

FLUVIAL LANDSCAPES IN THE ROMAN WORLD

edited by
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Preface

Tyler V. Franconi

This volume is the result of a conference organized with the Oxford Roman Economy Project held at All Souls College at the University of Oxford in June, 2014. The conference aimed to explore the social and environmental context of rivers in the Roman world, especially how Roman activity influenced hydrological activity and how, in turn, hydrological activity influenced Roman life. Specialists in the history, archaeology and environment of the Roman world came together and discussed their research and methods in order to foster discussions about the future direction of interdisciplinary research on ancient rivers. The results of this discussion, presented here, demonstrate a variety of approaches to the study of ancient rivers as well as their historical significance.

This conference and publication would not have been possible without the financial support of The Augustus Foundation, the Oxford Roman Economy Project, and All Souls College. My particular thanks go to Andrew Wilson for his support and assistance in the organizing, and to Candace Rice, Arietta Papaconstantinou, and Nick Ray for their assistance with the coordination. Not all speakers at the conference are represented in these proceedings, but I remain grateful to Michael McCormick and Philipp Niewöhner for their participation in the conference and discussion. Finally, much gratitude is owed to John Humphrey and his editorial team for bringing this publication to fruition.

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University of Oxford

INTRODUCTION

Studying rivers in the Roman world

Tyler V. Franconi

Rivers change. By day and season, by year and century, rivers are dynamic entities capable of extreme fluctuations in volume, path, velocity, and sediment levels. These fluctuations can be caused by climatic change on a regional or supra-regional level and by anthropogenic activity within a river basin, and these influences are not mutually exclusive. Hydrological fluctuations, in turn, have direct impacts upon the surrounding landscape, such as the erosion of riverbanks or the deposition of overbank alluvium through flooding or migration of the river channel. These changes could have profound impacts upon human settlement in the environs.

Rivers exist in a cyclical relationship with their surrounding landscape.¹ They both shape and are shaped by their local environments, leaving behind a multitude of data that form an environmental palimpsest of change through time. Fluvial archives hold the potential to understand the time-line of climatic, anthropogenic and hydrological change and how these relate to each other, providing a key index that provides important insights for the historian into past societies and their environment without assuming any *a priori* determinism.

The Roman empire covered three continents and embraced thousands of rivers.² The different geographical and climatological zones of the empire meant that rivers existed and were experienced in sometimes very different circumstances. The abundance of water in N Europe is in contrast to the scarcity of water in the pre-Saharan desert of N Africa; the monsoon-driven flow régime of the Nile contrasts with Alpine headwaters of the Rhône, Rhine and Po; the fluvial régimes of temperate Europe, where spring and autumn see the highest flows, contrast with the more rain-driven régime of Mediterranean lands, where discharge in winter can often be 50 times greater than average flows.³

These geographical distinctions essentially gave some regions, such as N and W Europe, sufficient access to water — sometimes, indeed, an undesired surplus — while other regions, such as N Africa and the Near East, often struggled to supply what was necessary. This difference means that rivers could fit into very different social contexts across the empire, and no single experience can be taken as representative.⁴

The social context of rivers in the Roman world has been largely ignored. While Egyptian floods brought agricultural prosperity, Gallic floods brought urban disaster. Where drought conditions across much of N Africa and the Near East spurred technological advances in water management,⁵ wet conditions in N continental Europe and Britain led to advances in drainage.⁶ Many studies view fluvial landscapes as backdrops to historical events, as passive landscapes controlled by Rome;⁷ rarely are elements of the landscape appreciated as being directly connected to daily life

1 Edgeworth 2011.

2 Campbell 2012; Purcell 2013; Campbell below, chapt. 2 and Purcell below, chapt. 11, for Roman accounts of their riverine resources. For descriptions of physical geography and modern hydrological characteristics, see Shahin 2002 on Africa; Tockner, Uehlinger and Robinson 2009 on the rivers of Europe; and Wagner 2011 on the rivers of the Near East.

3 Macklin *et al.* 2006; Luterbacher *et al.* 2012, 108; Benito *et al.* 2015.

4 A topic examined here in papers by Wilson (chapt. 8), Haug (chapt. 10) and Whiting (chapt. 9) for N Africa, the Fayyūm, and the Orontes, respectively.

5 Wilson 2012; Izdebski *et al.* 2016a; Wilson below, chapt. 8.

6 Rogers 2013.

7 Proponents of Roman control emphasize the management of resources, water and otherwise. See, for instance, Drerup 1959 on villas; Zanker 2000 on roads; Mattingly 2011 on mineral resources; and