INTRODUCTION

1. The project

The National Research Council of Italy (CNR), under the aegis of the International Relations Office, has started in the last years a productive collaboration with the Ministry of Science and the Ministry of Culture of Montenegro on the broad topic of the Montenegrin cultural heritage.

The first specific scientific agreement between CNR and the Ministry of Science of Montenegro was signed in 2014, and since then a series of bilateral activities have started. In Cultural Heritage studies, in particular, two bilateral projects have been conducted with the Historical Institute of Montenegro-University of Montenegro (HIM-UoM). Two CNR Institutes were involved: the Institute for Technologies Applied to Cultural Heritage (CNR-ITABC) – that signed a Memorandum of Understanding with the Ministry of Culture of Montenegro in 2016 – and the Institute for Ancient Mediterranean Studies (CNR-ISMA) – that started a Joint Archaeological Laboratory with HIM-UoM in 2017 (Alberti, Sfameni 2015, 2017; Alberti, Koprivica 2017). Both of these CNR Institutes were recently merged in the newly created CNR Institute for Cultural Heritage Sciences (Istituto di Scienze del Patrimonio Culturale, CNR-ISPC).

The first step of our collaboration has been a better knowledge of the Montenegrin Cultural Heritage, in order to strengthen the scientific relation between the two countries and the two scientific communities. In agreement with the Montenegrin Institutions, the Roman city of Doclea, located only few kilometres from the capital Podgorica, has been chosen as the scientific arena of this new collaboration, in view of its importance for the Montenegrin history and cultural identity. Doclea has been in fact since 2012 the first site in the priority list for intervention drawn up by Montenegro (RCCTFCS 2014).

Doclea, investigated at the end of the 19th century, has seen excavation activities also during the 20th century, conducted by international and local teams, as we will examine in detail later (Burzanović, Koprivica this volume). The work has contributed to bring to light some sectors of the city, both Roman and medieval (Munro *et al.* 1896; Sticotti 1913; Rinaldi Tufi, Baraldi, Peloso 2010; Rinaldi Tufi 2012; Koprivica 2013, 2016. See also the journal Nova Antička Duklja/New Antique Doclea 2010 on).

Doclea, the second-largest city in the province of Roman Dalmatia, was built within the lowland stretching between the Zeta river, the Morača river and the Širalija, and it was named after the Illyrian tribe Docleati. Doclea was a *municipium* created in the Flavian period, when the main monuments were built: a square-shaped *forum*, buildings of different sizes, *tabernae* and an aisled *basilica*, the Capitol temple, the temple of the goddess Roma and the temple of Diana, the two Flavian baths. Less known are the private quarters: only a private dwelling with more than twenty rooms around a courtyard, a bath-suite and a little temple have been excavated. The East Goths ravaged the city in 489 and an earthquake damaged it in 518. The city was destroyed again by Avars and Slavs in 609.

Doclea had indeed an important Late antique phase, represented by three churches, one with three naves, another perhaps with a basilical plan and a third with a cruciform plan. As for dating the later existence of the city, some scientists relate the Cruciform church to the 9th century: for this reason, probably Doclea continued its existence for longer than two centuries after the ravage and devastation in the early 7th century.

Even though the site is of great interest for the Montenegrin community, a more complete project of analysis and enhancement is still required. For this reason, one of the goals of our common work is the reappraisal of the scientific activities already carried out on the site, in order to achieve a better knowledge of its history and development by the application of new methodologies of analysis and new technologies of investigation. Another primary target is the enhancement of the site, for a better promotion of its touristic enjoyment and cultural use.

The joint Italian and Montenegrin team started its activities in 2017 in the framework of the so-called 'Joint Archaeological Laboratories', an initiative designed to fund interdisciplinary research projects to be carried out by Italian and foreign researchers in co-operation by sharing their individual skills and research facilities (Alberti, Koprivica 2017; Alberti *et al.* 2018). The ArcheoLab Italia Montenegro initiative is carried out under the patronage of the Ministry of Culture of Montenegro and through funds awarded by the National Research Council of Italy (2017-2018), the Ministry of Foreign Affairs and International Cooperation (MAECI) (2017-2018) and the society Terna Crna Gora d.o.o. (2017-2018).

While we were writing this introduction, we had the important and gratifying news that our project, under the title 'The Future of the Past: study and enhancement of ancient Doclea, Montenegro' will be financed in 2018-2020 as one of the Great Relevance Projects of the MAECI, giving to all of us thereby fresh motivation, perspectives and encouragement¹.

https://www.esteri.it/mae/it/politica_estera/cooperscientificatecnologica/programmiesecutivi/accordi_programmi_culturali_tecnologici.html.

2. Goals and methodology

The project has as its primary goal the collection of all the historical, archaeological and technological data about Doclea and the surrounding valley, in order to achieve a better knowledge not only of the city, but also of the surrounding landscape, still partially unknown after more than a century of research. Still missing or but little known are, in fact, the Roman private habitation quarters, the medieval settlement and the pre-Roman occupation of the valley, for which a few Bronze Age and Illyrian finds are reported but not fully published. We do not know yet in which historical, social and economic milieu Doclea was originally founded and what are the reasons of its limited – or at least scarcely known – development.

Following on from the period of the first excavations and discoveries between the end of the 19th and the first twenty years of the 20th century (Munro et al. 1896; Rovinski 1909; Sticotti 1913), an important step in the 1960s was the discovery and excavations of the necropoleis by the Serbian Academy of Sciences and Arts, actually Archaeological Institute of Belgrade (CERMANOVIĆ-KUZMANOVIĆ, SREJOVIĆ, VELIMIROVIĆ-ŽIŽIĆ 1975). In the following decades, though, the activities were reduced to a few excavations conducted by the Centre for Conservation and Archaeology of Montenegro. whose results and findings are kept in the archive, but remain largely unknown. More recently the Centre restarted research activities, whose outcomes are published in Nova Antička Duklja/New Antique Doclea (2010-2017). In particular, some of the new excavations opened in Doclea by the Centre in the last two years were identified using the results of our geophysical prospections (COZZOLINO in this volume). Since 2017 other excavation activities as well are in progress under the aegis of the Balkan Heritage Field School (https:// www.bhfieldschool.org/): the team is digging in the area of the Capitol temple (https://www.bhfieldschool.org/program/roman-dig-doclea-montenegro).

The present project, remaining cognisant of what has been done and what is in progress, employs a non-invasive multidisciplinary approach, in which different expertises are employed and innovative technologies and methodologies are tested, as is usual in the more professional and contemporary interdisciplinary projects. Different approaches drawn from history, archaeology and topography, and involving remote sensing, geophysics prospections, informatics, architecture, all conducted at different levels and scales of analysis, are starting to be the norm in many Mediterranean projects to do with cultural heritage analysis and enhancement, especially when dealing with cultural and archaeological landscapes. It is so too for Doclea (Cullotta, Barbera 2011; Baratti 2012; Amato *et al.* 2016). We have proceeded from the archival and bibliographical collection of all data kept in numerous European museums, to remote sensing analysis by satellite, aerial

and drone images, and thence to archaeological survey, geophysics prospections and 3D reconstruction. Activities are still very much in progress. We define our methodological approach as 'top-bottom-top', meaning that, after the existing literature investigation, we proceeded from aerial reconnaissance from on high, down to earth with the archaeological survey, and even deeper underground with geophysics, before returning up onto the ground surface with the activities of reconstruction and valorisation. Every action is performed with the strong collaboration of all the professionals involved, and in an atmosphere of continuous review and discussion.

For achieving these sorts of objectives, Doclea appears an ideal site: quite rapidly abandoned and not inhabited thereafter for centuries, and with few excavation activities conducted till now. Our first term goal is to acquire a better knowledge of the site, its actual extent and dimensions in time and space for the Roman and medieval periods. This is to be achieved through a re-composition of old and new data and the construction of an up-to-date digital map, a fundamental first-step for every future investigation.

The present collection of papers is a preliminary scientific account of the results we achieved in the first year of activity at Doclea (2017). The choice to publish them in a Supplement of the international journal *Archeologia e Calcolatori* was largely dictated by the goals of our multidisciplinary project, in which new technologies are being applied to cultural heritage in the course of a successful dialogue with the approaches inspired from the Humanities. The common objective is to improve our knowledge of such an important site for the Montenegrin cultural identity in a unique digital environment.

From an editorial point of view, the aim is to facilitate the reader's comprehension. For this reason, author's names and titles published originally in Cyrillic characters (as Russian and Slavic languages) have been transliterated in Latin characters. For old texts republished in recent years in Montenegrin, the first original edition has been used. This is so for Rovinski (1909), republished in 1994, and Sticotti (1913), republished in Montenegrin in 1999. Until now, with the exception of Cermanović-Kuzmanović, Srejović, Velimirović-Žižić 1975 and Koprivica 2016, the only monograph dedicated to Doclea is that of Sticotti (1913): his plan of the city, after more than a century, is still on display on the site (Plate 1). With this publication of our first results, we intend to provide a new set of images, that could be of assistance for future research and for a better realisation of the site (Plates 2-4).

The aim of this Supplement is to give a preliminary picture of the first campaign of interventions held in 2017, even if the project continued to produce results during our later interventions on site. Given the strong interdisciplinary approach adopted, every contribution is at the same time interconnected/dependent upon from the others and independent, because generated by different but integrated competencies.

The volume is essentially divided into two sections: after a first archaeological paper dealing with earlier chronological phases, there is a section concerning historical and archival matters; a second section follows, in which mostly archaeological and technological activities are presented. The whole concludes with a paper on future perspectives.

The first paper (ALBERTI) is a preliminary overview of the approach to comprehending the territory of the valley and its history during the Bronze and Iron Ages, before the city foundation, in which recent Montenegrin approaches in archaeology are compared to the contemporary directions of the discipline in the Mediterranean, in which the topic of cultural identity is deeply significant. After a description of the landscape, made following a proto-historical phenomenological approach, the main pre-Roman finds are introduced, with special reference to the first results concerning communication routes.

The second article (Burzanović and Koprivica) is an elucidation of the framework of the Italian political and scientific involvement in the Balkans, with special reference to national research and interest in Doclea. Through the use of both published and unpublished archival documents, the beginning of the international interest on Doclea (mostly Russian, British and Italian) and the history of the first excavations there conducted is delineated.

An account on the epigraphic materials found in Doclea, both published and unpublished, is then presented (KOPRIVICA and PELCER-VUJAČIĆ). The paper documents the *status questionis* concerning the epigraphic materials coming from Doclea, on which studies started before any archaeological excavations, and sketches the future perspectives given by innovative projects of digitisation and reflections about problems of identity.

The fourth paper (Colosi, Merola, and Moscati) deals with the reconstruction of the urban planning of Doclea, through the use of topographical and archaeological survey and innovative technologies of analysis, like remote sensing data and their photo-interpretation. This integrated methodology has permitted the comprehension and geo-referencing of monuments still visible even though excavated at the end of the 19th century, and the identification and positioning of new structures. The ultimate goal here is the construction of a GIS platform and so to make a contribution to the production of a new and improved urban plan. The new results achieved concern roads and *insulae*: these are compared with other Roman urban plans.

The fifth paper (COZZOLINO and GENTILE) is a first account of a long-term (and still in progress) ground-penetrating radar survey, with a focus on some of the results achieved in the public area of the city around the *forum* and the Capitol temple. The first geophysical map here shows not only hidden and previously completely unknown structures, but gives new information and interpretation for already known buildings.

Next comes a preliminary analysis on the history and development of some of the Doclea main public buildings (SFAMENI, D'EREDITÀ, and KOPRIVICA). The paper analyses in particular the *forum* and the *thermae* in the general context of Roman architecture, starting from the archival documentation concerning the Doclea excavations and making comparisons with other similar Roman buildings, especially those belonging to Adriatic contexts. Using advanced technologies in aero-photogrammetric data processing and a careful analysis of all the architectural elements, the elaboration of three-dimensional models was started.

We conclude with a first and very preliminary account on the future of Doclea, with the perspectives suggested and opportunities offered by open-air and ecomuseum projects as experienced in other sites, drafting the first basic principles of a complete development project we will produce in the next years for the Ministry of Culture of Montenegro (Alberti and D'Eredità).

The distinctive quality of the present project, conducted jointly by CNR Institutes and HIM-UoM, is the planning of a series of medium and long-term activities, for the inserting of Doclea in the contemporary archaeological arena and in the international position it deserves. For the first time since its discovery, a multidisciplinary team is conducting an integrated and innovative project for the promotion and, in a sense, of the 're-discovery' of the site. We are looking at the past, with our eyes fixed firmly on the future, a future brought into being from scientific results (new knowledge, publications both academic and popular), but also one promoting touristic and economic improvements (new media disseminations, sustainable tourism, socio-cultural and economic growth).

Lucia Alberti
Istituto di Studi sul Mediterraneo Antico
CNR – Roma
lucia.alberti@cnr.it

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