

公益財団法人 セコム科学技術振興財団
研究成果報告書

研究課題名
古代ローマ帝国の防災・防犯マネジメント

Disaster and Crime Management in Ancient Roman World

研究期間
平成27年 4月 ～ 令和 元年 3月

報告年月
令和 2年 3月

研究代表者
九州大学 大学院 人間環境学研究院 教授
堀 賀貴

Faculty of Human-Environment Studies
Kyushu University
Dr. Yoshiki HORI, Professor

Abstract

The vitalisation of urban life expressed in vast new building works, such as in Pompeii and Ostia, was accelerated by the establishment of internal peace known as the Pax Romana, which is easy to be overestimated in the concept of peace, but could be regarded as the adroit management by ancient Roman people, facing disasters such as flood, traffic accidents, and crimes in the city.

New investigations and a re-examination of older data in light of the latest technology of laser scanning and photogrammetry for more precise and detailed measurements, afford not only fresh insights into ancient buildings and urbanisation, but also new information that may lead to provide new clues as to new research about disaster and crime management of ancient Roman world. In the abstract I would like to introduce the brief results of topographical surveys in Ostia and a traffic system in Pompeii, which have been published on Journal of Architecture and Planning of AIJ.

Pompeii

Streets in Pompeii, of which the most have less than 2.5 m wide, are not a suitable place for cart transportation depending mainly on 2-wheeled carts, pack animals, and men carrying packs. They run on the middle of streets and drivers avoided the oncoming carts as the case may be. The narrower streets and town gates (except for the Ercolano Gate) allowed one-way alternative traffic. Impediments on the streets: the stepping stone and public fountains were physical impediments against the cart traffic, such as on the Strada Stabia. Parked animals and carts, which also partially obstructed the streets, are negative evidence of well-regulated lane traffic. We possibly overestimate the capacity of Strada Stabia for transportation and underestimate that of Strada Consolare without any stepping-stones. The cart traffic was carefully controlled by practice not by regulations. Pompeian local government keep cart traffic moving by forcing cart drivers to follow the route they intended to avoid snarled, inconvenient, and inefficient traffics.

Ostia

Constant maintenance of streets which was a crucial consideration in any infrastructure plan, had been resulted in the apparently deliberate raising of the ground level as discrete events rather than as a continuous fill. In other words, the raising of the level of the streets could represent a short period of construction activity avoiding to make the buildings or blocks along the street inaccessible for long term, rather than a long slow period of construction. An accurate observation of the raised surface of Ostian main streets can be made from the result of laser scanning covering all area of Ostia, and the gate constructed on the early imperial period was located on the east, west and south edges of the plateau along the Tiber. The surface of the Decumanus Maximus was assembled in stages rather than commonly raised as a unit, and the flat areas responded the city blocks buildings. All such surface detail had to be plotted accurately during the planning process. The streets in Ostia remind us that in Imperial times quite different principles for infrastructure planning remained with other kinds of function than the Roman monumental beauty or axiality.