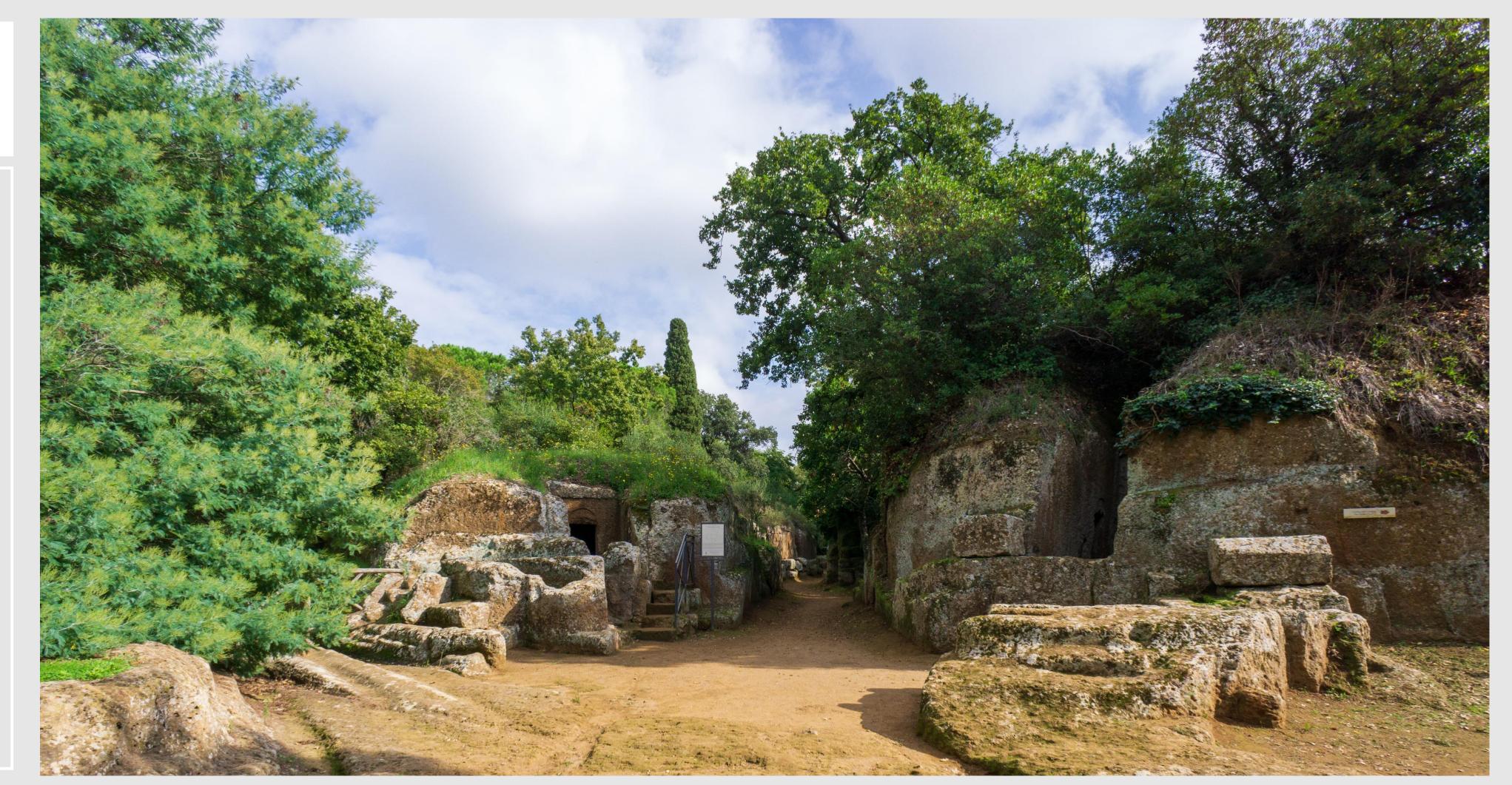**FACULTY OF ARTS AND PHILOSOPHY**

MEDITERRANEAN ARCHAEOLOGY

Nathen Fair

DEFROSTING "FROZEN MUSIC" AT ETRUSCAN CAERE AND ROMANO-FALISCAN FALERII USING EXTENDED REALITY

INTRODUCTION

Extended Reality or XR is the catch-all term for the diverse range of technologies, which includes Virtual Reality and Augmented Reality, that allow for human-machine interactions with real and virtual environments. XR in the last decade has seen increasing use in the presentation of archaeological sites and finds in museum exhibits, on-site experiences, as well as purely online ones. However, only more recently has the interest and the technology reached the point where the possibility of its use in analysis and interpretation been considered more seriously. Building on these developments this project seeks to rigorously develop a theoretical framework for the use of XR in analysis, and to explore the application of this framework to the analysis of the political architecture and spaces of Caere and Falerii Novi. Restoring a centrality of sense-experience into our act of knowledge production, and exploring the impact that centrality has on our understanding and processes is the driving purpose of the project.

Why now?

Technological developments: XR is by no means the only technology which has seen increasing developments in the last decade. Remote-sensing technologies and techniques especially in their application to ancient towns have also seen transformative developments. Producing a new range of data which can be used in the production of XR.

Theoretical lacuna: To date the field has focused on 'authenticity' and 'accuracy' in visual depictions of historical sites and landscapes, but has often not significantly interrogated what this means and how it may obscure insights in our production of knowledge.

Limited use of XR in non-Roman Italy: Most significant uses of XR in ancient Italy have focused on Roman sites such as Rome, Pompeii or Ostia, which has left a significant gap in the documentation and analysis of cultures such as the Etruscans.

Value

This research will deliver a theoretically founded, repeatable framework for developing highly experiential XR models of ancient urban landscapes for analytical use. It will also provide two worked examples: Caere and Falerii. Caere was a vibrant Etruscan city, not only the second-largest but also the site of numerous firsts in Etruscan iconography and art, and it was a fundamentally connected city afforded a treasury at Delphi and concluding trade across the Mediterranean. The city's importance has nevertheless seen most research focus on its, duly worthy, necropolis rather than the urban spaces. This research will fill this gap. Falerii, while not of the same order as Caere, similarly has seen its own urban landscape understudied in comparison to Roman settlements. Despite the sites unique situation as a relatively undisturbed location well suited to new remote-sensing technologies and techniques. Understanding and accessing Etruscan and Faliscan socio-political attitudes and ideas has been hampered historically by a dearth of written evidence from the cultures themselves. Archaeological evidence then is essential to accessing and understanding these sites and cultures.

Process

It is necessary to begin with an interrogation of the very masks and lenses by which we judge the process of graphical representation broadly in the field. In particular what is meant by accuracy and in an interdisciplinary approach consider just what phenomenological impacts sense-experience will have on knowledge production within the scope of our studies of ancient towns.

This framework then can be applied to the production of the XR models of Caere and Falerii during both their development and then their use. Using the rigorous framework to develop better understandings of the cultures at work in each urban landscape.
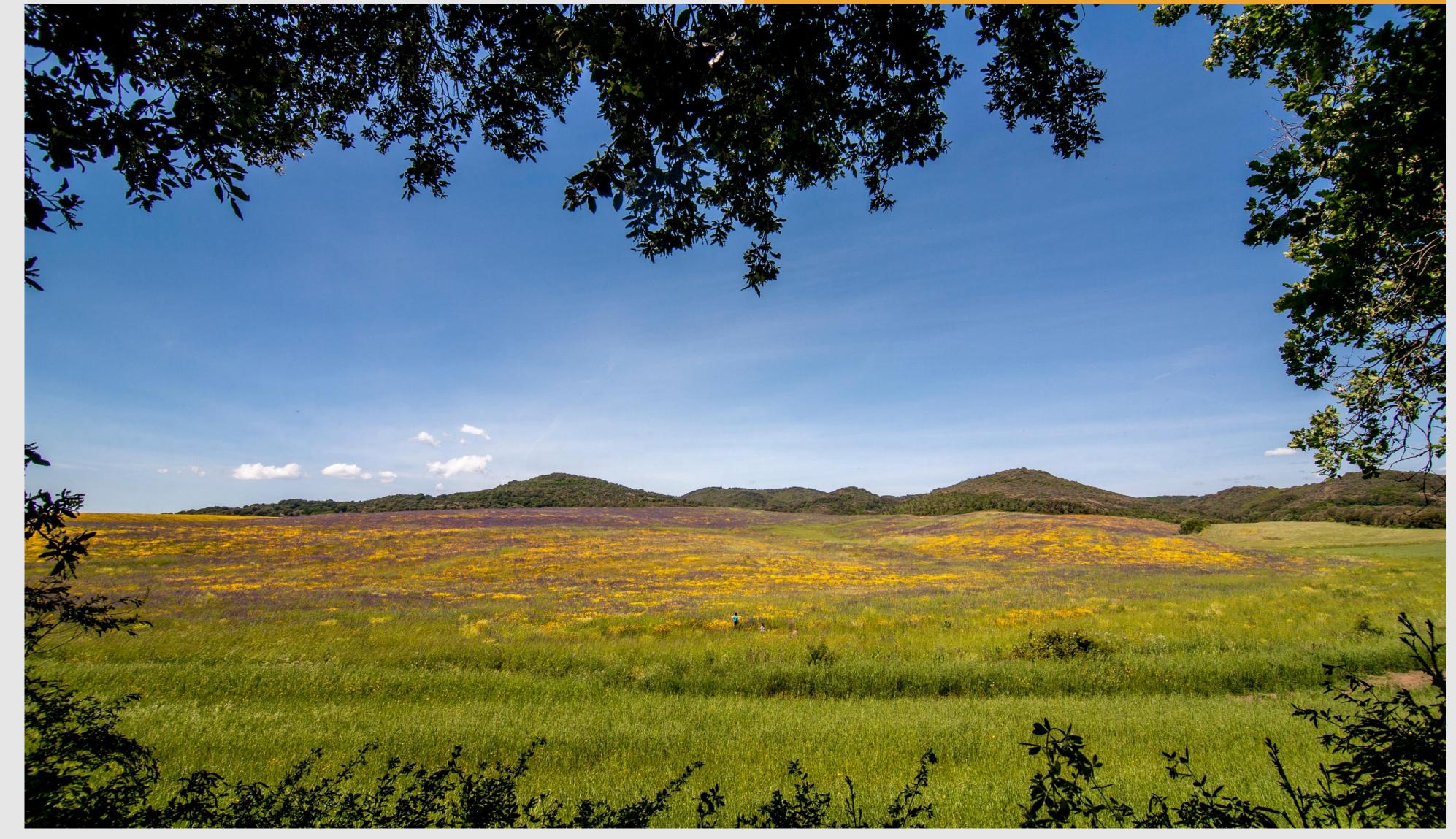
Outcomes

The relevance of sense-experience in knowledge production, and just how much of sense-experience XR can impart, as well as how do we maintain academic rigour in the use of this approach are key questions which this project drives towards.

New technology cannot be adopted wholesale without question, however, similarly we cannot consign new technology to merely one aspect of use because we imagine it less "rigorous" or less "accurate". Instead we have to interrogate just what are meant by these masks we apply to our production of knowledge.

We never know for certain what will let the music play again.

Acknowledgements

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