A Model of Edo and Urban Development: the Changing Water Environment

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The castle towns of the Early Modern Period that formed the basis of today's large cities consisted of a castle on top of a hill and the construction of a castle town on the plains of the river basins. Edo Castle was also built on the alluvium created by the Hirakawa River, which faced Tokyo Bay. This paper focuses on archaeological sites in the lowlands that were developed in the course of the construction of Edo Castle. It examines the process during which land was increased for urban use by reclaiming coastal areas and rivers. It also sheds light on the situation concerning the adaptation of natural rivers to form artificial rivers such as moats and water and sewerage channels.

The medieval castle town of Edo faced the lowlands which comprised of Hibiya-Irie inlet, Yatagawa River and Shiodomegawa River (Tameike-no-tani), and was an area that was a base for boat transport linking rivers and the sea, while the area directly below the castle was blocked by Hibiya-Irie inlet and Hirakawa River, which hindered the expansion of the castle town. Consequently, when Tokugawa Ieyasu who became shogun in 1603 set up his shogunate in Edo he embarked on a huge urban construction project that saw the reclamation of Hibiya-Irie inlet and took about 30 years as a base from which to govern was established.

We may conjecture that development in the lowlands surrounding Hibiya-Irie inlet and Hirakawa River consisted of the gradual establishment of urban land while building moats and drainage channels that placed particular emphasis on the drainage of former river channels and coastal areas. It is now evident that the construction of outer moats was undertaken together with the completion of the overall project as a framework for urban development that included the surrounding areas where there was an abundance of undulating land. This provided the impetus for urban development on the rim of the outer moats. In connection with the holding ponds (Tameike-hata) which provided an abundant water environment and for which there are records from the detailed management systems of the shogunate, we learn of the construction of urban man-made water systems where moats and water and sewerage channels were made from natural rivers, the severe inflow of earth into the holding ponds after the middle of the Edo Period, the gradual expansion of residential areas as they were pushed out by the sides of the holding ponds in the course of numerous projects to build embankments, and the steady increase in environmental pollution.