## 河川と都市の折り合いのデザイン

-Design of river and city that makes a mutual concession and finds corresponding point-社会システム工学コース 1125129 前田 伸人

## 修士論文要旨

日本の都市の中には、河川の恩恵を受け発展してきたものが多く存在する。その一方で河川は都市に災害をもたらす事もあり、この災害を防ごうと古より様々な試みがなされ現代に至っている。

過去、河川と密接な関係を持っていた都市は、災害と戦いながらなんとか河川と共生する方法を模索し、その文化や風土を継承してきた。しかし、河川に頼らずとも物流や食物の獲得が可能になった現在、都市は河川を閉め切り、治水という名目を持ってその関係を分断してきた。大阪や東京もかつては水都と呼ばれていたが生活環境の向上や土地利用の為の暗渠化、水を効率よく流す事だけを考えた河川整備等を行ってきたため、河川と共生する文化は失われつつある。

本修士論文の設計対象地域である愛媛県大洲市は非常に緩い河川勾配を持つ一級河川肱川を舟運動線として活用し、筏流しや物資の流通で発展してきた都市である。現在でも鵜飼いが行なわれるなど舟運文化の継承がなされており、文化的な風景を生み出している。しかし、中流域に盆地が存在し、下流域は河川のすぐそばまで山足が迫った狭窄な地形特性を持つ事から洪水の多い地域としても有名である。そのため河川と都市の間に高い堤防が立ちはだかり、都市空間と河川空間を分断してしまっている。今後も治水対策は続けられる予定で、30年後には堤防の整備が完了する予定である。今後も都市と河川を分断する形で河川整備が進められると、水害に対抗する為に発生してきた大洲市の独特の風景や建築様式や、大洲市発展の鍵となった舟運の文化などが失われる可能性がある。そこで、都市と河川が直接的に繋がれない現状を踏まえつつ、間接的に都市と河川が繋がり合えるような都市空間、河川空間の提案を行なう。

直接的に都市と河川を結ぶ方法として、高規格堤防などの地盤を底上げする様な提案が存在するが、本設計対象地は江戸時代のまち割りを現代でもそのまま使用しており、堀の遺構なども数多く残されている。そういった場所で、地域の歴史を踏まえず地盤を底上げする様な方法は都市のアイデンティティーを保っていく上でも大きな弊害となる為行なわない。現在大洲市が持っている歴史的町並みや堀の遺構、肱川の河川空間を最大限活用する事で、間接的に都市と河川を結びつけ、その関係を構築していく。

今回の修士論文で、都市の持つ歴史や文化を見直し、それらをそのままの形で活用するのではなく、現代の都市の形状、空間特性に合わせて活用していくという事を行なった。都市空間の中に水辺を引き込み、舟運動線と歩行者動線の関係が発生する動線や、都市の中に水を配置する事で都市の中にいながら河川を感じる事のできる空間を創出でき、間接的に都市と河川を結びつける事ができた。歴史的なものをかたくなに保存し、眺めるだけにとどめるのではなく、都市の形に合わせて活用していく事で、新しい関係を生み出す事ができ、改めてその土地のポテンシャルを生かす事が大事であると言うことを再認識する良い機会となった。

-Design of river and city that makes a mutual concession and finds corresponding point-

Department of Infrastrucutre System Engineering 1125129 Nobuhito Maeda

The favor of the river is received in the city in Japan and a lot of things that have been developed exist. There is causing the city the disaster, and the river is performed various attempts when old and has arrived on the other hand at the present age even if this disaster is prevented.

The city with the river and implications gropes for the river and the symbiosis method while managing to fight against the disaster, and has succeeded to the culture and the climate in the past. However, distribution and the acquisition of food are the river closes the city now at the time of became it, and have divided into parts the relation possible with the pretext of flood control no reliance of the river. Because the river has been maintained having thought making to the culvert and the water for the improvement and the land use of living conditions are efficiently poured, the river and the culture that lives together are being lost though Osaka and Tokyo had been called a water capital before.

Ehime Prefecture Ozu City that is the region of this master's thesis for the design is a city that uses class A river Hijikawa with a very loose river inclination as a boat movement line, and has developed because of the circulation of the raft sink and goods. A still cormorant fishing succeeds to ..doing.. [warerunado] [funehako] culture, and cultural scenery is invented. However, the basin exists in the middle reaches region, and the downstream region is famous from mountain foot's nearby to become empty the river possession of the characteristic of ..approached stricture.. geographical features as the region where a lot of floods exist. Therefore, a high embankment is blocked between the river and the city, and the city space and the river space are divided into parts. As for the flood control measures, it is scheduled that it is scheduled to be continued, and is completed the maintenance of the embankment in 30 years in the future. There is a possibility that the culture etc. of peculiar scenery, the style of architecture, and [funehako] of Ozu City has been generated by the reason why there are a lot of flood damage when the river maintenance is advanced in shape to be going to divide into parts the city and the river in the future are lost. Then, it proposes the city space and the river space where the city can be indirectly connected with the river basing the current state to which the city and the river are not connected immediately each other.

The ground in the high standard embankment etc. is left as a method of connecting the city with the river immediately, and a lot of this ground for the design uses the waiting dividing of Edo as it is at the present age, and has been left for the monument in the moat etc. as for the bottom though exists the proposal to raise. The history in the region is not based in such a place and the raising bottom method doesn't do the ground because it becomes a big evil to keep the identity of the city. The city and the river tie indirectly by maximum using the monument in a historical town and the moat that Ozu City has and the river spaces of Hijikawa, and the relation is constructed now.

The thing of the history and the culture of the city were reviewed by this master's thesis, and they were not used in the form of the state as it is but using it according to shape and the spatial characterization of a modern city was done. The waterside was able to be drawn in to the city space, to create the space to be able to feel the river while arranging water in the traffic line and the city where the relation between the boat movement line and the pedestrian movement line was generated and existing in the city, and be able to tie the city and the river indirectly. It became a good chance to recognize saying that it was important to make the best use of the potential of the land being able to invent, and renewing a new relation by the thing that was not stopped because the historical one was stubbornly preserved, and it looked at but was used according to the shape of the city again.