

Innovations in Healthcare Facilities Planning and Design

/ **Choi Kwang-Seok**

Abstract

The hospital began as a public institution serving the poor. Through the introduction of modern science and technology, hospital has been the institutional core of a nation's health care system. In the late of 20th century, with the application of commercial design, it has become a more welcoming and accessible place for the patient and visitors in the emerging competitive healthcare market.

Today, healthcare is also continuously evolving. Thinking about the future healthcare, we can easily remind some words like competition, lower cost, patient-centered, outpatient-focused, information technology, network, and so on. Although the future is always a uncertain, these might be new requirements and driving forces for the future healthcare facilities planning and design. Particularly, in a society which emphasizes the broader, interactive scope, with global markets and global communications, the healthcare network is considering as the future healthcare facility. These networks may be made up of two, or hundreds of linked health facilities scattered all over the world.

These network have great influence on existing healthcare facility planning and design. First, the healthcare planning will be more complicated than ever. Financing, organizations, communications, technology, total design, construction and operation will become ever complex and expensive. Accordingly, architects and architectural firms will be compelled to develop new skills, services and organizational structures in order to respond to the rapidly changing needs and demands of, new client, network. Architect will also have to be a health planner as well as health facility planner.

Second, healthcare facility design will be more simple and distinctive. While the 20th century hospital was depend on the functional condition by it's complexity, healthcare facilities design in a network will relatively set free from functional requirements. After learning design and operating concepts for a while from existing network examples like fastfood franchise, hotel chain, bank, the airline, etc., the health network will become a paradigm of network architecture in future information society.



1. (Introduction)

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2. (Evolution of Hospital)

2.1. (Observability and the Asylum)

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2.2. (Machine Medicine and Hospital)

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[1]

, 1596, Adam Elsheimer

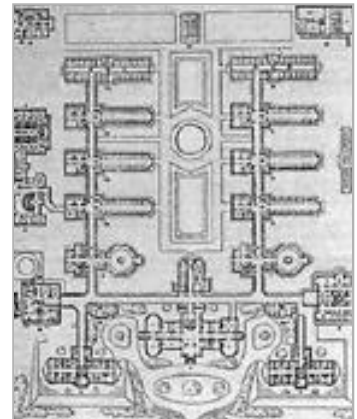


[2]



[3]

Hamburg Eppendorf , 1884,
, 82 1,474



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1876, ()

1) (Function and Compact Design)

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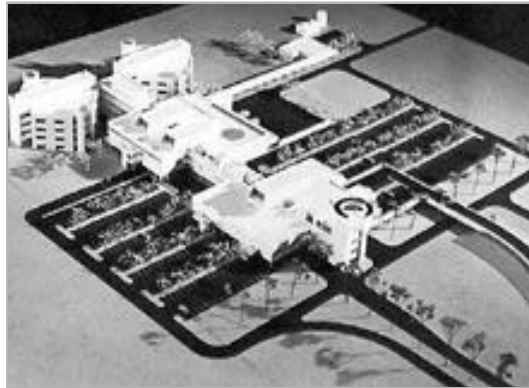
2) (Flexibility and Block Design)

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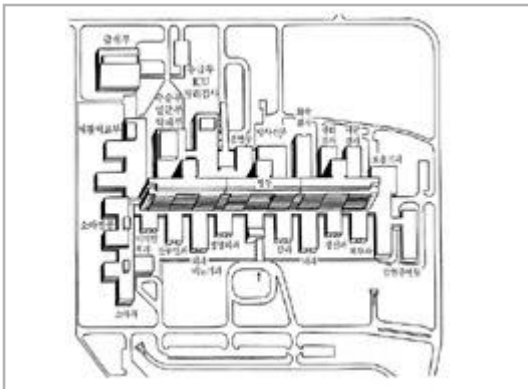
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[5]
University of Minnesota
Health Science, 1974,



[6]
Desert samaritan Hospital,
1970,



[7]
Sundsvall
1975,



[8]
Medical campus,

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3) (Competition and Commercial Design)

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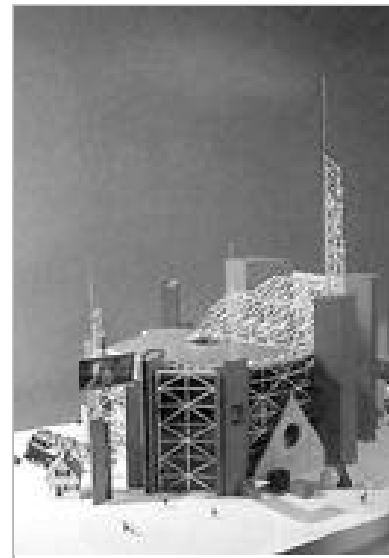
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[9]

, Brigham & Womens Hospital, 1987



[10]

Starbright Pavilion

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[11]
Medical Mall, Dartmouth
Hitchcock Medical Center
1994,



[12]
Dartmouth Hitchcock
Medical Center

2.3. (IT and Network Architecture)

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3. (Prospect of Korean Healthcare Facility)

3.1. (Healthcare Environments in Korea)

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3.2. (Necessity of Change and Procedures)

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3.3. (Ownership of Network)

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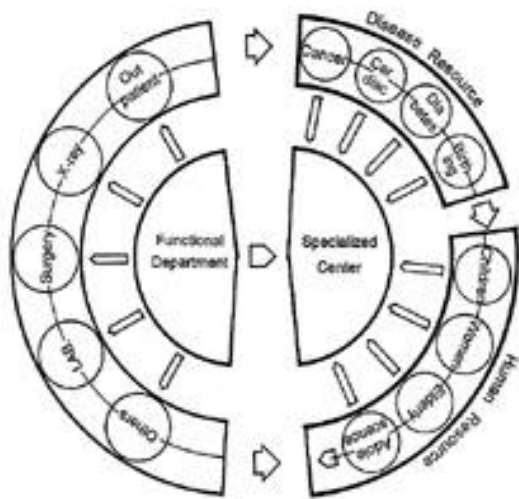
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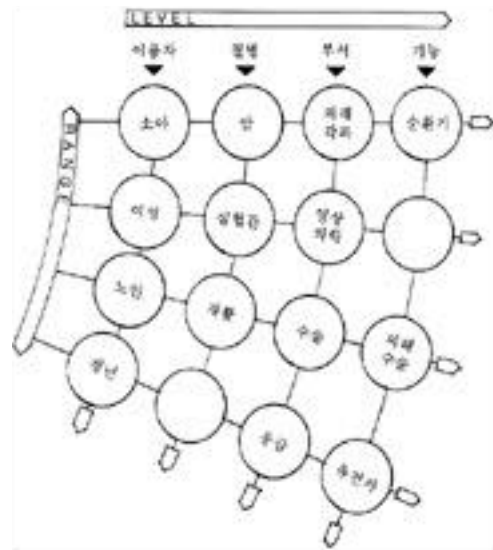
3.4. (Network Facility)

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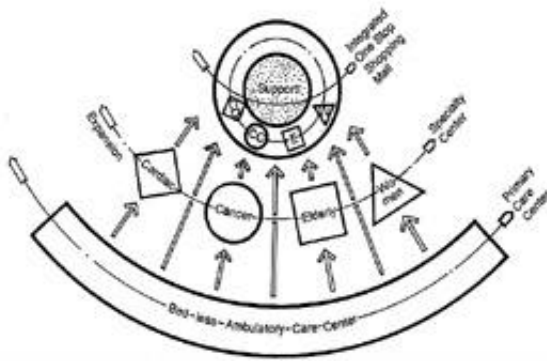


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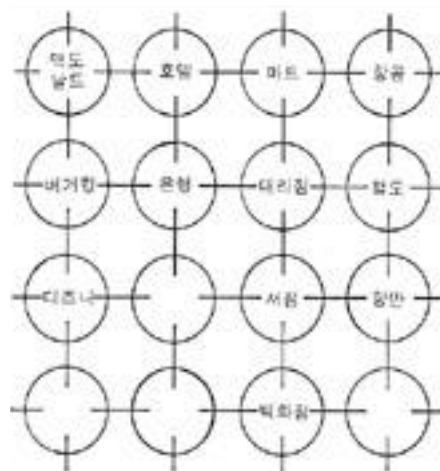


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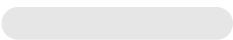
[19] , Mackenzie Health Science,



[20] ,

4. (Conclusion)

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