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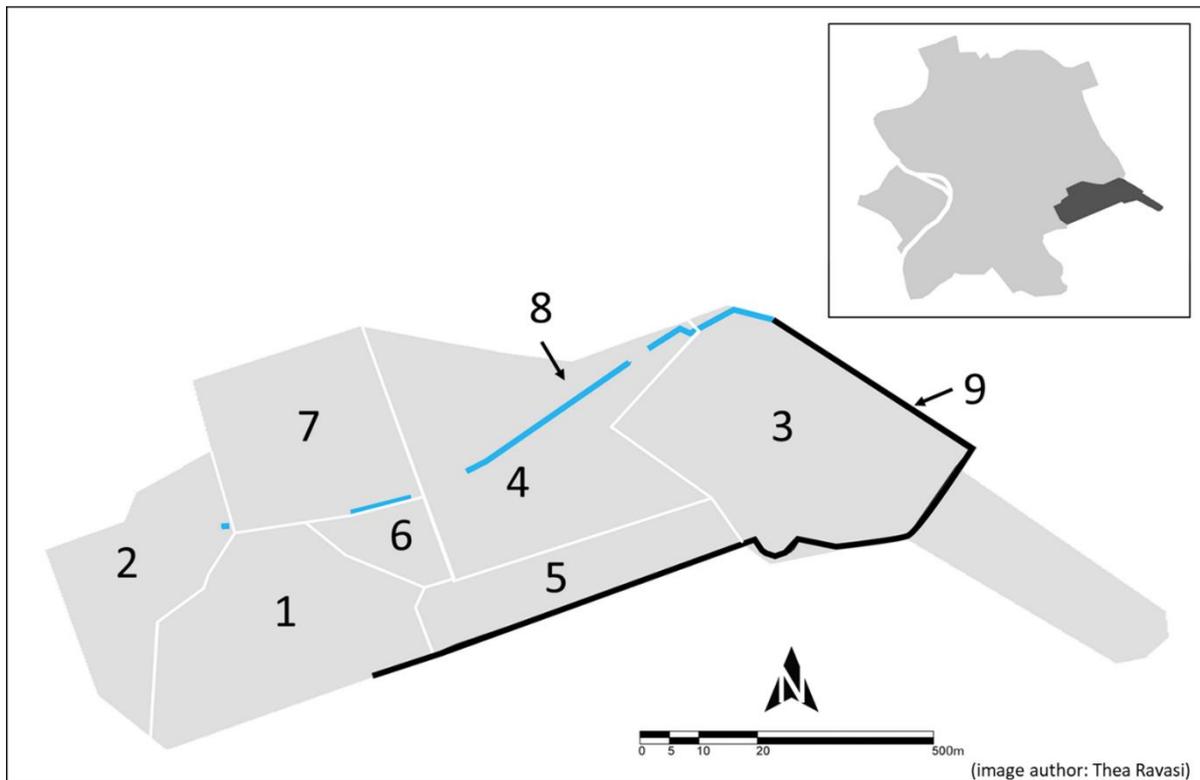
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## **ROME TRANSFORMED: RESEARCHING THE EASTERN CAELIAN C1-C8 CE (ROME)**

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'Rome Transformed: Interdisciplinary analysis of political, military, and religious regenerations of the city's forgotten quarter C1-C8 CE' launched on 1 October 2019. The project is funded as an Advanced Grant by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement no. 835271). Hosted by Newcastle University, the award brings together researchers from that university with colleagues from the British School at Rome, the Consiglio Nazionale delle Ricerche and the University of Florence.

Rome Transformed (ROMETRANS) aims to develop understanding of Rome and its place in cultural change across the Mediterranean world by mapping political, military/security, and religious changes to the eastern Caelian from the first to eighth centuries. The programme brings together archaeologists, architects, earth systems engineers, geographers, historians, hydrologists, and environmental scientists to analyse both the mundane and monumental elements of the city's fabric in chronological, geographical, and ideological relationship to one another. From the late Republican/early imperial period *horti* through successive imperial palaces to the seat of papal governance, the area's architecture embodied changing expressions of political power. From the early military stations, through the grandeur of the barracks of the emperor's horse guards, to the building and rebuilding of the Aurelian Walls and the control of water systems, it reveals notions about the intersection of security and military power. From the shrines of the early empire to the world's first cathedral, the Lateran Basilica and through the development of the Basilica of S. Croce at the site of the Sessorian Palace, it attests successive religious regenerations. The research area and constituent study zones are shown here.



Zones within the ROMETRANS Research Area. 1.1. Laterano, 1.2. Ospedale di San Giovanni, 1.3. Santa Croce, 1.4. Villa Wolkonsky, 1.5. Giardini Carlo Felice, 1.6. Scala Santa, 1.7. Via Merulana, 1.8. The Claudio-Neronian Aqueduct, 1.9. The Aurelian Walls. Inset: the location of the research area within Rome (Thea Ravasi).

ROMETRANS has three objectives: first, it investigates the appearance of the buildings that drove these changes, producing academically robust visualisations, appropriately contextualised. Second, it brings these elements together to model the transformations that saw the eastern Caelian reshaped to meet the needs of shifting political, military, and religious ideas. Third, it offers a longer-term interdisciplinary perspective on the changing shape of this pivotal area than any previously attempted. The complexity of the underpinning survey requires the development of a new methodological approach to integrating documentary sources, architectural analysis of both standing buildings and eleven sub-surface excavated areas, laser scanning and photogrammetry, geo-radar (GPR), electrical resistance tomography (ERT), and borehole survey.

To ensure that the project methodology is sufficiently robust, project members participated in two major residential workshops facilitated by Thea Ravasi, the first in December 2019 in Newcastle focussing on harmonisation of systems, operating procedures and the data management plan, and the second in January 2020 at the British School at Rome, bringing together colleagues engaged in research across the eastern Caelian. The tremendous success of this event owes everything to the generous

participation of colleagues from the Soprintendenza Speciale Archeologia Belle Arti e Paesaggio di Roma, Comune di Roma – Soprintendenza Capitolina ai Beni Culturali, and Musei Vaticani. This second workshop was followed directly by a programme of fieldwork delivering structural analysis, scanning and ground penetrating radar survey at the Villa Wolkonsky (Fig. 1.4).

The support of the British Embassy in Rome and the British Ambassador to Italy and San Marino Jill Morris CMG enabled the team to work in the grounds of the Villa, the ambassador's residence, to study the tomb of Tiberius Claudius Vitalis and a section of the Neronian aqueduct - a branch of the Aqua Claudia, that runs through the property. The holistic approach taken to the standing archaeology in the area is designed to contribute to several strands of further analysis, including, but not restricted to, work on the wider water supply network and its longevity, movement, and connectivity in the ancient suburbs/city, and at a very fundamental level, a reappraisal of successive shifts in the ground surface in antiquity. A provisional reading of GPR prospection (GSSI 200 MHz antenna) data from the survey indicates relatively limited development along the course of the aqueduct at this point.

A methodological challenge for the project team lies in the characterisation of buried ground surfaces dating from the first to eighth centuries. The integrated study of archival evidence (ranging from early modern maps through antiquarian reports to the results of recent excavations), together with excavated structures (such as the Tomb of Claudius Vitalis) and GPR is fundamental to the approach, but wherever possible these approaches will be augmented by Electrical Resistance Tomography (ERT) and borehole survey. The need for data integration, met in the project through 3D GIS, close collaboration with ArcheoSITAR and ROMETRANS' distinct use of visualisation/provocation modelling, is fundamental to the programme.

With this pattern of integration firmly in mind, the team's second fieldwork phase took place in March. Geophysical survey work consisted of an ERT survey in the Giardini Carlo Felice (Fig. 1.5) and a further survey, with both GSSI GPR 400 and 70 MHz antenna immediately east of the Basilica of St John Lateran (Fig. 1.1). This work, interrupted by the COVID-19 lockdown, forms part of a similar suite of approaches and accordingly is integrated into our programme of standing building survey and environmental/geographical analysis, but there are also questions specific to the topography of each zones. The Giardini Carlo Felice occupy an important space enclosed within the circuit of the Aurelian Walls and lying between the Lateran Basilica and the Basilica of S. Croce. Extensive documentary sources show that this area was open from the high Middle Ages onwards, but what did it look like before then? From the Severan period onwards, both the Lateran area and the S. Croce area saw substantial, richly attested, development. What implications did this have for the area between these two points, and how did the area evolve subsequently? We are most fortunate here to benefit from

discussions with colleagues whose work on the remarkable Metro C excavations immediately to the south have made such a contribution to our understanding of the region in recent years. The area immediately east of the Lateran Basilica is of intense interest to the project for the same reasons as the Carlo Felice area, but here a range of evidence also points to the presence of major elements of the Lateran Patriarchium including perhaps the Triclinium of Leo III. Accordingly, we believe that a return to and expansion of earlier work we undertook as part of the Lateran Project in 2012 (Haynes, Liverani, Piro and Spinola 2013) is of considerable importance.

Running concurrently with the geophysical survey in March was a programme of structural analysis at three key ROMETRANS locations. The first element sought to bring to completion work begun in January at the Villa Wolkonsky, and following an extremely valuable exchange with Duncan Keenan-Jones (Queensland) and Davide Motta (Northumbria), we were able to develop the ROMETRANS structural recording system to allow for high-resolution documentation of the aqueduct system here and elsewhere within the project. The second element focussed on the archaeology of the Via Statilia just outside the grounds of the Villa Wolkonsky. Here, the team reappraised both the late Republican/Early imperial tombs, but also the section of subterranean aqueduct identifiable here. The reappraisal of the tombs challenges existing interpretations of the published sequence of development in the area. And finally, the last element saw a major effort expended on the analysis and recording of the stretch of aqueduct from the Via Statilia to the Porta Maggiore. Work on the scanning of the tombs and on the structural analysis of this last stretch of aqueduct were interrupted when the introduction of the COVID-19 lockdown was announced.

As with so many projects therefore, this report must acknowledge that fieldwork in 2020 was seriously disrupted by factors unpredictable at the beginning of the year. Yet despite this and the difficult circumstances that have followed, team members have continued to analyse the data that was recovered and to meet at least weekly through video conferencing, to maintain an integrated approach to the different forms of data and the complexities of the research area. And in all this they have been still further aided by the rich bodies of material, gathered from either hard copy archives prior to COVID or from digital archives thereafter. Francesca Carboni working with Emanuela D'Ignazio and with Carlo Rosa has progressed and geo-located an extensive body of material relating to a range of sources from legacy data, bore hole records and historical documentation, while Margherita Azzari has accessed a substantial body of important historical maps.

## References

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