

#2 Urban Structure before Modern age

Theory of Urban Structure

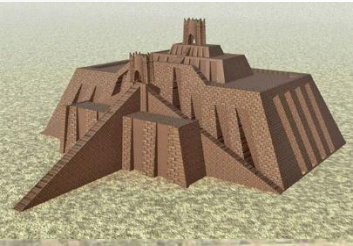
Kwon, Young Sang

Seoul National University

Department of Civil and Environmental Engineering, Urban Design Major

#1. Urban Structure before Modern age in Western

Ancient/ Mesopotamia -Ur



The Great Ziggurat



Ancient/ Mesopotamia - Erbil

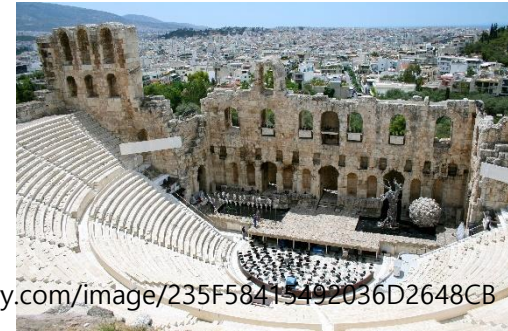
- Listed as a UNESCO World Heritage Site



Ancient/ Athens Greece



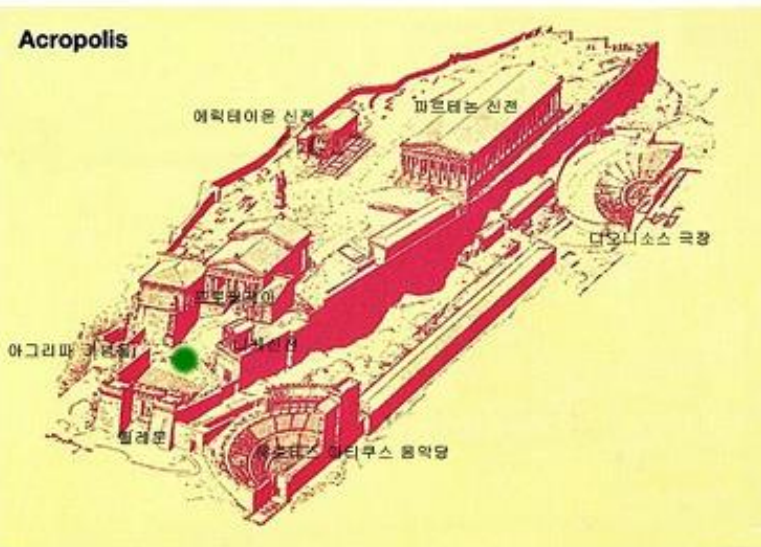
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<http://cfile28.uf.tistory.com/image/235F58415492036D2648CB>

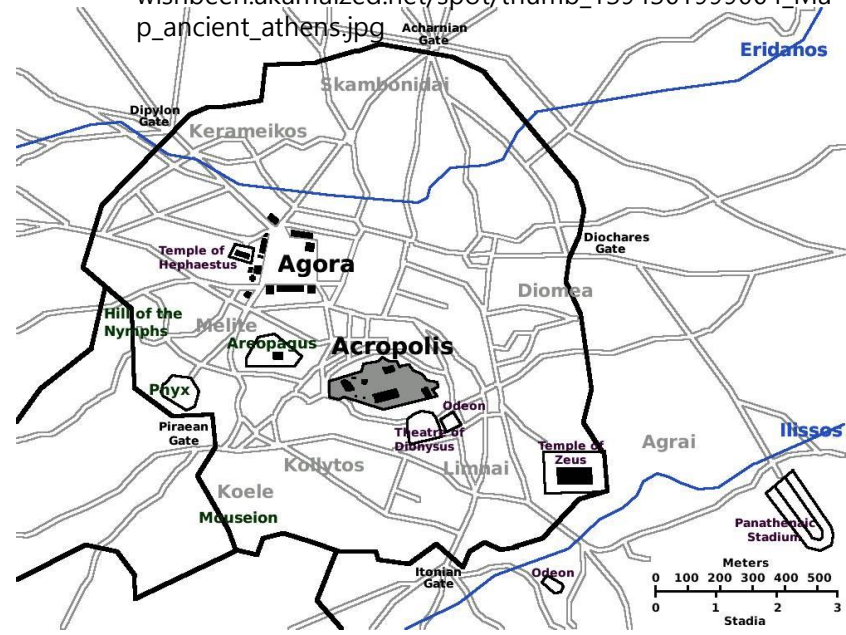


Agora



Acropolis

https://img-wishbeen.akamaized.net/spot/thumb_1394361999064_Map_ancient_athens.jpg



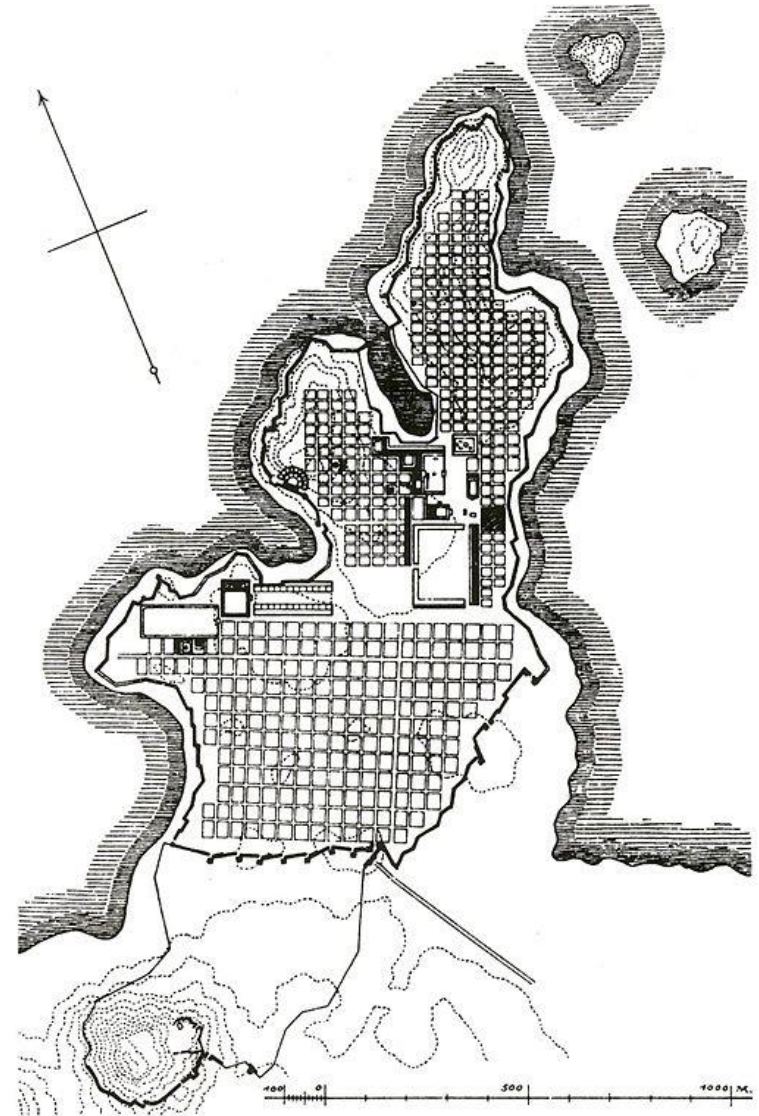
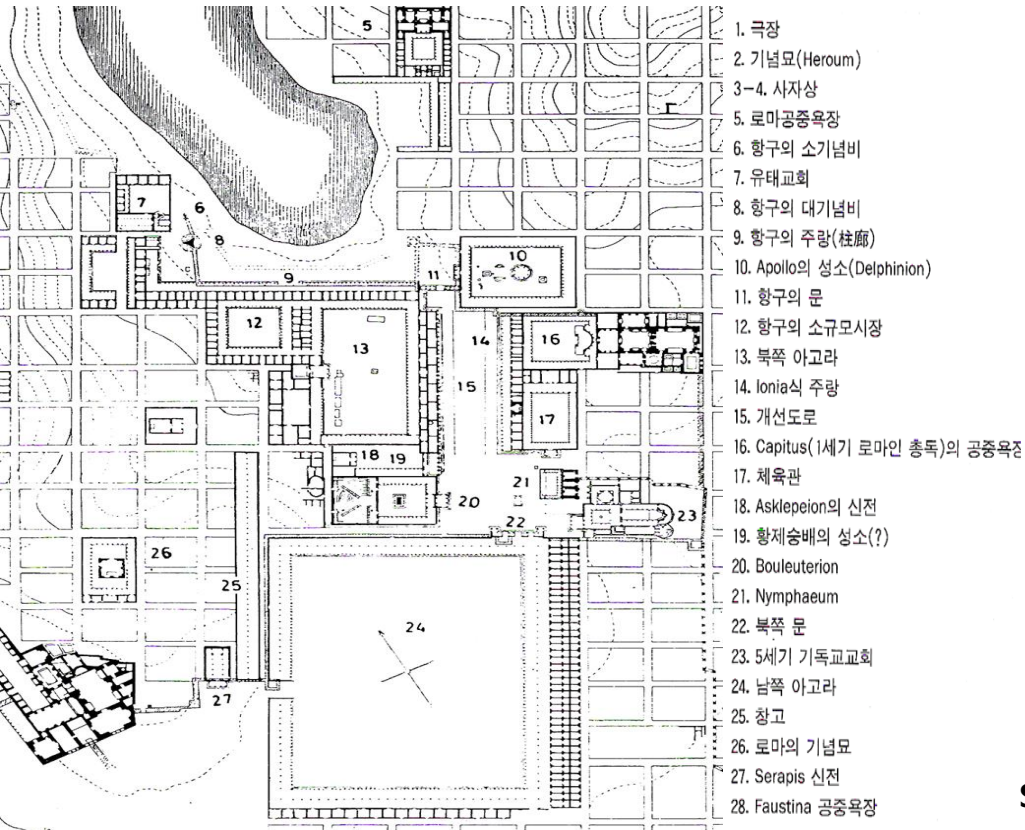
Eridanos

Ilissos

Meters

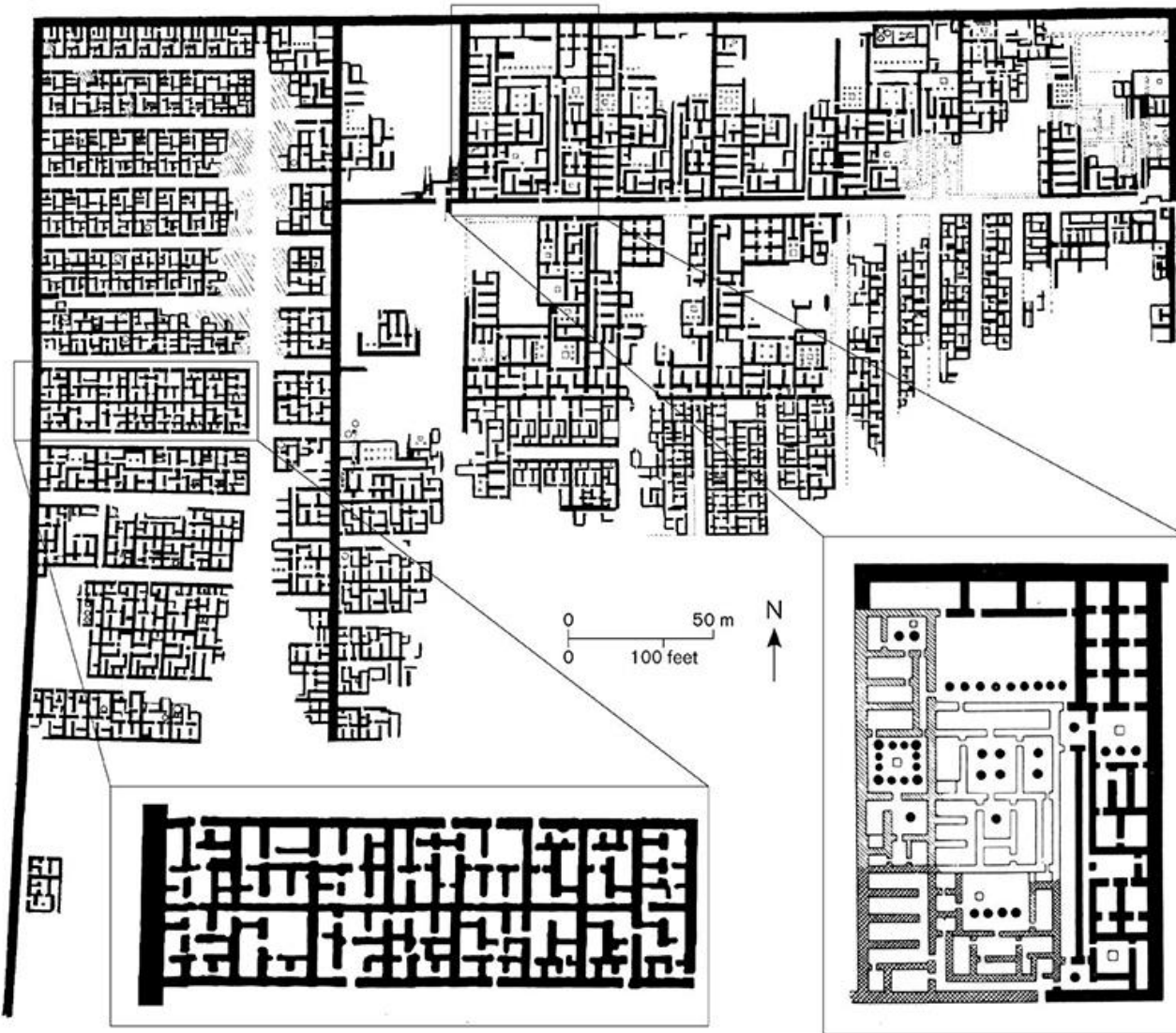
Stadia

Ancient/ Miletus Greece



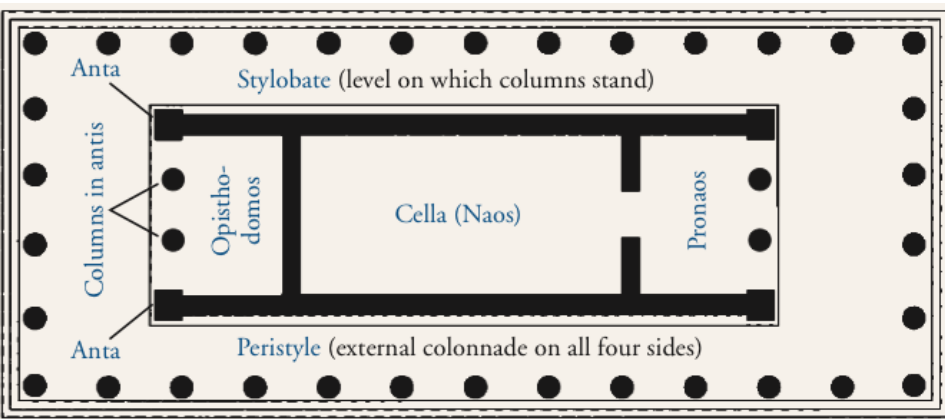
Source: http://www.wikiwand.com/it/Urbanistica_greca

Ancient/ Egypt Kahun



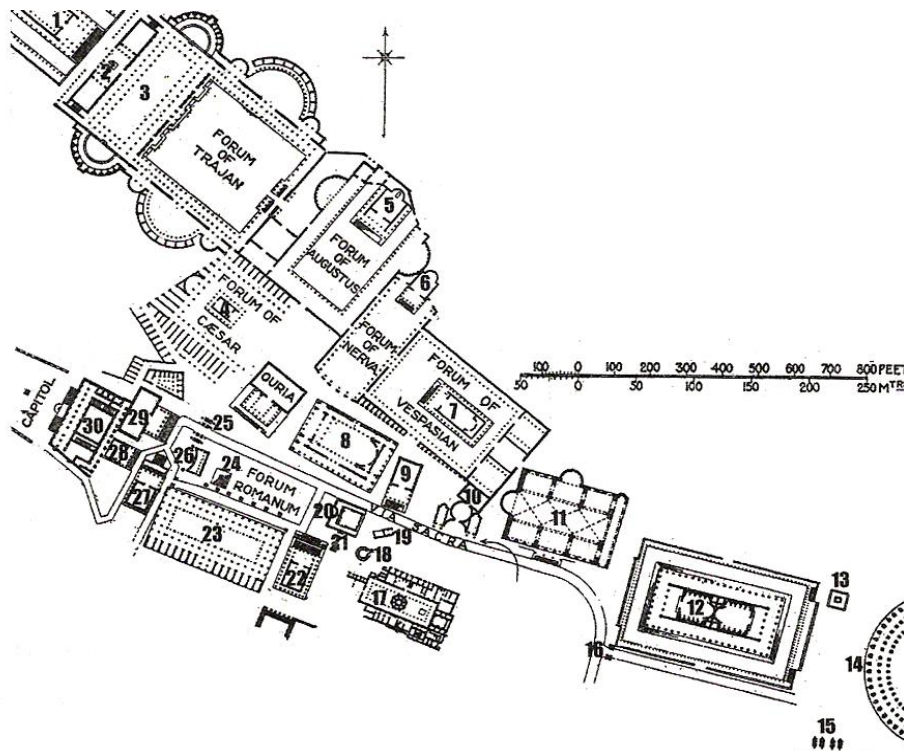
<https://erenow.com/ancient/the-complete-cities-of-ancient-egypt/12.php>

Ancient / Greek Perry style

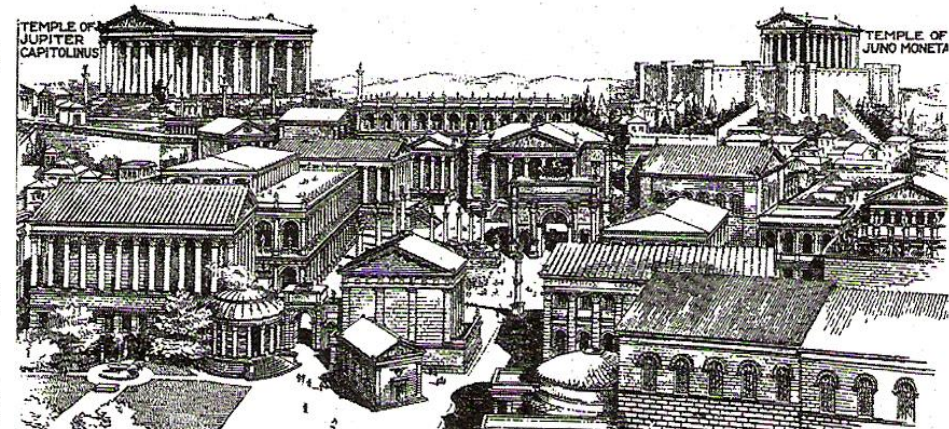


Rome/Forum

- A complex of urban religious, commercial, and political functions
- Citizens' organizations and religious facilities are arranged around the plaza.

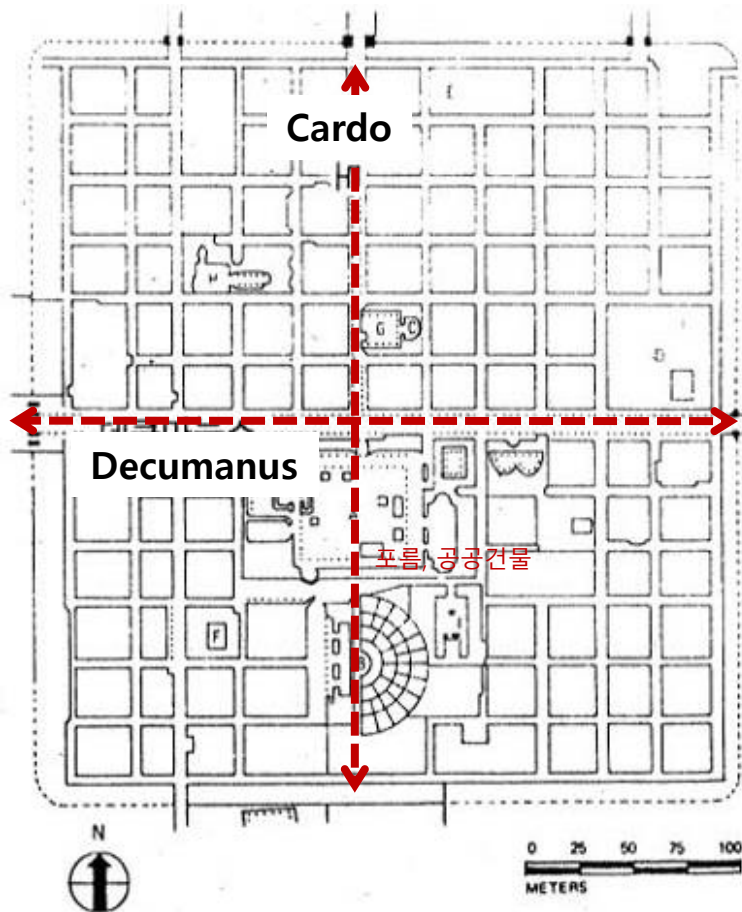


- | | | |
|------------------------------|---------------------------------|-------------------------------|
| 1. Temple of Trajan | 11. Basilica of Constantine | 21. Arch of Augustus |
| 2. Trajan's Column | 12. Temple of Venus & Rome | 22. T. of Castor & Pollux |
| 3. Trajan's Basilica | 13. Colossus of Nero | 23. Basilica Julia |
| 4. T. of Venus Genetrix | 14. The Colosseum | 24. Column of Phocas |
| 5. Temple of Mars Ultor | 15. Arch of Constantine | 25. Arch. of Septimus Severus |
| 6. Temple of Minerva | 16. Arch of Titus | 26. Rostra |
| 7. Temple of Peace | 17. House of The Vestal Virgins | 27. Temple of Saturn |
| 8. Basilica Aemilia | 18. Temple of Vesta | 28. Temple of Vespasian |
| 9. T. of Antonius & Faustina | 19. The Regia | 29. Temple of Concord |
| 10. Temple of Romulus | 20. Temple of Divus Julius | 30. Tabularium |



Ancient Rome (B.C. 753~330)

Composition of urban space centered on the road (Cardo, Decumanus)
Forum, Colosseum and other symbolic buildings

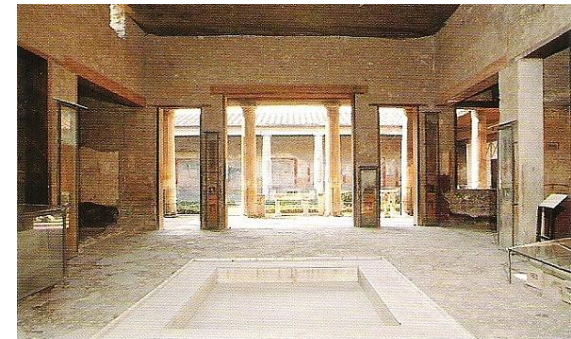


<AD 100 Team Guard> North African Colony
Constructed for the purpose of garrison supervision by local residents
Roman Barrack Placement Method



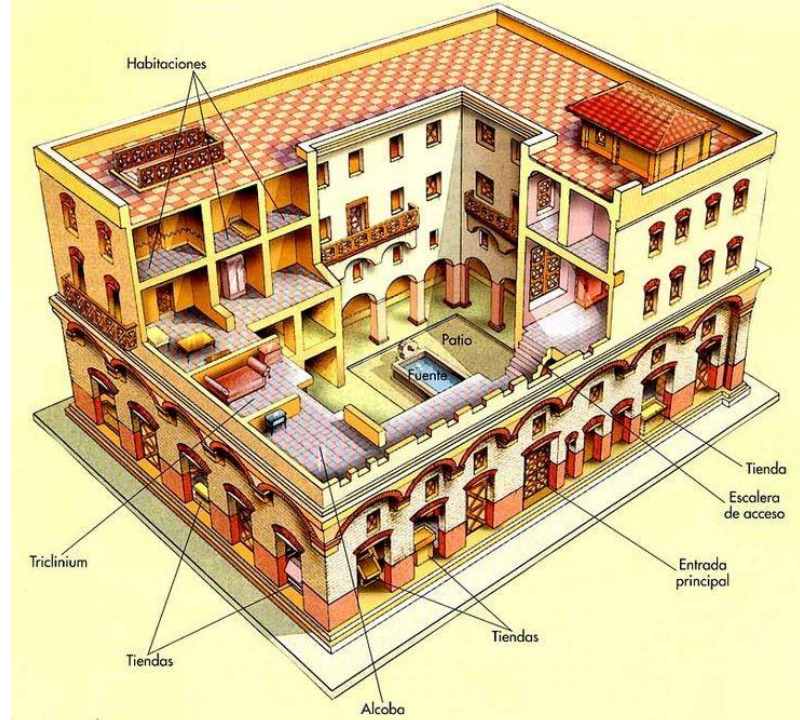
Rome / Domus

- Common single-family / upper-middle class residences in Rome
- Atrium (the courtyard) - Tablium - Peristyle (courtyard with columns)



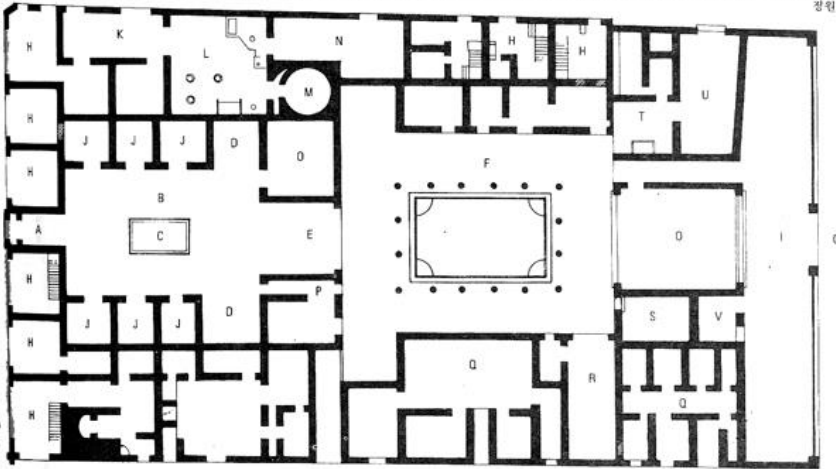
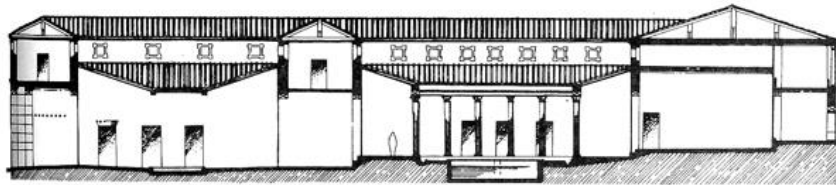
Rome/Insula

Roman-style court yard type housing complex



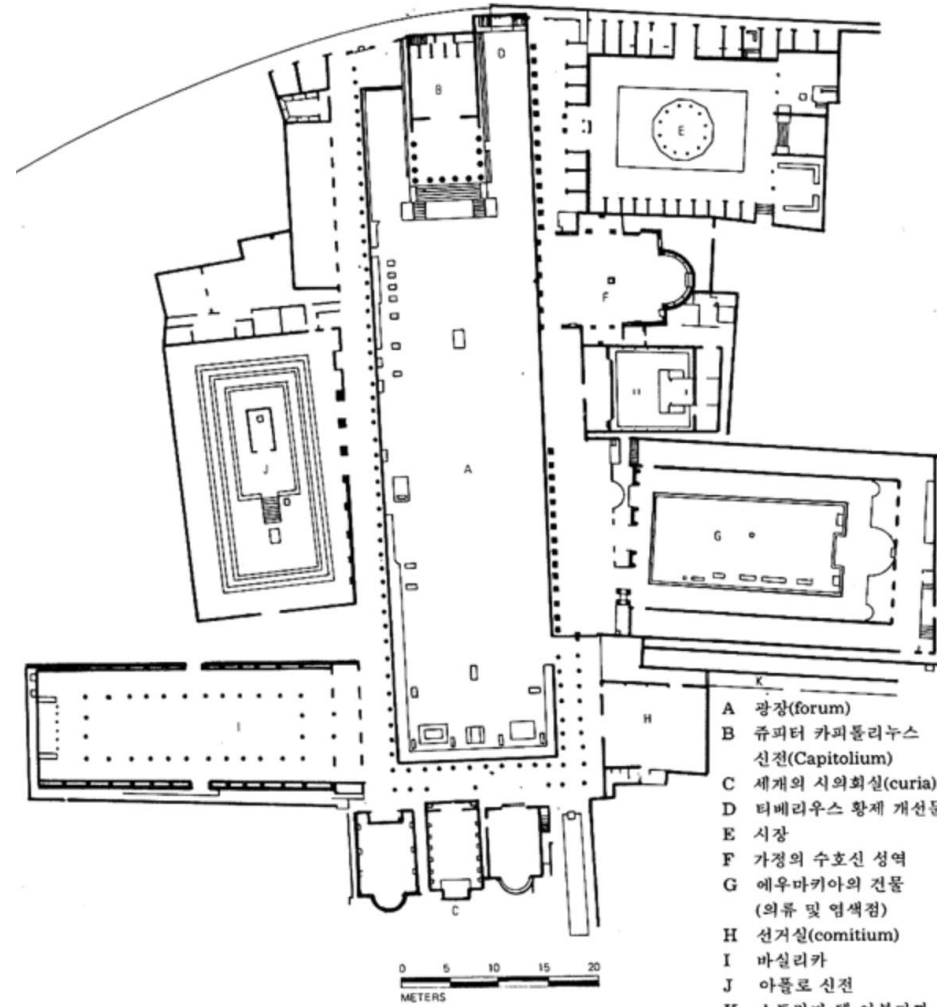
Rome/Pompeii

Pansa Housing



- | | | |
|-------------|-------------|-------------------|
| A 현관 | I 포티코 (발코니) | P 안뜰에서 캐리스타일로의 통로 |
| B 안뜰 | J 광선 | Q 독립된 채 |
| C 벽물받이 (연못) | K 열가계 | R 식당 |
| D 작은방(alae) | L 열가계 한채 | S 거울실의 식당 |
| E 타물리움 | M 화덕 | T 무덤 |
| F 캐리스타일 | N 사무실 | U 아좌두는 곳 |
| G 파수원 (정원) | O 응접실 | V 정원사 방 |
| H 창문 | | |

Court Arrangement of Pompeii



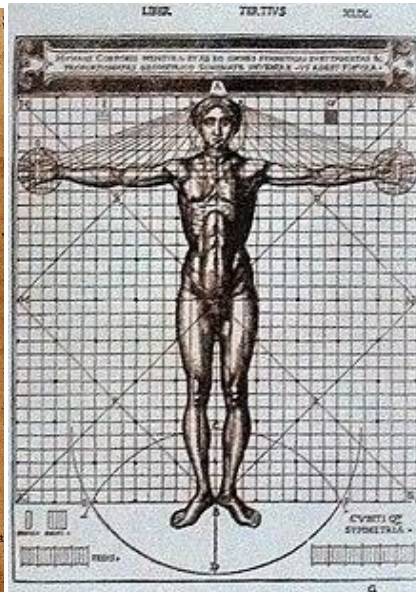
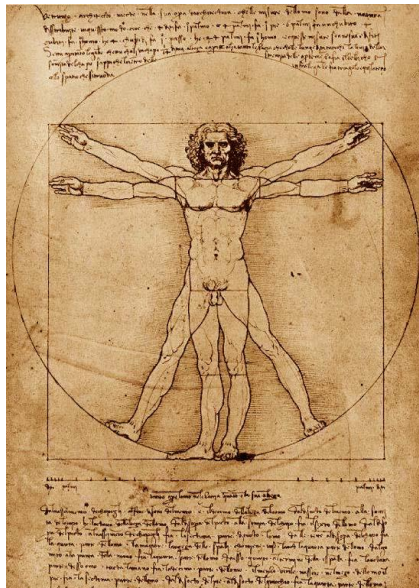
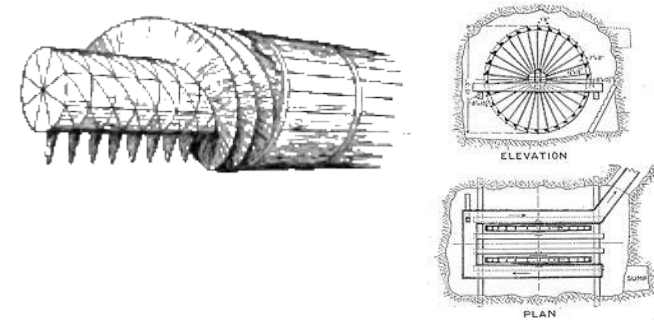
- | |
|-----------------------------|
| A 광장(forum) |
| B 유피터 카피톨리누스 신전(Capitolium) |
| C 세계의 시의회실(curia) |
| D 티베리우스 황제 개선문 |
| E 시장 |
| F 가정의 수호신 성역 |
| G 에우마키아의 건물 (의류 및 염색점) |
| H 선거실(comitium) |
| I 바실리카 |
| J 아폴로 신전 |
| K 스트라다 델 아본다짜 |

Vitruvius

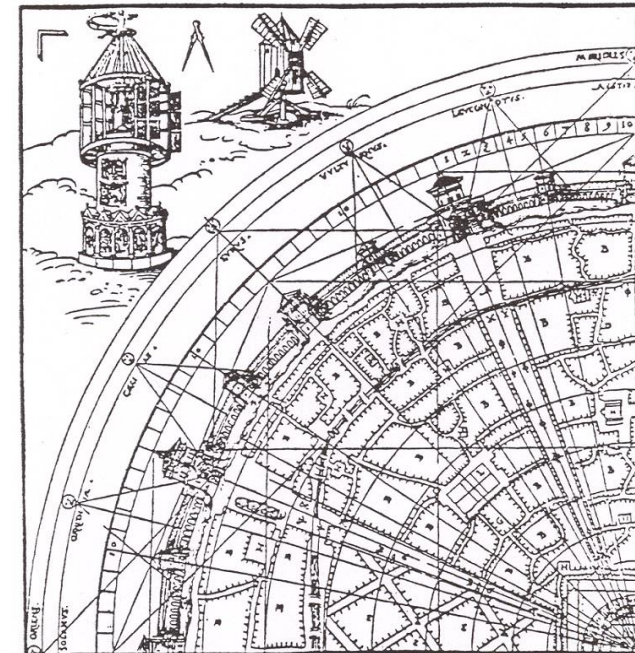
Marcus Vitruvius Pollio (born c. 80–70 BC, died after c. 15 BC), commonly known as **Vitruvius**, was a [Roman](#) author, architect, [civil engineer](#) and [military engineer](#) during the 1st century BC, known for his multi-volume work entitled [De architectura](#).^[1] His discussion of perfect proportion in architecture and the human body led to the famous [Renaissance](#) drawing by Da Vinci of [Vitruvian Man](#).



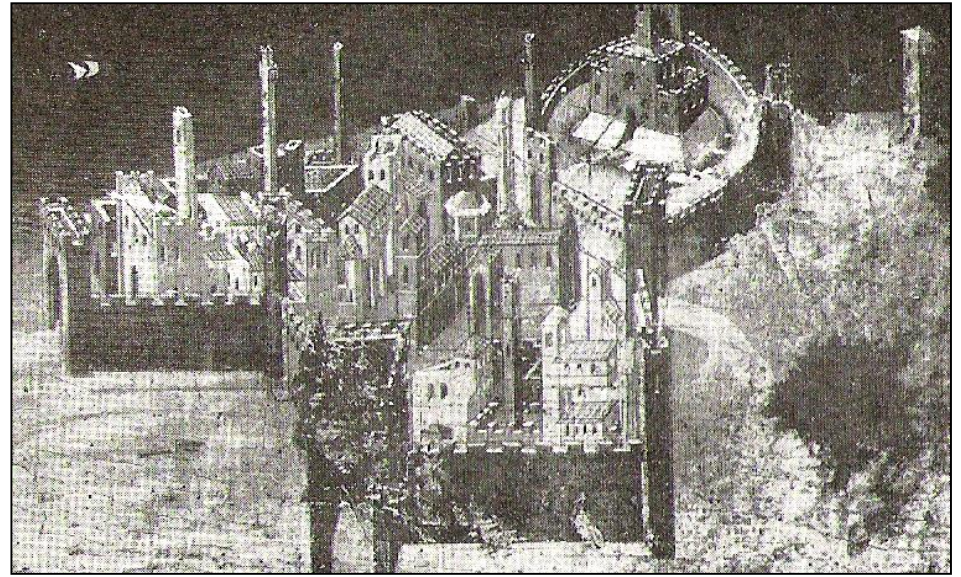
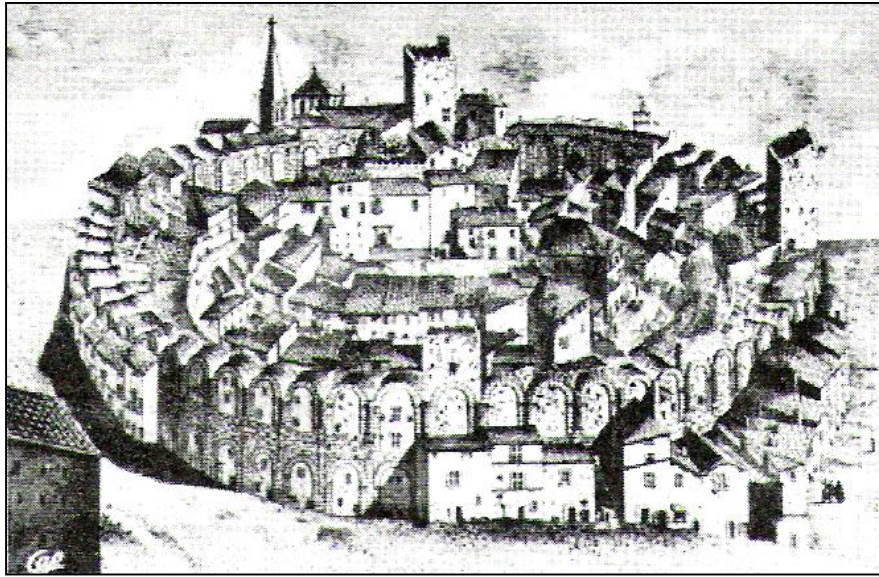
A 1684 depiction of Vitruvius (right) presenting [De Architectura](#) to [Augustus](#)



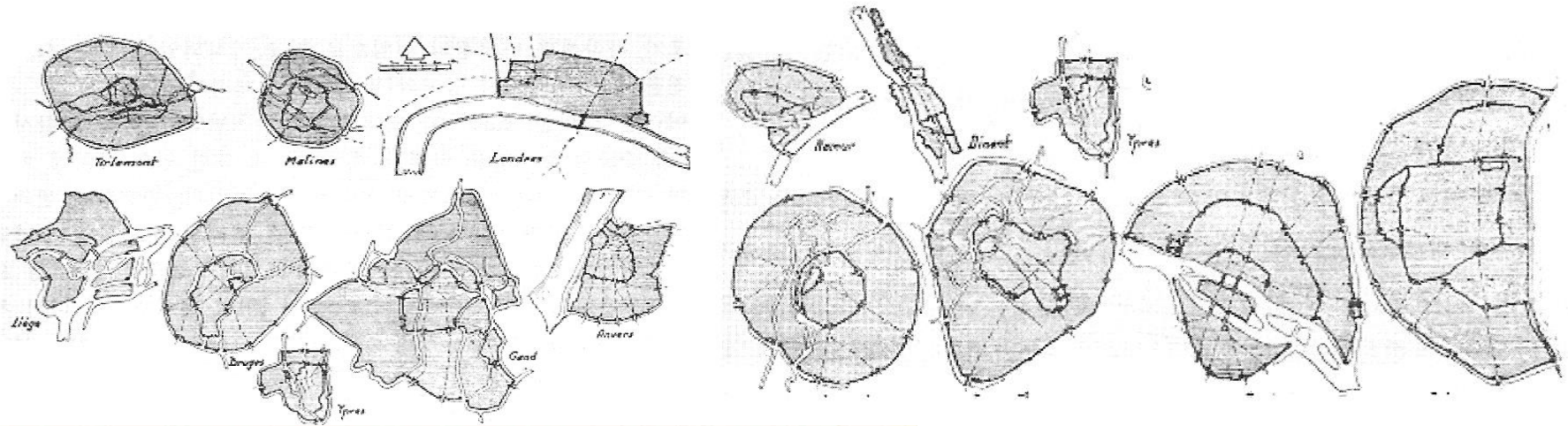
"Vitruvian Man", illustration in the edition of *De architectura* by Vitruvius; illustrated edition by Cesare Cesariano (1521)



The middle age / Castle



The middle age / Castle



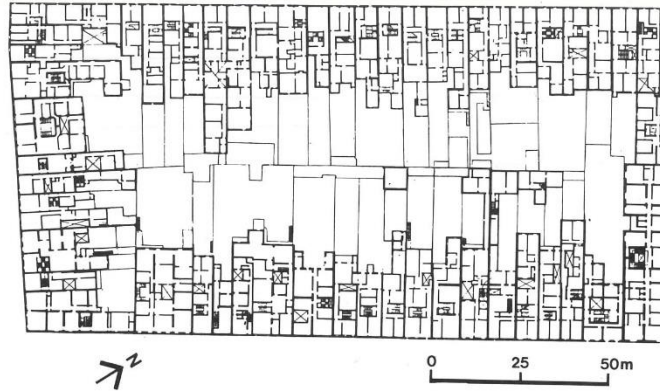
Viena en el siglo XIX

. Il centro di Vienna nella prima metà dell'800.

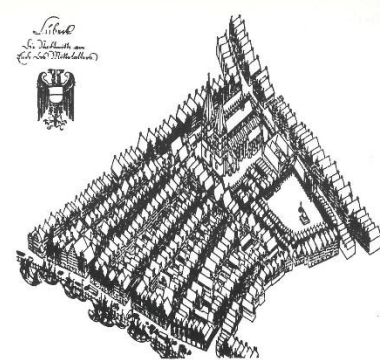
Fig. 1197. Il centro di Vienna nella seconda metà del-
l'800, dopo la sistemazione del Ring.

[Ringstraße, before and after the redevelopment of the fortifications](#)

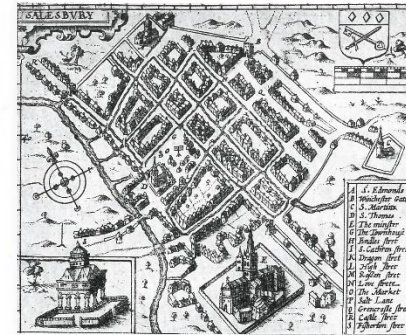
The Middle age / elongated plot



94. 피렌체에 형성된 주거블록



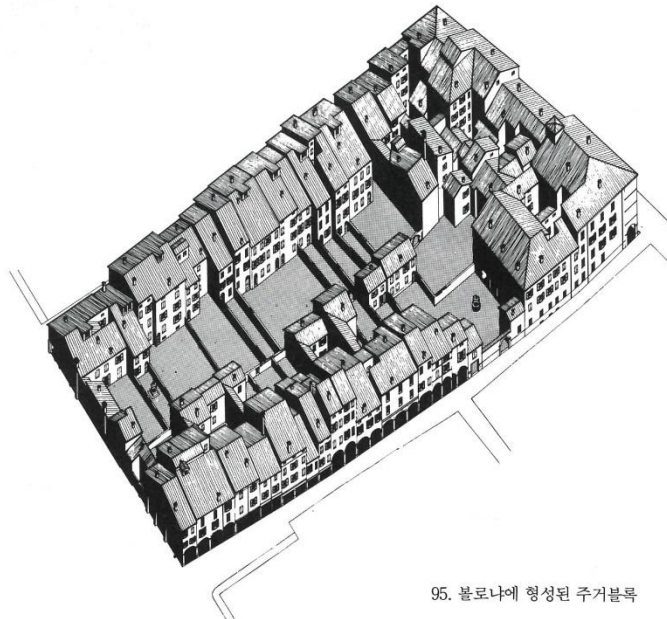
81. 중세 시대 뤼베 시의 중심부 모습을 재현한 그림



82. 1600년경 영국 살즈베리(Salisbury) 시의 모습이 표시된 그림. 당시 주거지역에서 블록이 형성되어 간 모습이 잘 나타나 있다.



Oberbayern, German
<https://pxhere.com/ko/photo/974972>

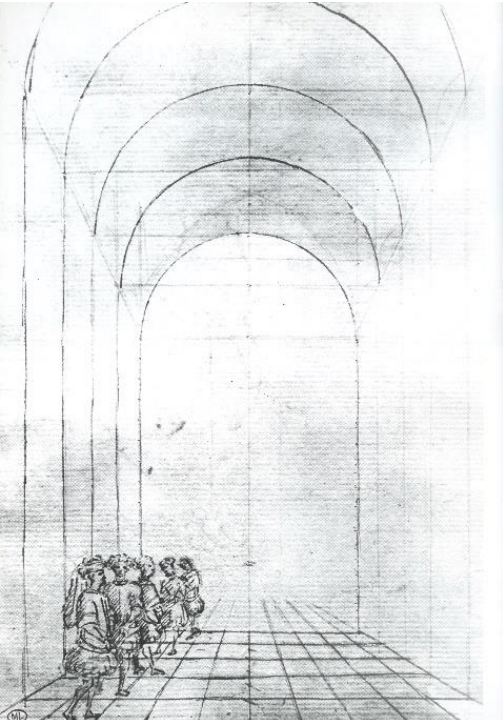


95. 볼로냐에 형성된 주거블록

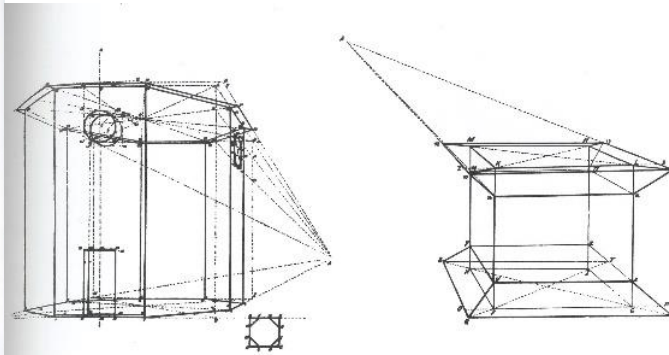
Renaissance / humanism

- Ideal urban planning based on humanistic ideals and geometric order
- Cosmic form cities like Palmanova
- Reorganizing central cities like Florence and Rome

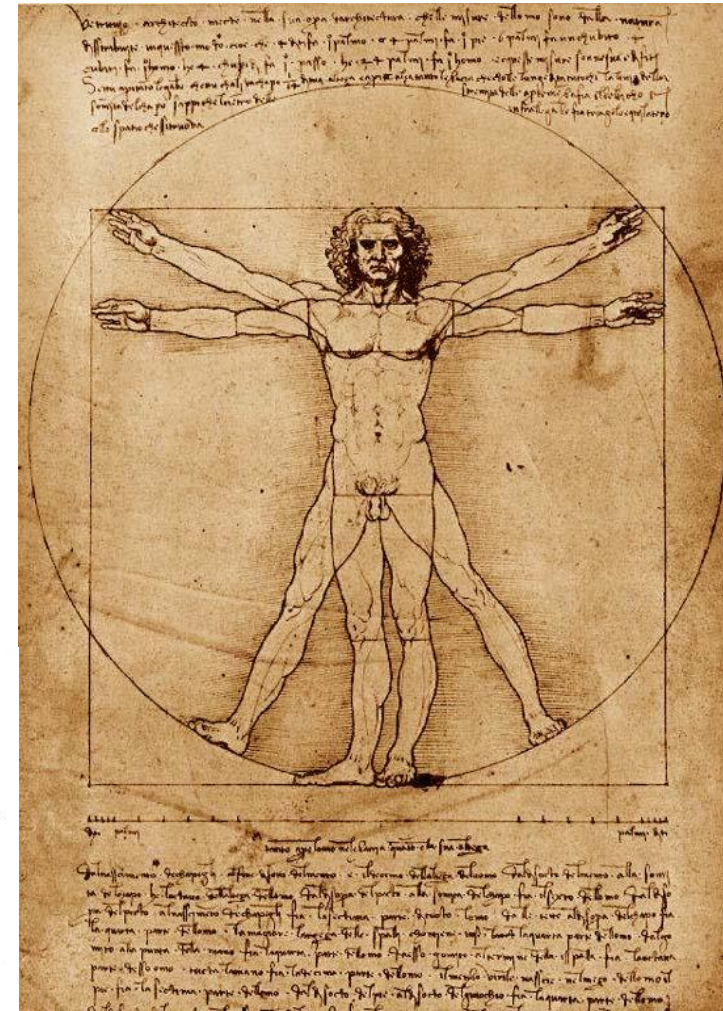
Antonia Pisanello, 15c



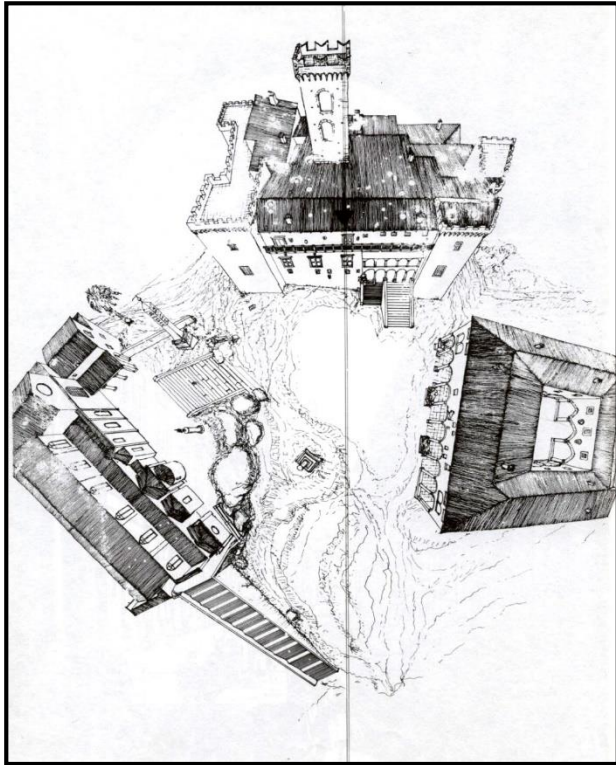
Piero della Francesca



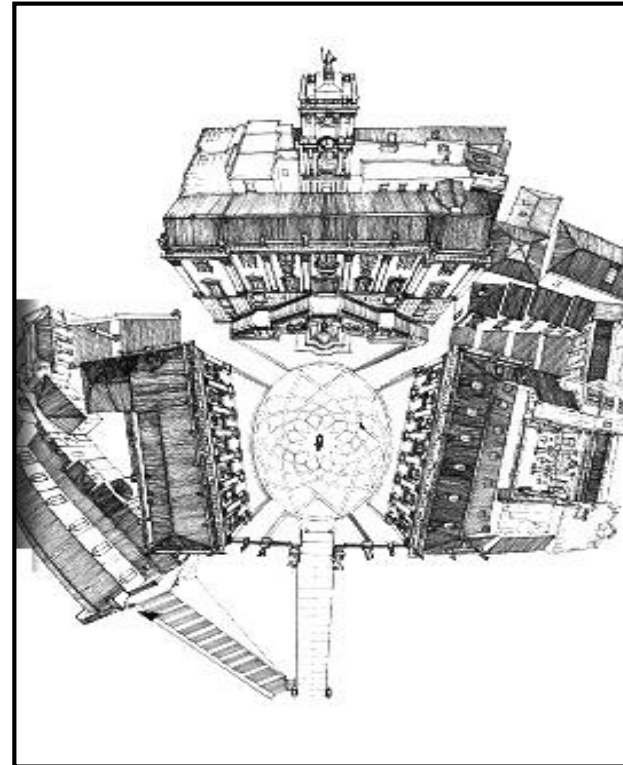
Vitruvius Man
Leonardo da Vinci (1452~1519)



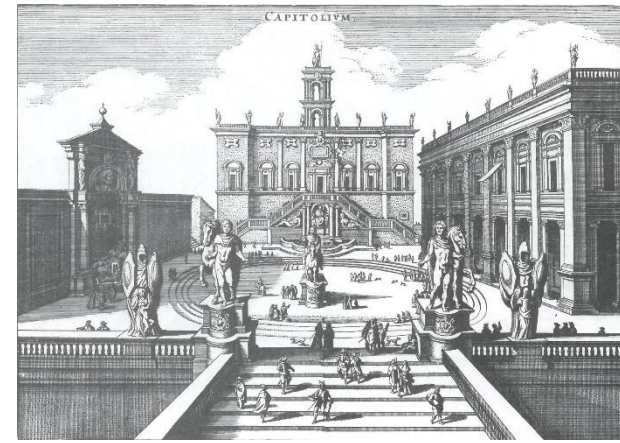
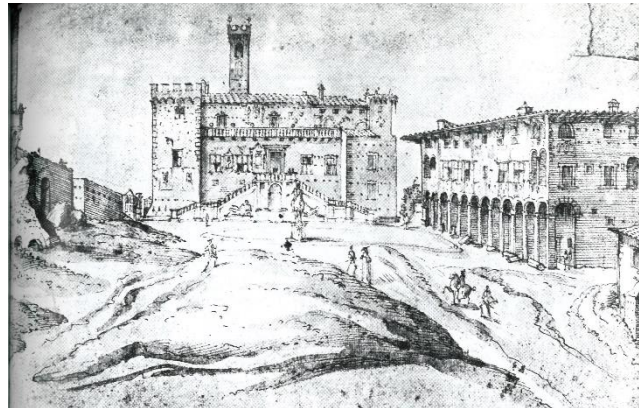
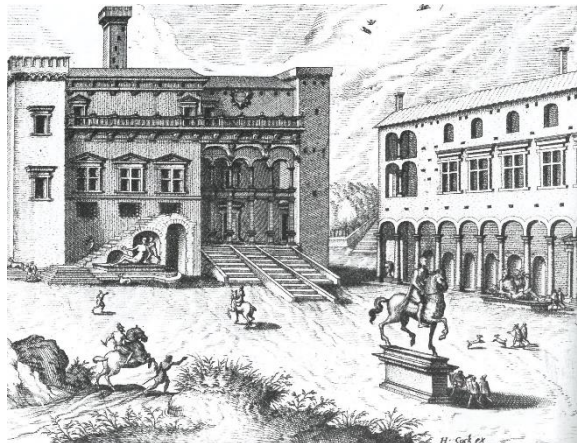
Renaissance / Mons Capitolino (Campidoglio)



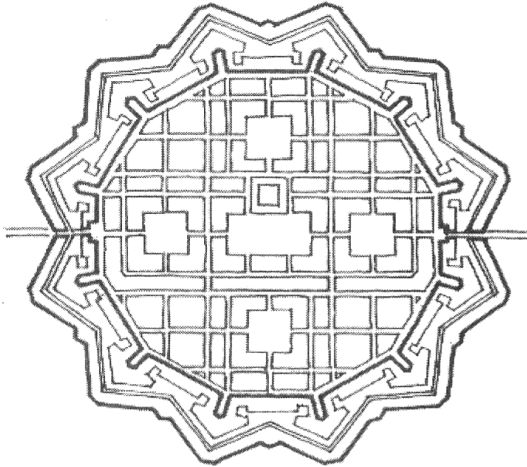
Rome / Middle Age



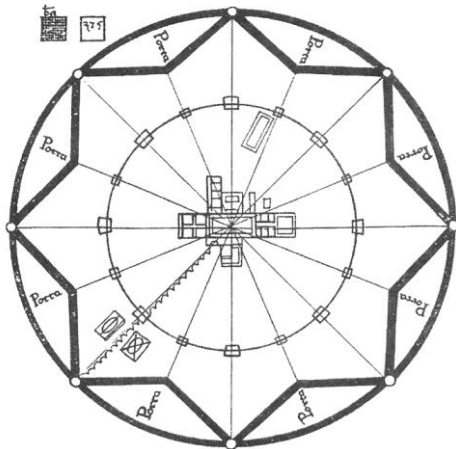
Rome / Renaissance, Michelangelo



Renaissance / Ideal Form, Cosmic



Antonio Filarete



Sforzinda, Ideal City

Vincenzo Scamozzi, Pamanova, Military city in geometric form
Defended in the form of a moat



<http://opusteno.rs/zanimljivosti-f19/italija-palmanova-grad-tvrđjava-u-obliku-zvezde-t29033.html>

Renaissance / Palazzo



Good Government in the City, Ambrogio Lorenzetti

Leon Battista Alberti, Facade of Palazzo Rucellai, Florence



Donato Bramante, Palazzo Caprini, Rome



Florence, Palazzo Medici Riccardi



http://www.bongkim.com/bongkim/data/cheditor4/1311/efe4cc8ac7d5d05a98d63cd5ed691789_31kRGD20SSIPuaDEvJPG

http://www.bongkim.com/bongkim/data/cheditor4/1311/efe4cc8ac7d5d05a98d63cd5ed691789_7CbnjT8fwRYxbQunv3FvJPG

Renaissance / Florence(Firenze)

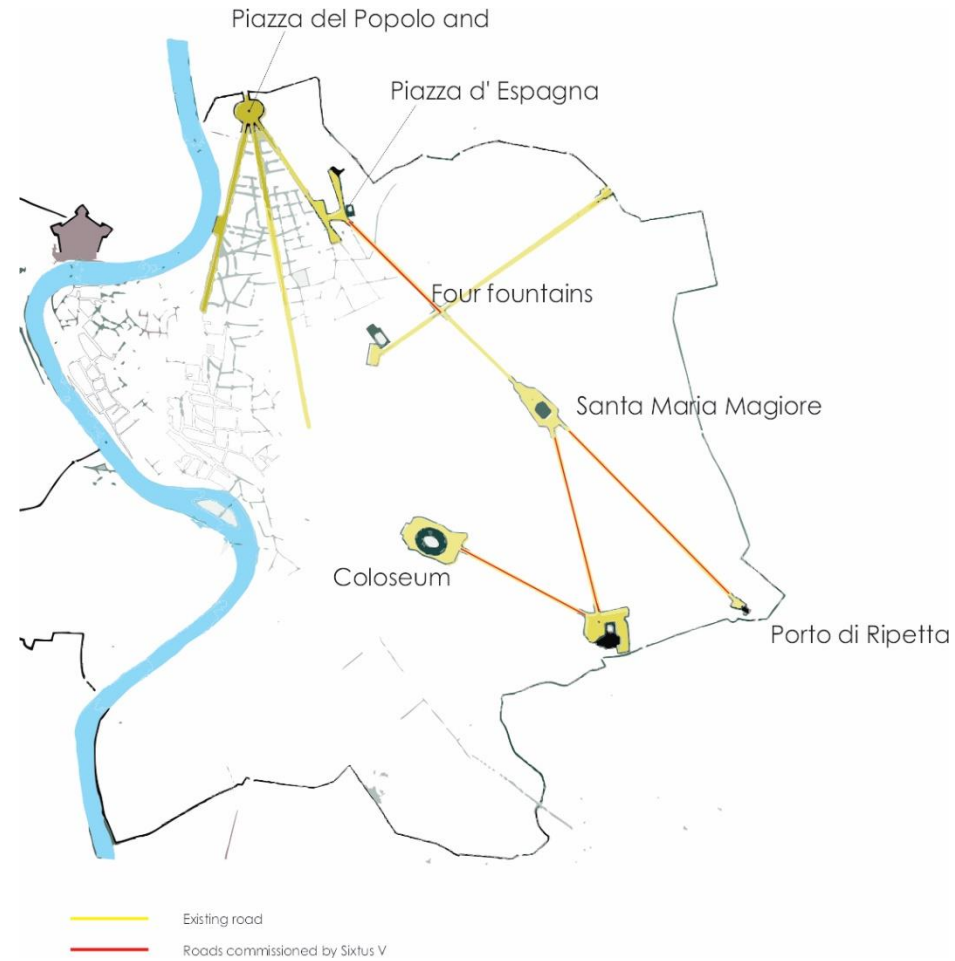
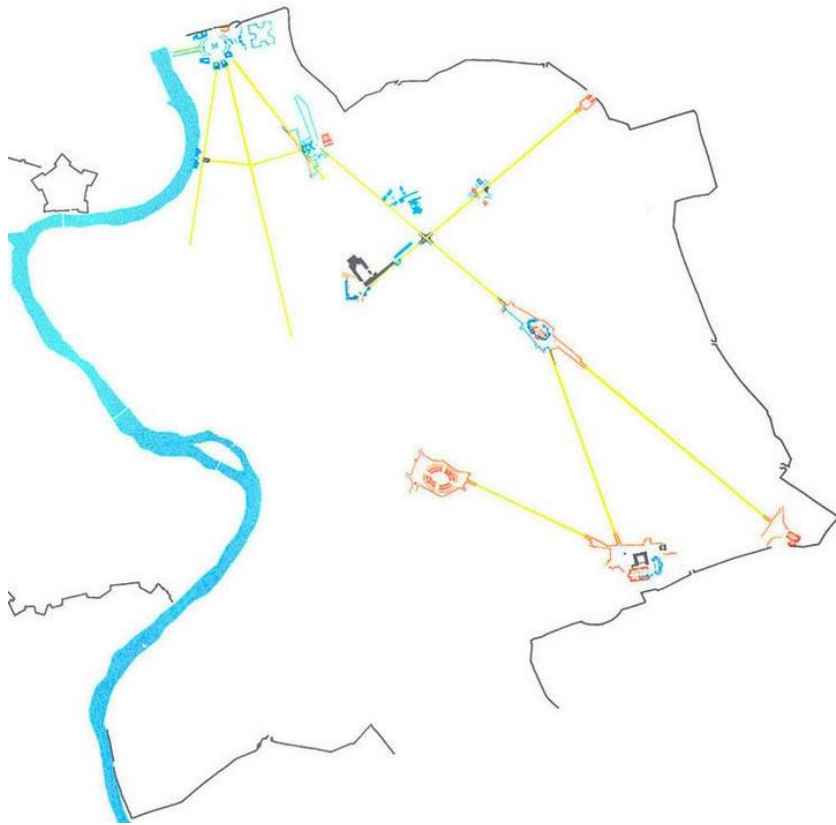


Palazzo della Signoria (Palazzo Vecchio), Florence



Baroque Rome / Sixtus V

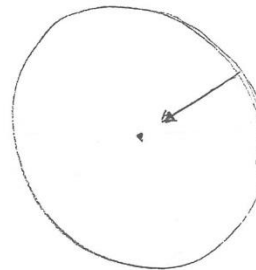
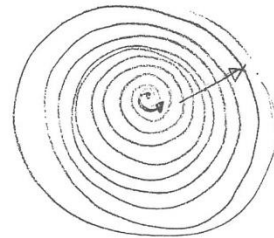
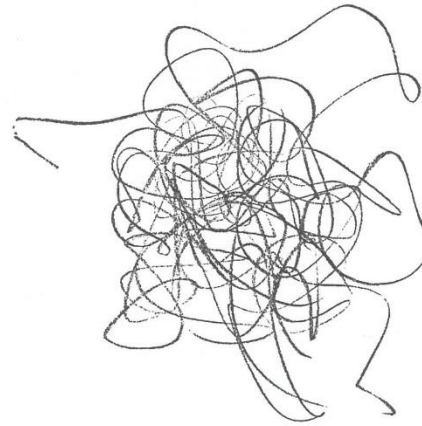
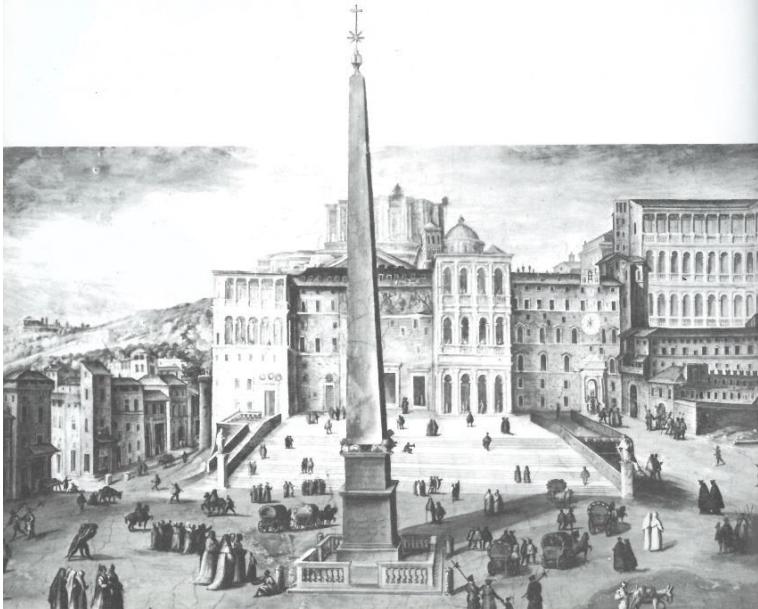
Movement system / E.Bacon



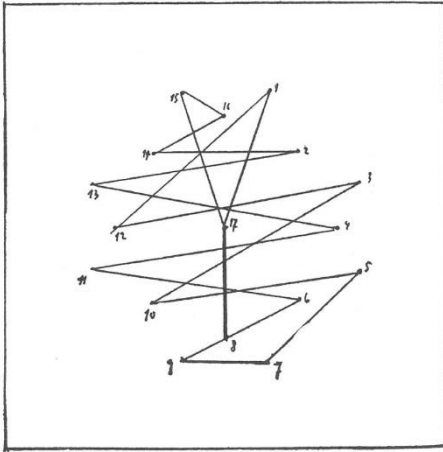
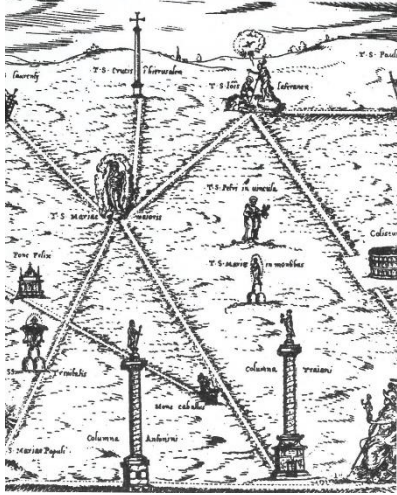
Baroque Rome / Sixtus V



Baroque Rome / Sixtus V

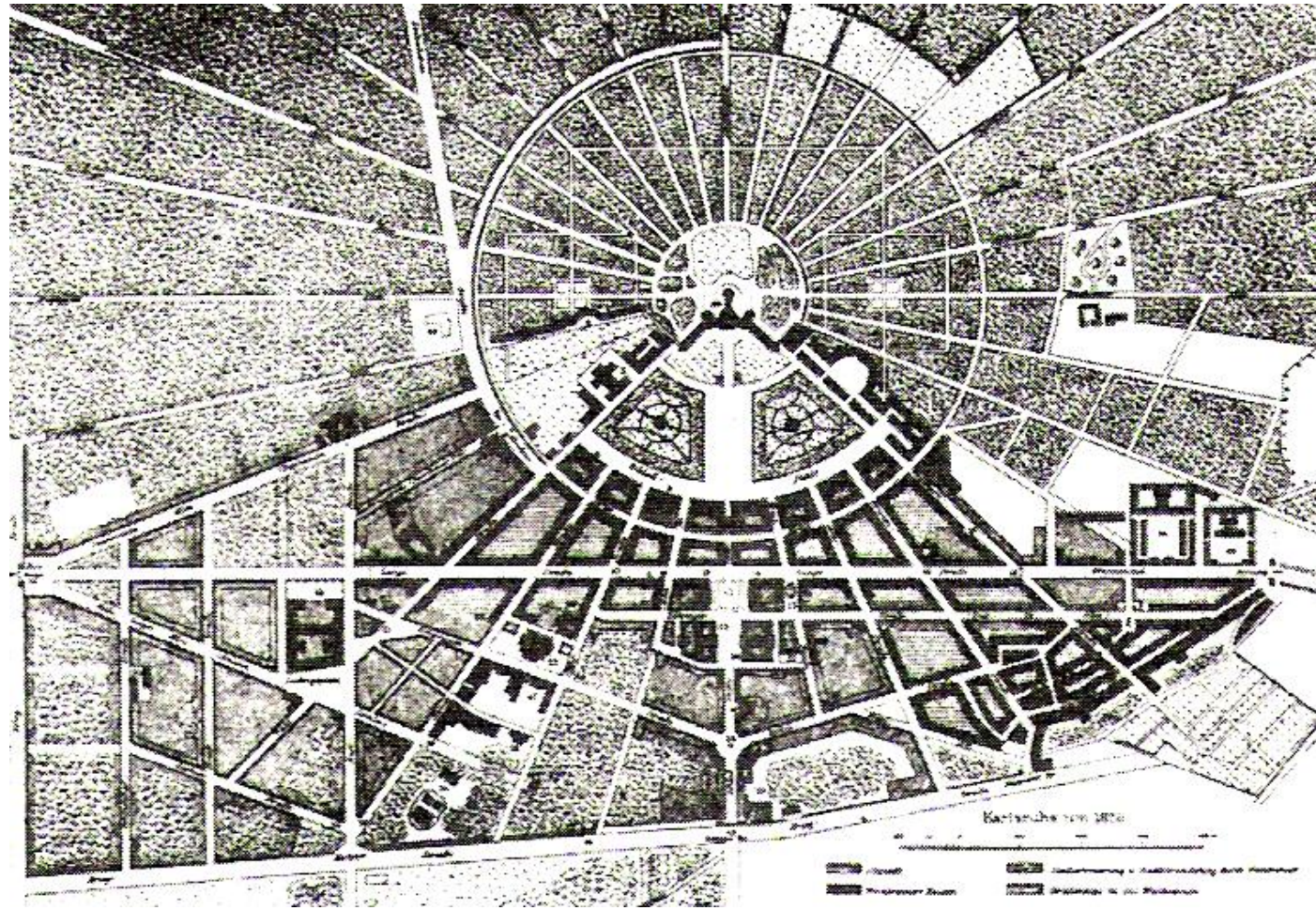


Baroque Rome / Sixtus V



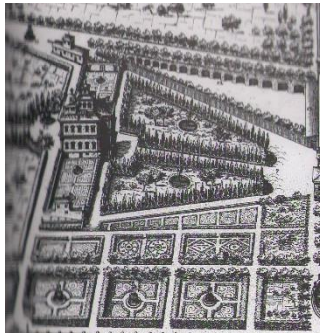
Baroque/ Karlsruhe

- Carl Wilhelm
- Designing palaces, gardens, forests, and urban forms in a single radial illusion
- The focus of the radiation road is a strong centralized politics symbol

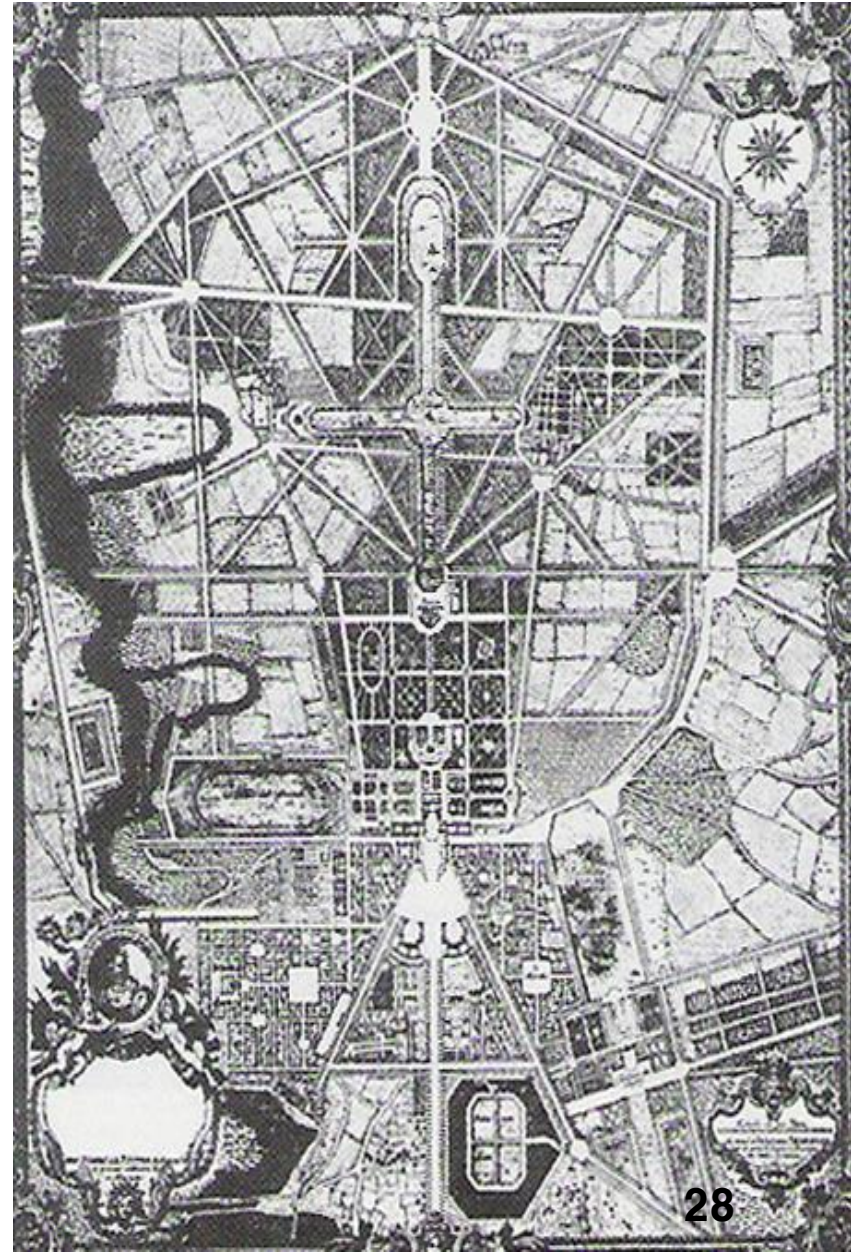
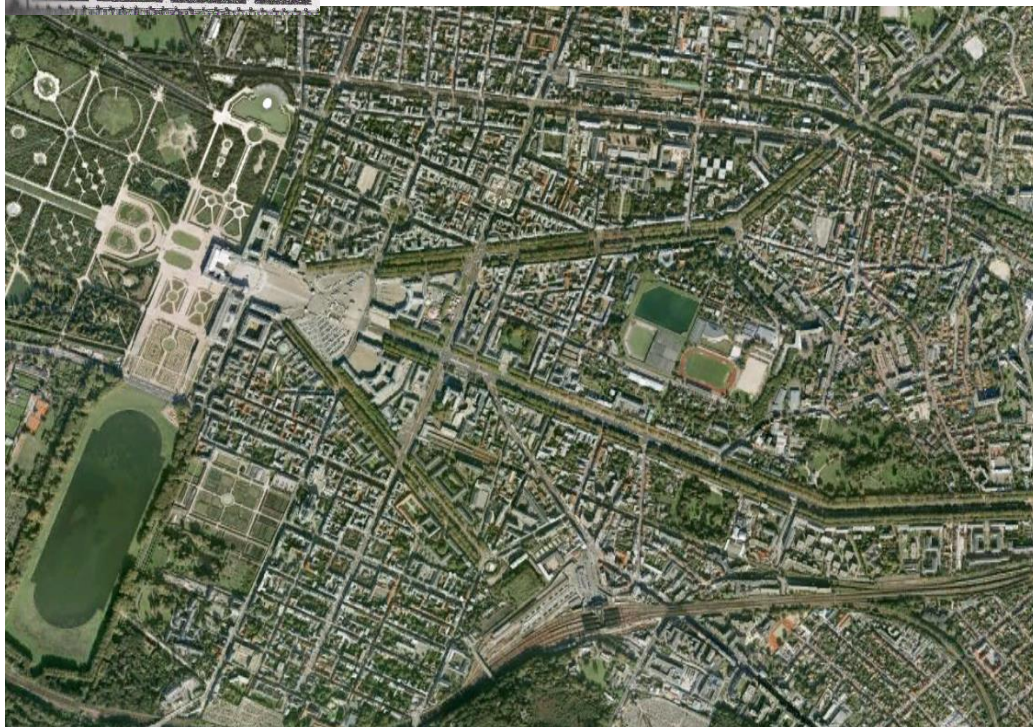


Baroque / Versailles

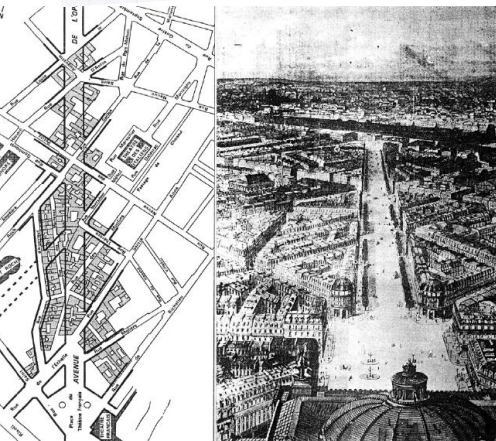
- Exclusive kingship symbol
- Powerful diagonal shape



Rome, Villa Montalto, 1642, three ways of the garden



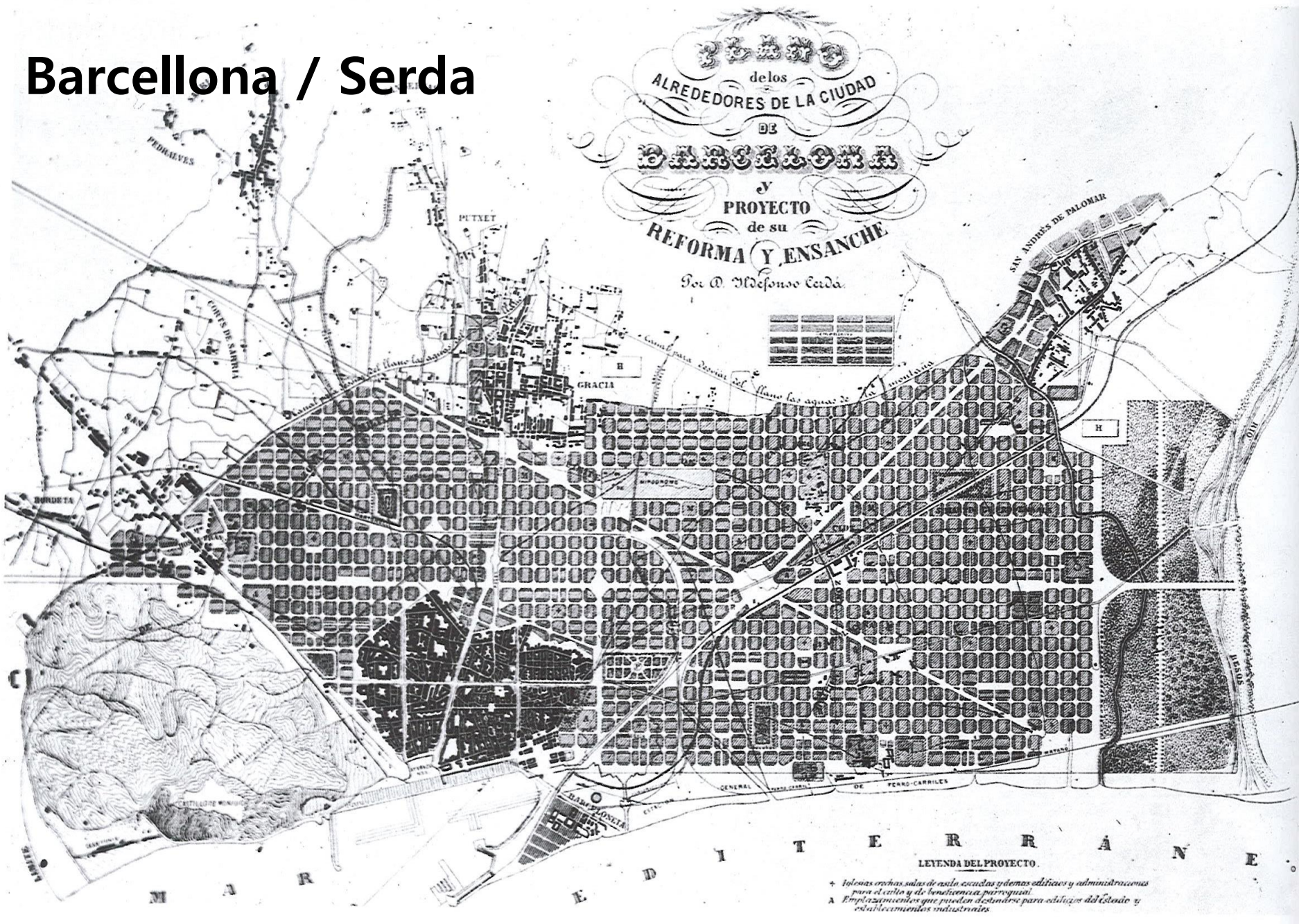
Baroque / Haussman, Paris



Examples of opera street development by Haussman

Block formation by diagonal line generation

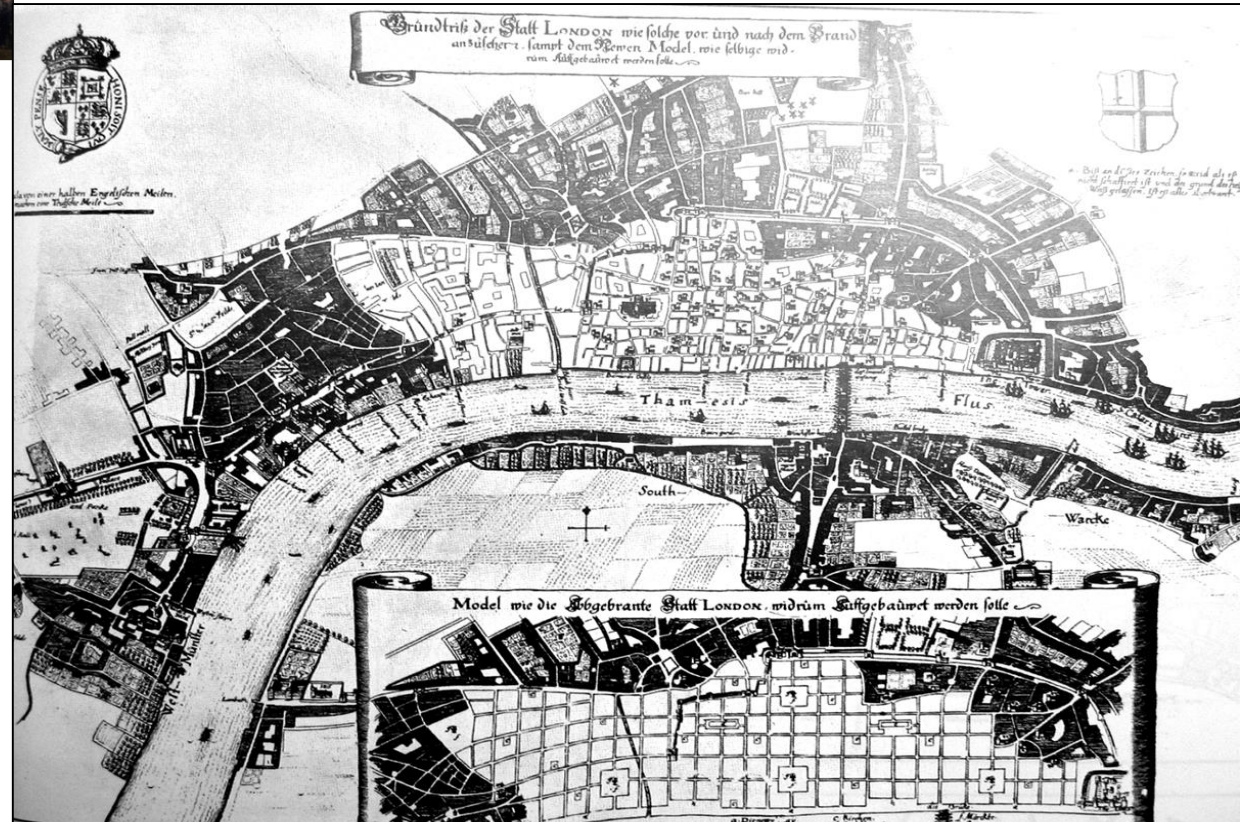
Barcellona / Serda



Great Fire London / Christopher Wren

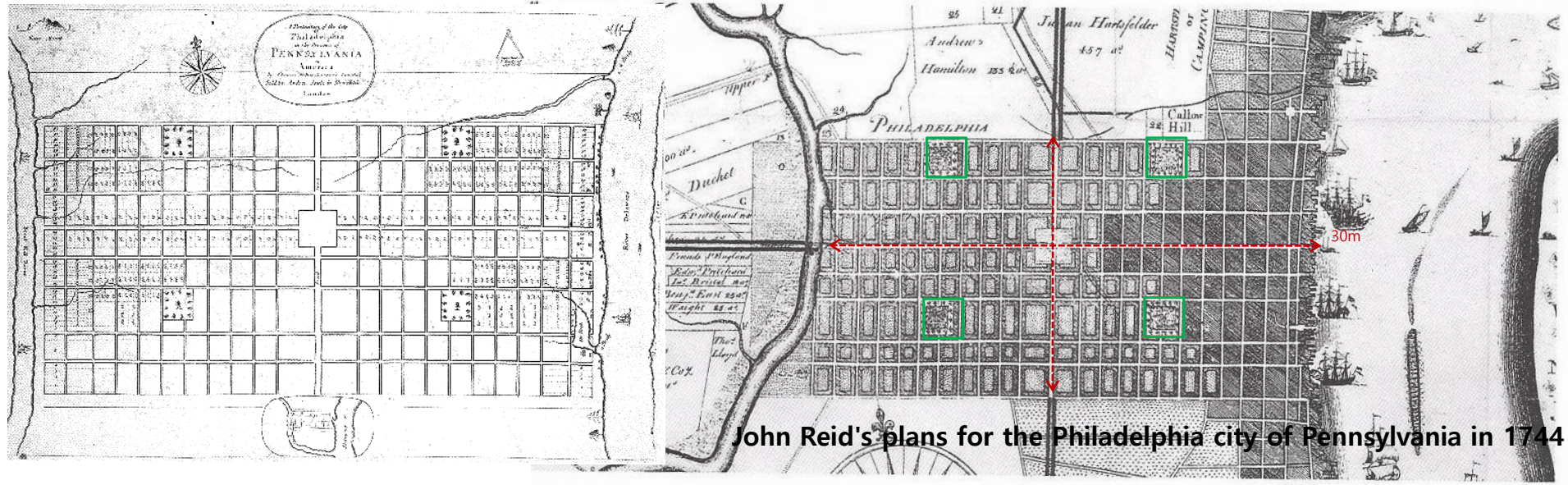


Wren in a portrait by [Godfrey Kneller](#) (1711)



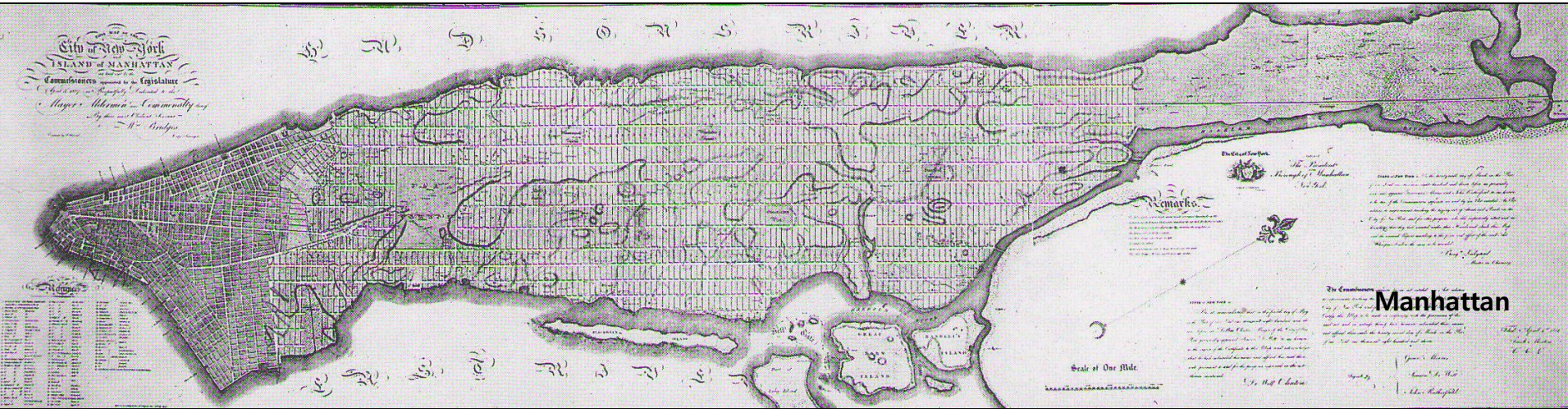
The area destroyed in 1666 in London. (The picture below shows Robert Hooke's reconstruction plan)

America, New Continental



John Reid's plans for the Philadelphia city of Pennsylvania in 1744

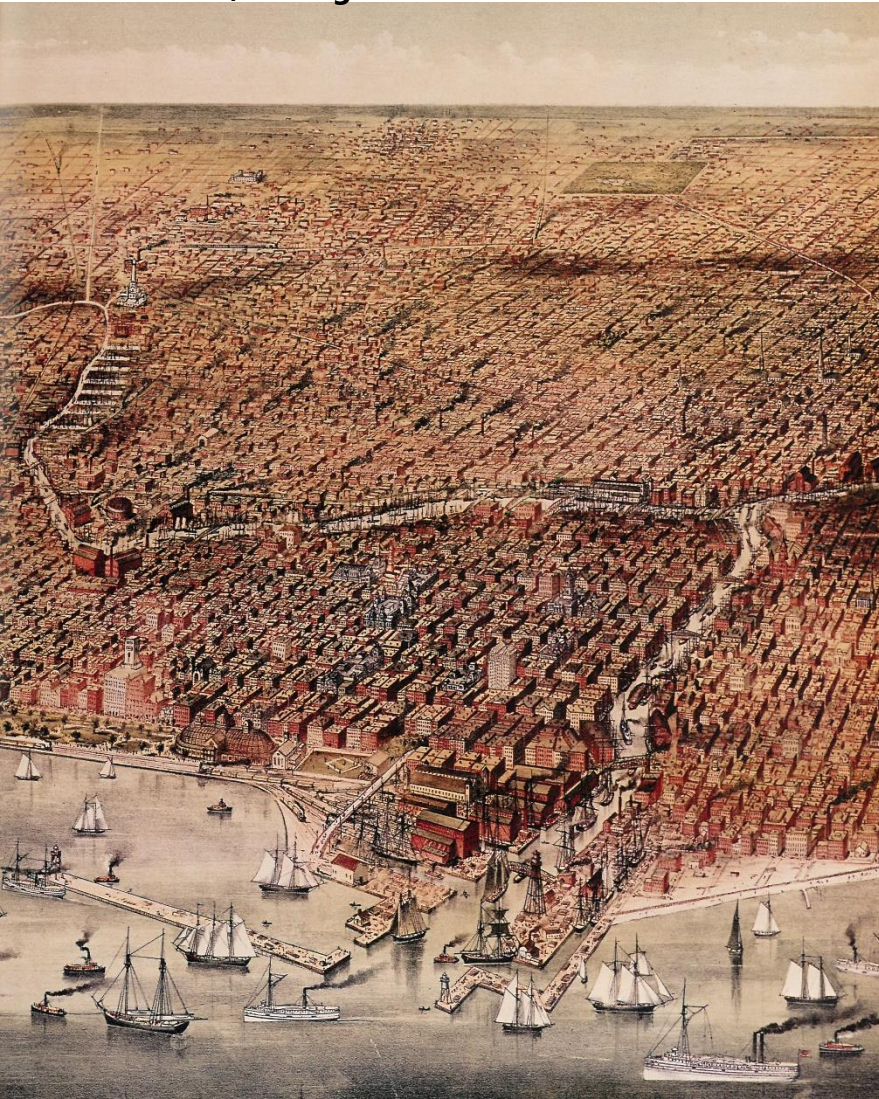
William Penn / Thomas Holme's Portraiture of the City of Philadelphia, 1683



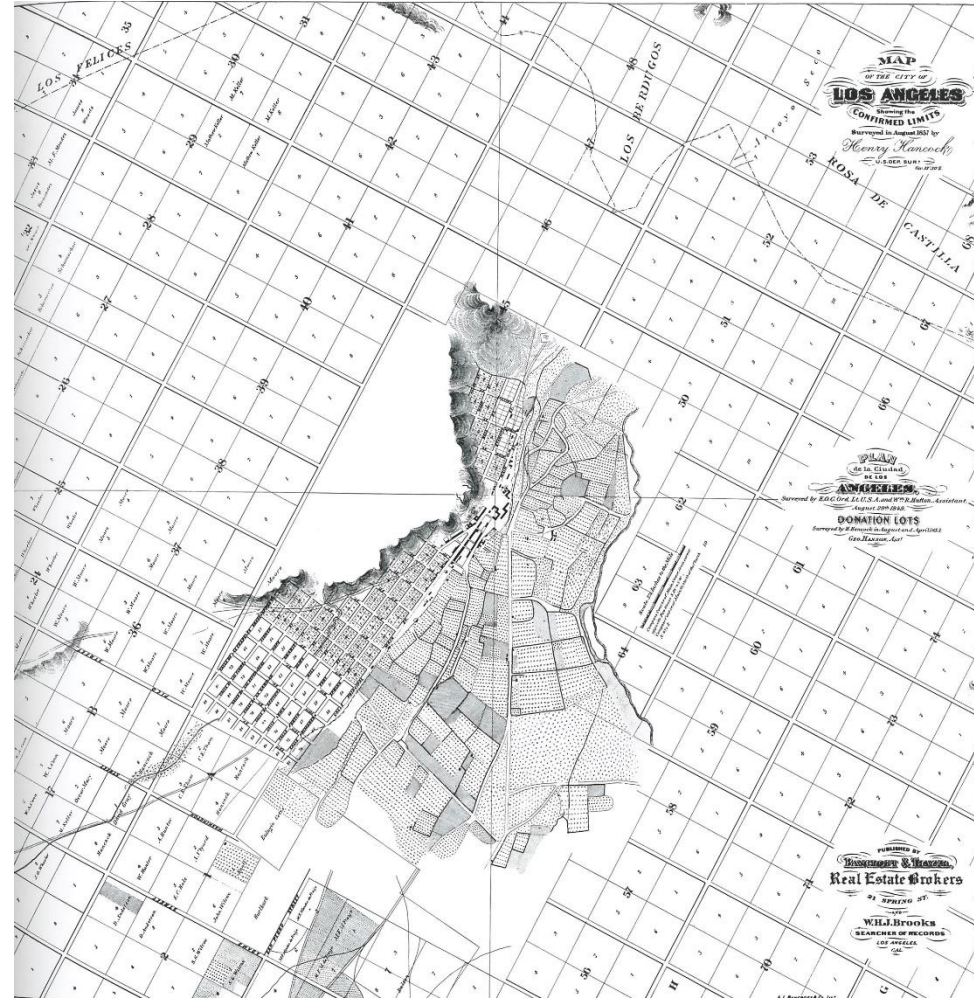
Manhattan

America, New Continental

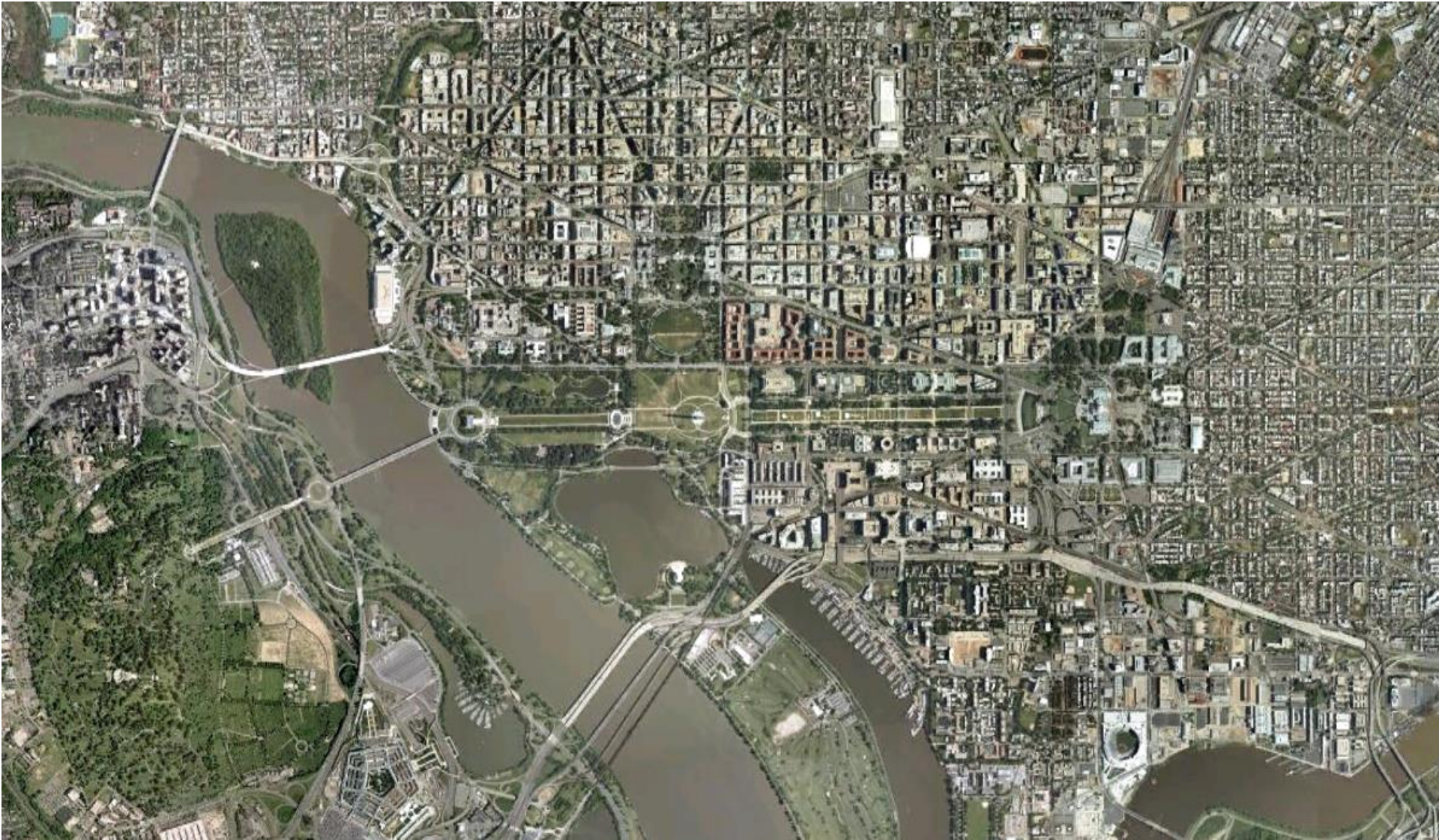
Illinois, Chicago



Los Angeles



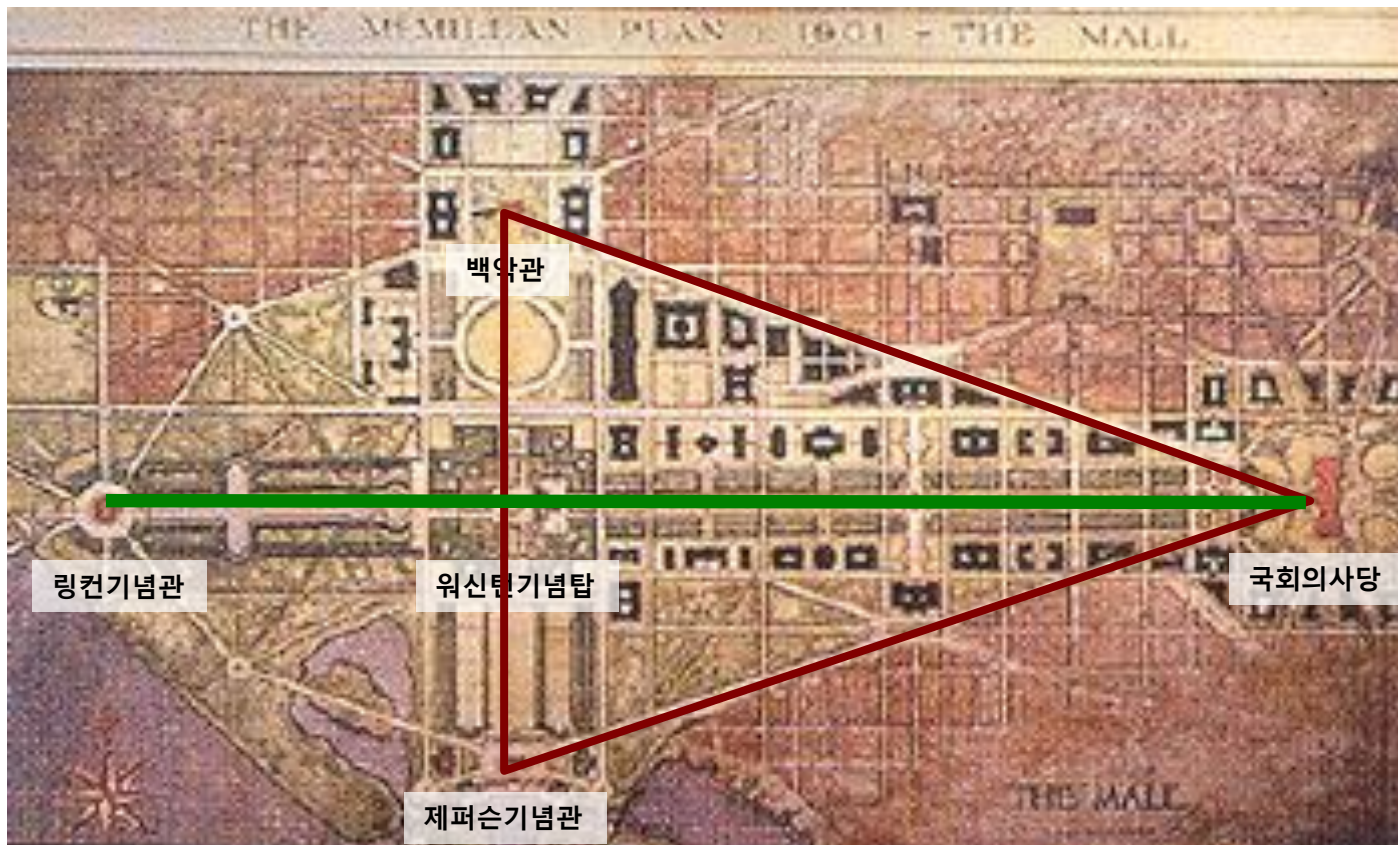
Washington / Pierre L'anfant



Washington / Pierre L'anfant

Macmillan proposal

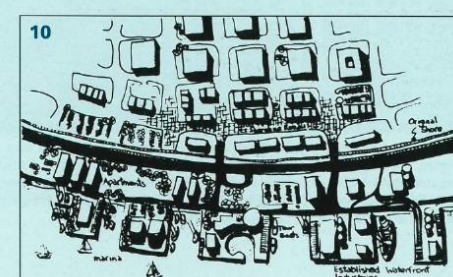
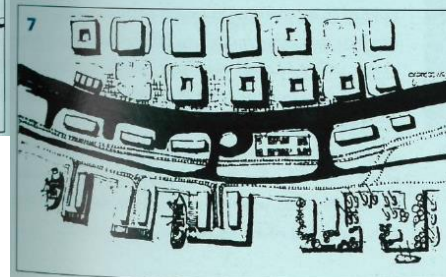
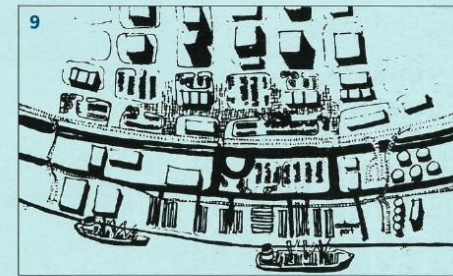
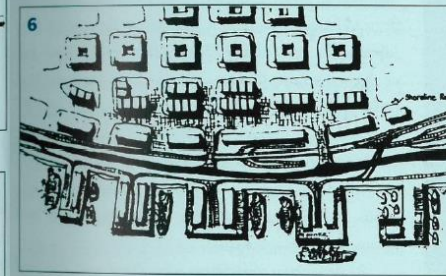
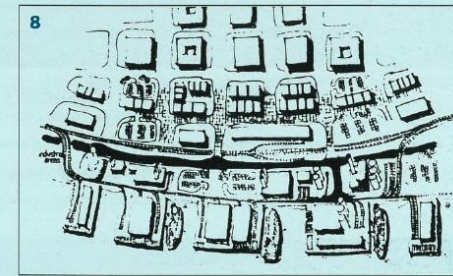
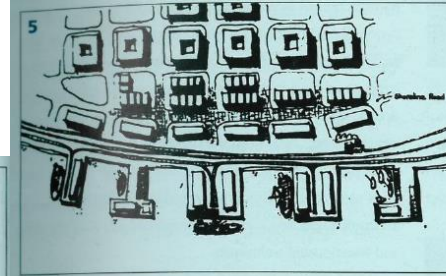
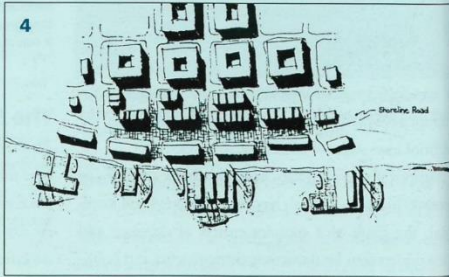
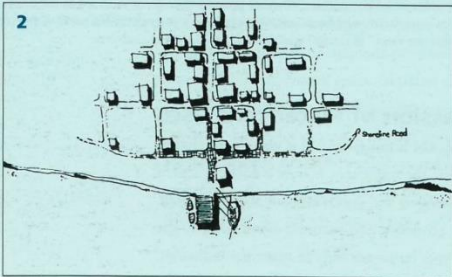
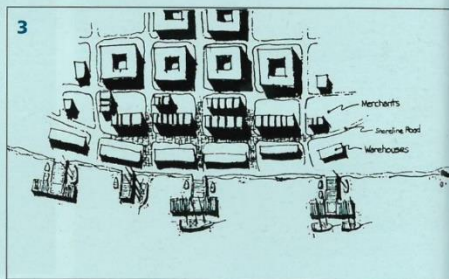
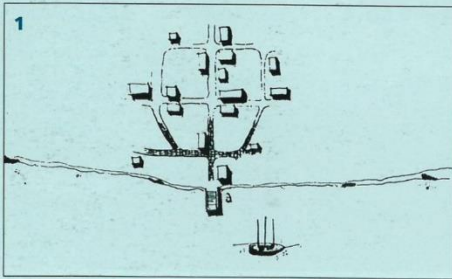
- Based on the idea of Langfang, the city experts Gordon, Omstead, Daniel Burnham,
- The romantic color is rich, but the chest is emphasized by the combination of the two.
- Place Mount Vernon (Washington native) in the downstream of the Potomac River, establish a square around the mall, erect the Jefferson Memorial
- The triangle structure connects the Capitol with the White House and the Jefferson Memorial, and forms a straight line connecting the Capitol, the Mall, the Washington Monument and the Lincoln Memorial.



Transition in Urban Waterfront

Stage	Symbol	Period
	○ city ● port	
I Primitive cityport		Ancient–medieval to 19th century
II Expanding cityport		19th–early 20th century
III Modern industrial cityport		mid-20th century
IV Retreat from the waterfront		1960s–80s
V Redevelopment of the waterfront		1970s–90s

Transition in Urban Waterfront

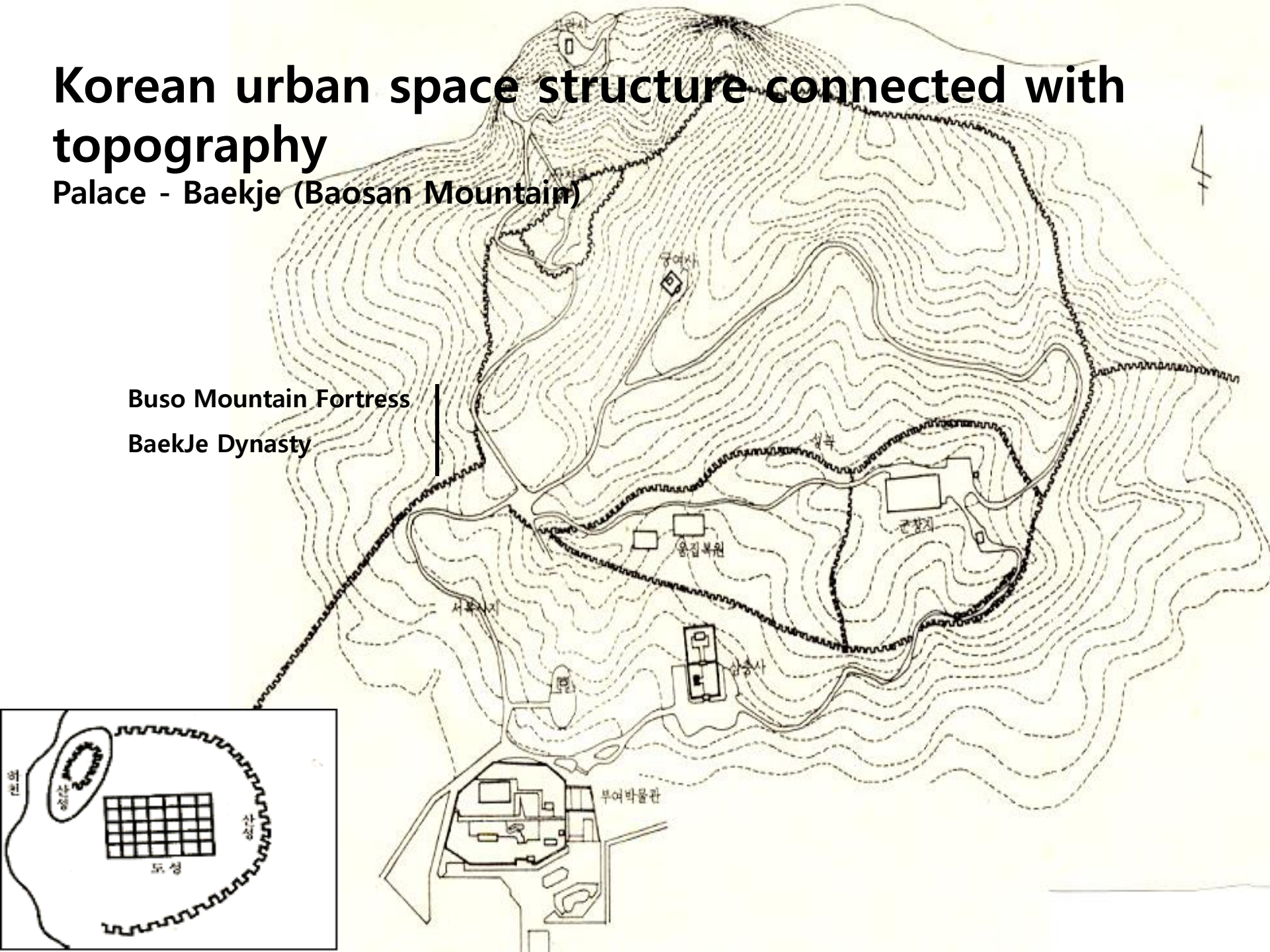


#2. Urban Structure before Modern age in Eastern and Korea

Korean urban space structure connected with topography

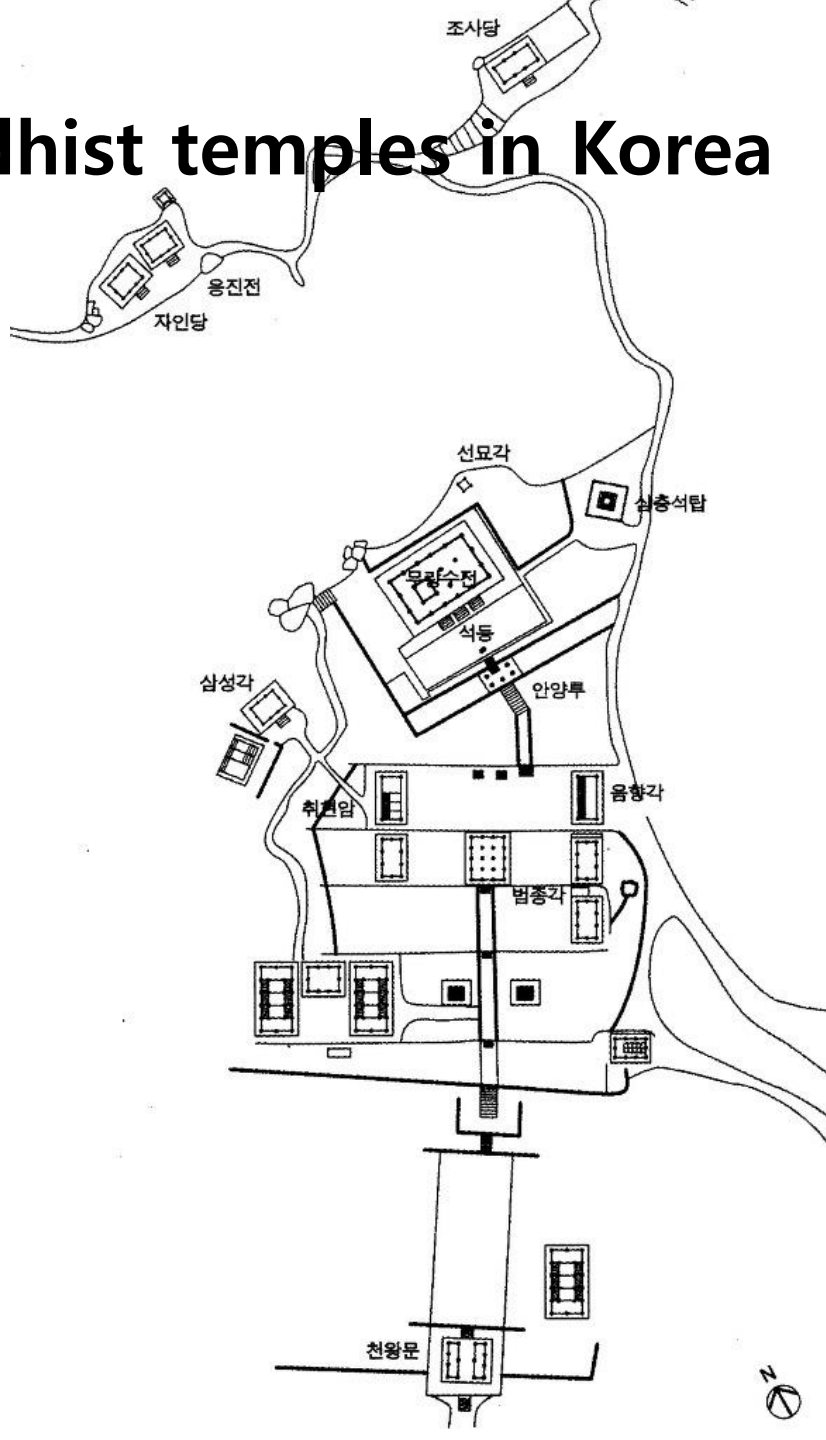
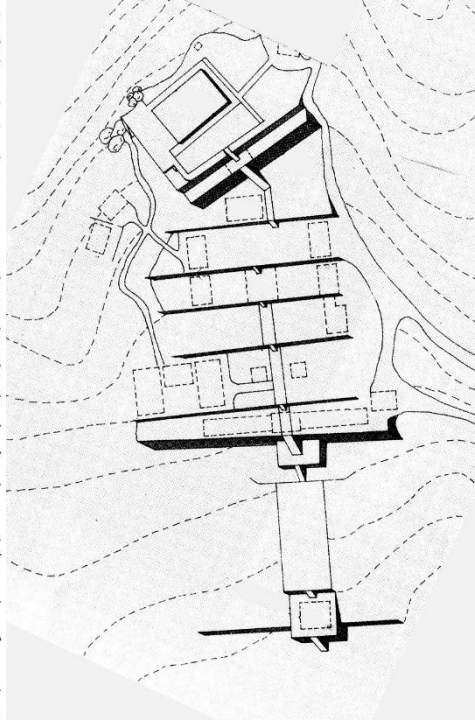
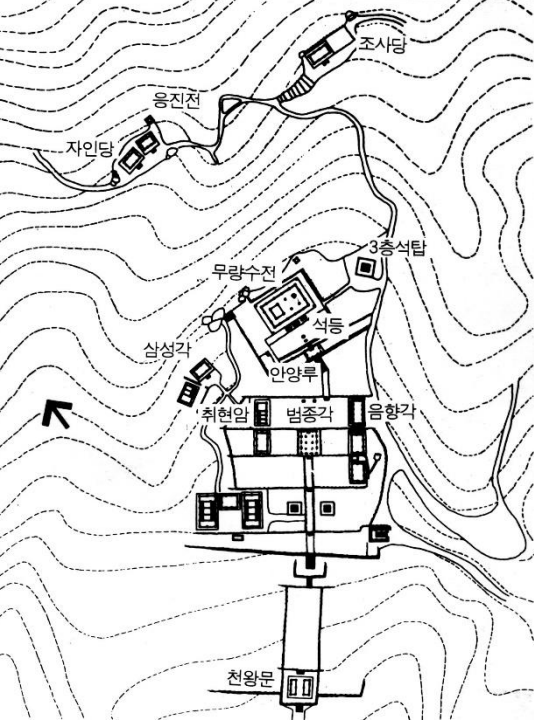
Palace - Baekje (Baosan Mountain)

Buso Mountain Fortress
BaekJe Dynasty



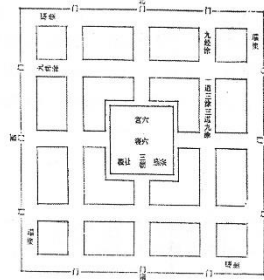
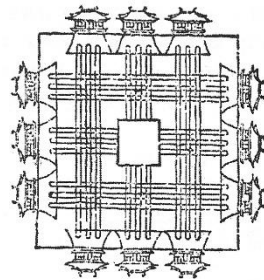
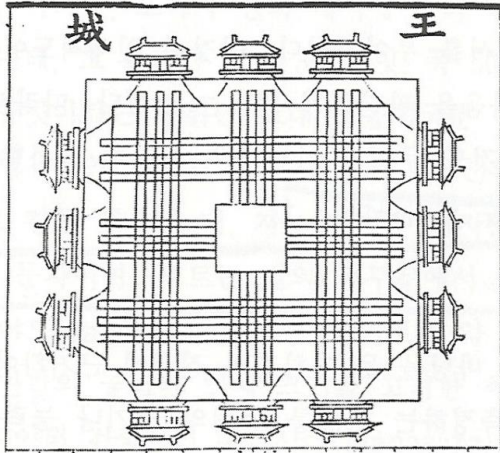
The spatial structure of Buddhist temples in Korea

Buseoksa Youngju

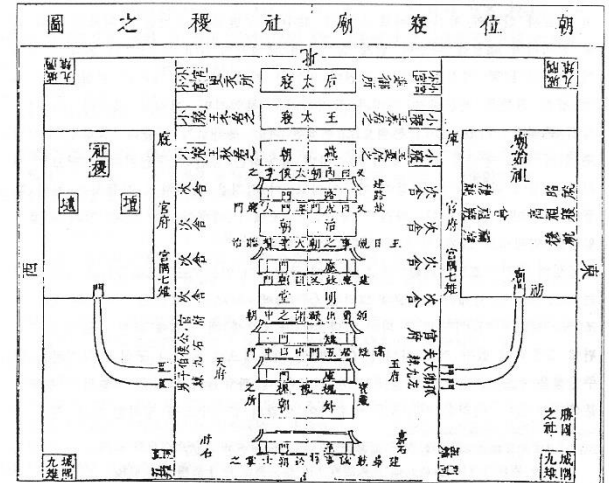


Traditional Asian urban structure of Grid pattern

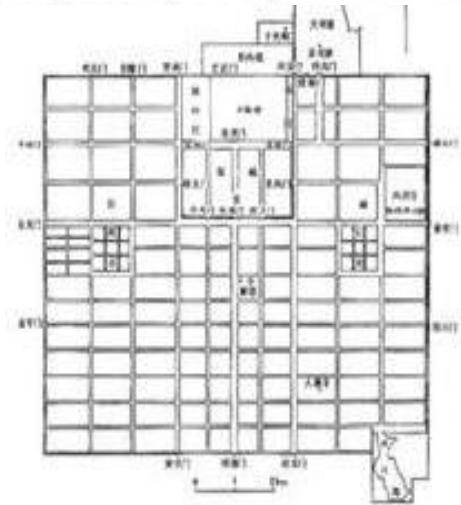
Capital Cities



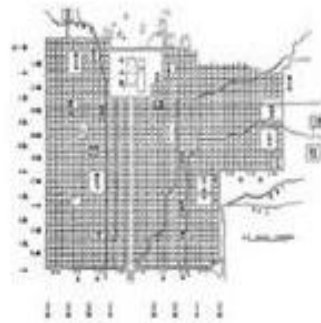
聶崇義 「三禮圖」의 「王城圖」와
戴震의 「考工記圖」의 「王城圖」



「周禮」의 궁성계획에 따른 궁궐내부구조



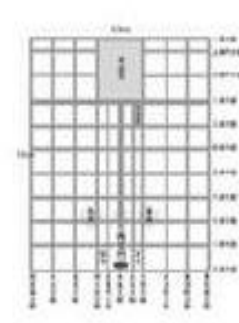
장안성



평성경



등원경



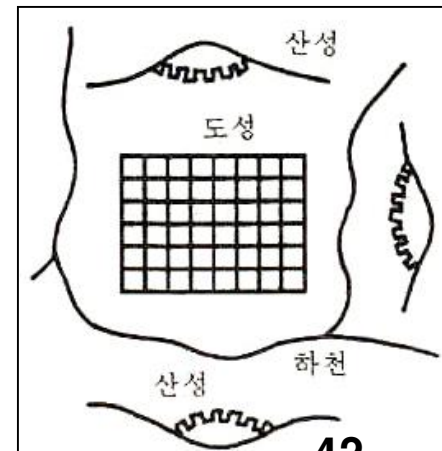
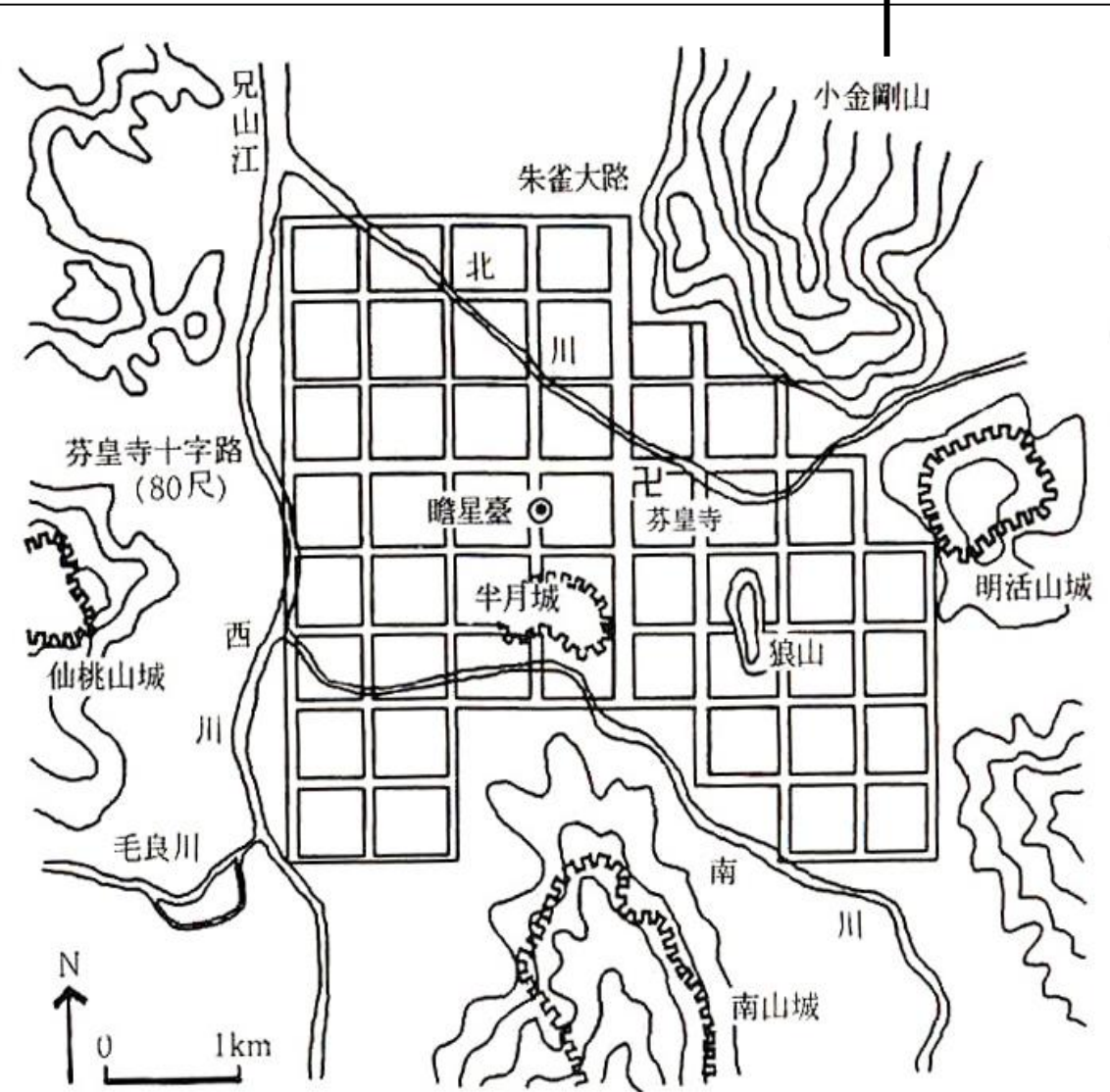
평안경



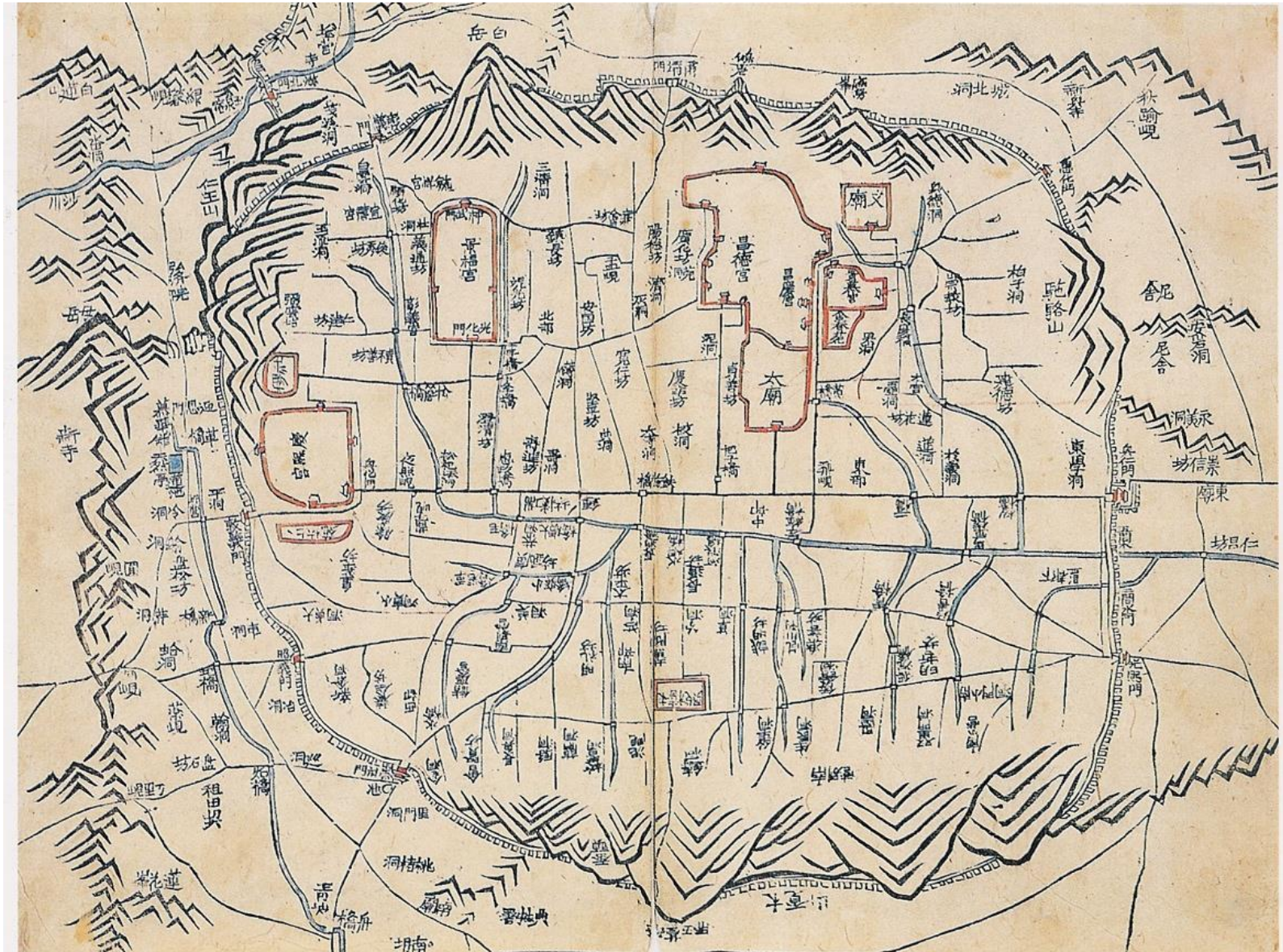
상경용천부

Traditional urban structure of Grid pattern

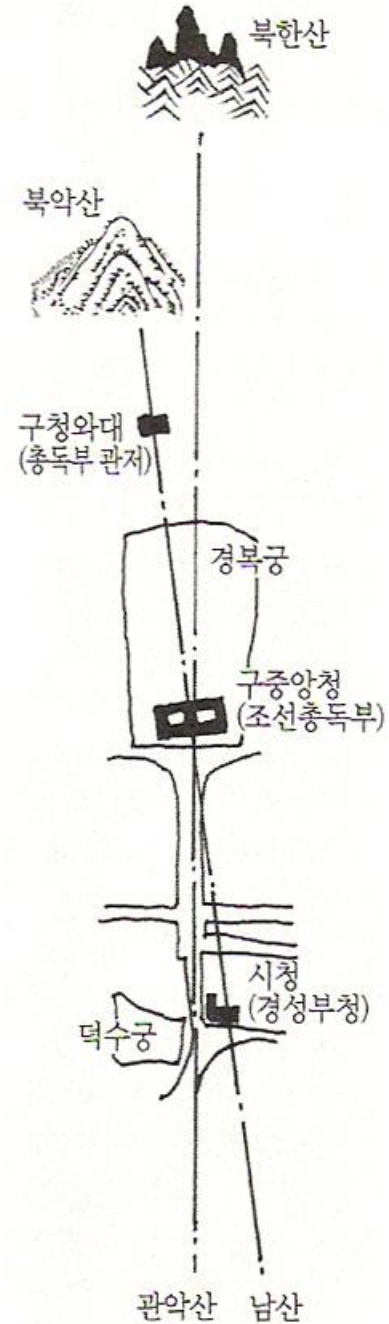
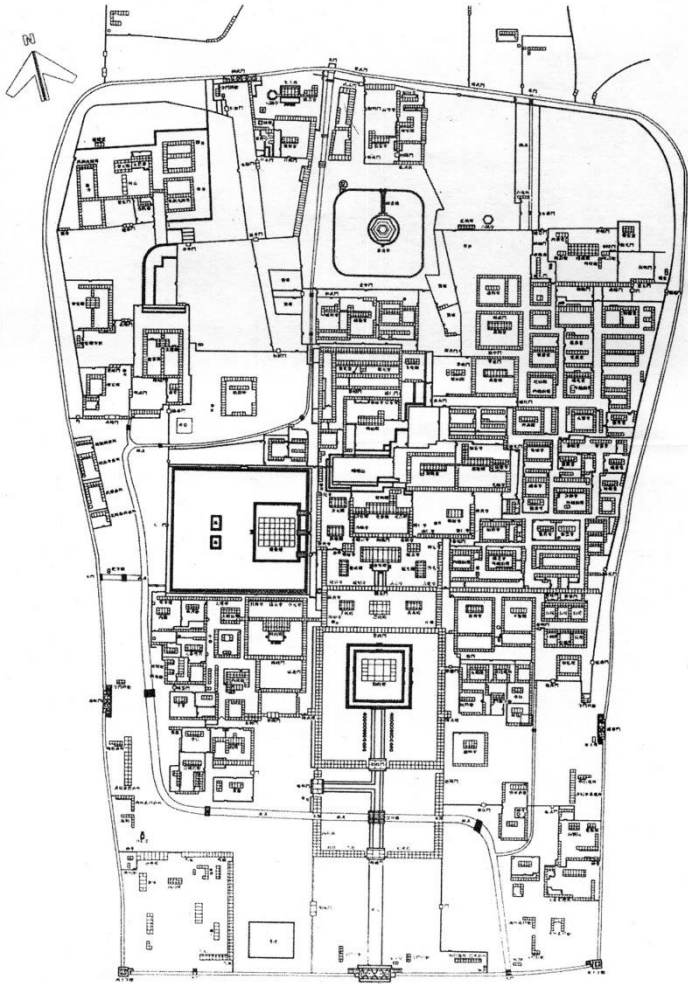
Palace-Shinra Dynasty (Kyungju City)



Old Seoul, Hanseongbu

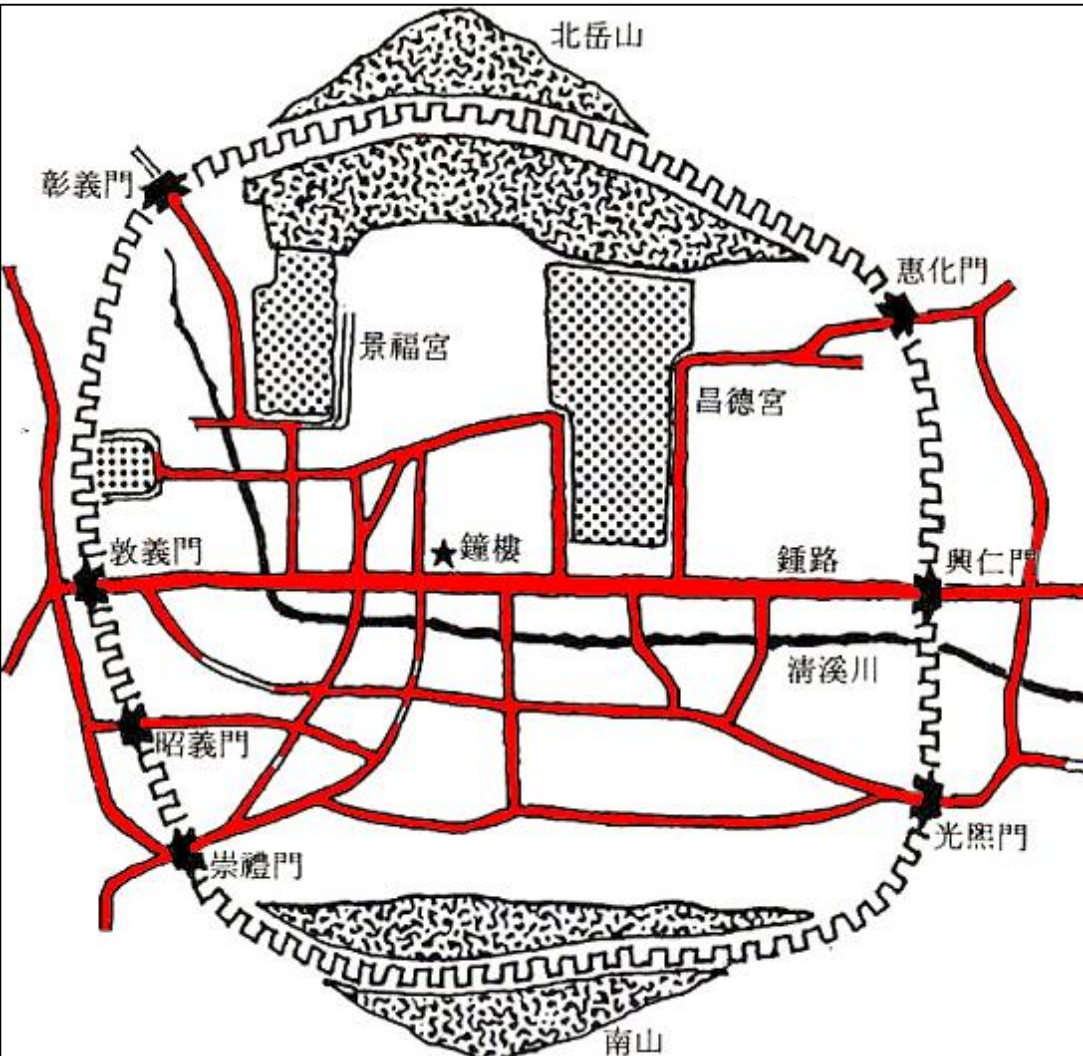
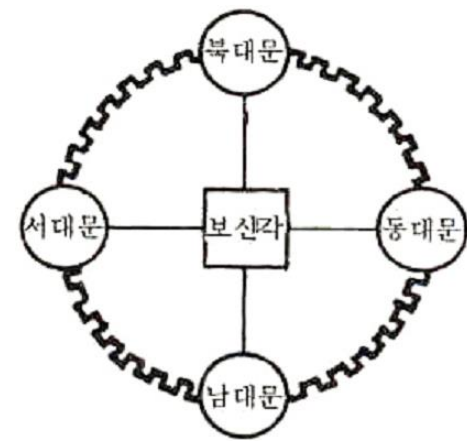


Old Seoul, Hanseongbu, Palace



「北闕圖形」과 「京都圖」

Old Seoul, Hanseongbu, Palace



1392, 조선창업
1393, 한양천도

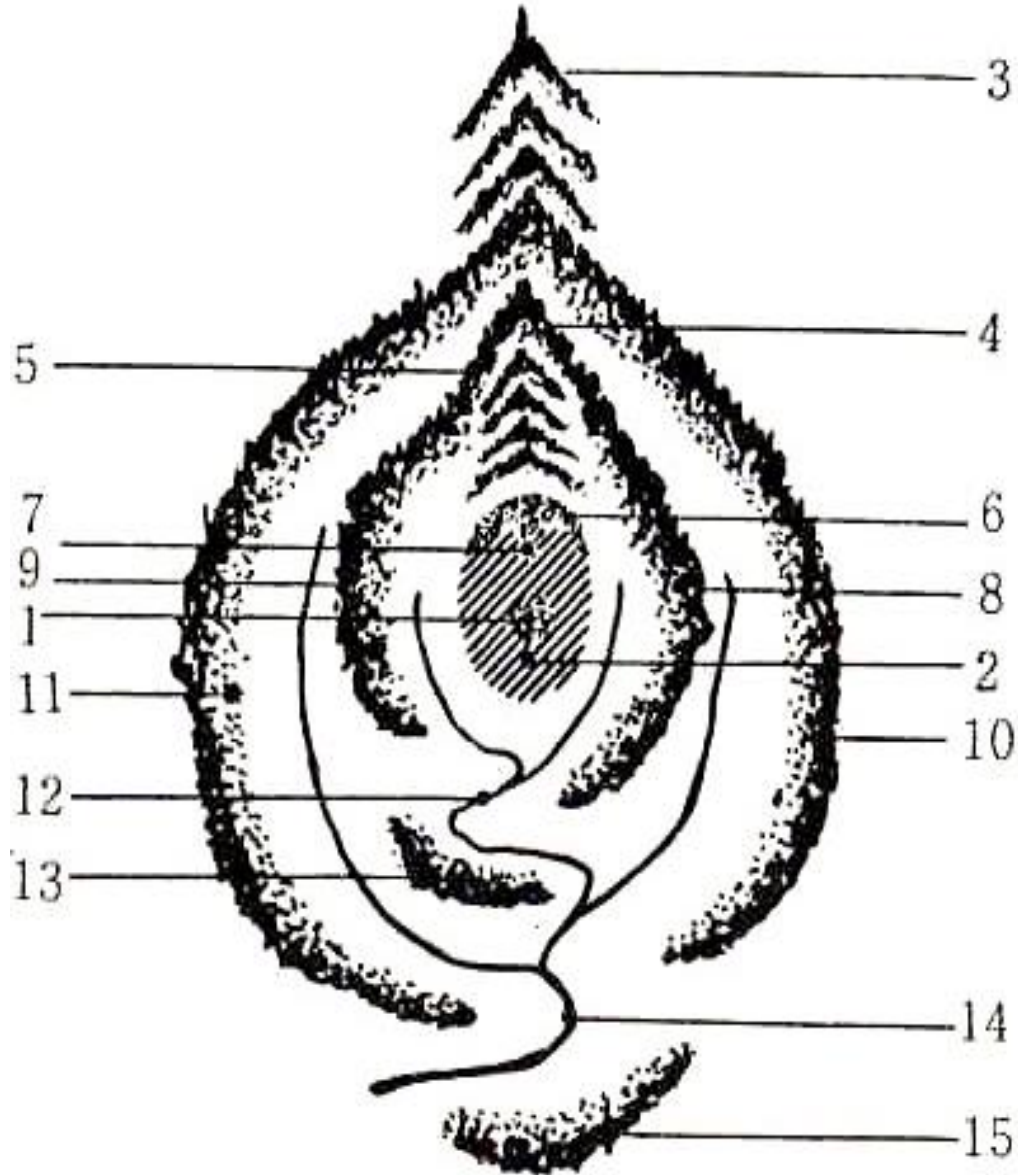
계획원리

- 풍수지리+유교

계획가

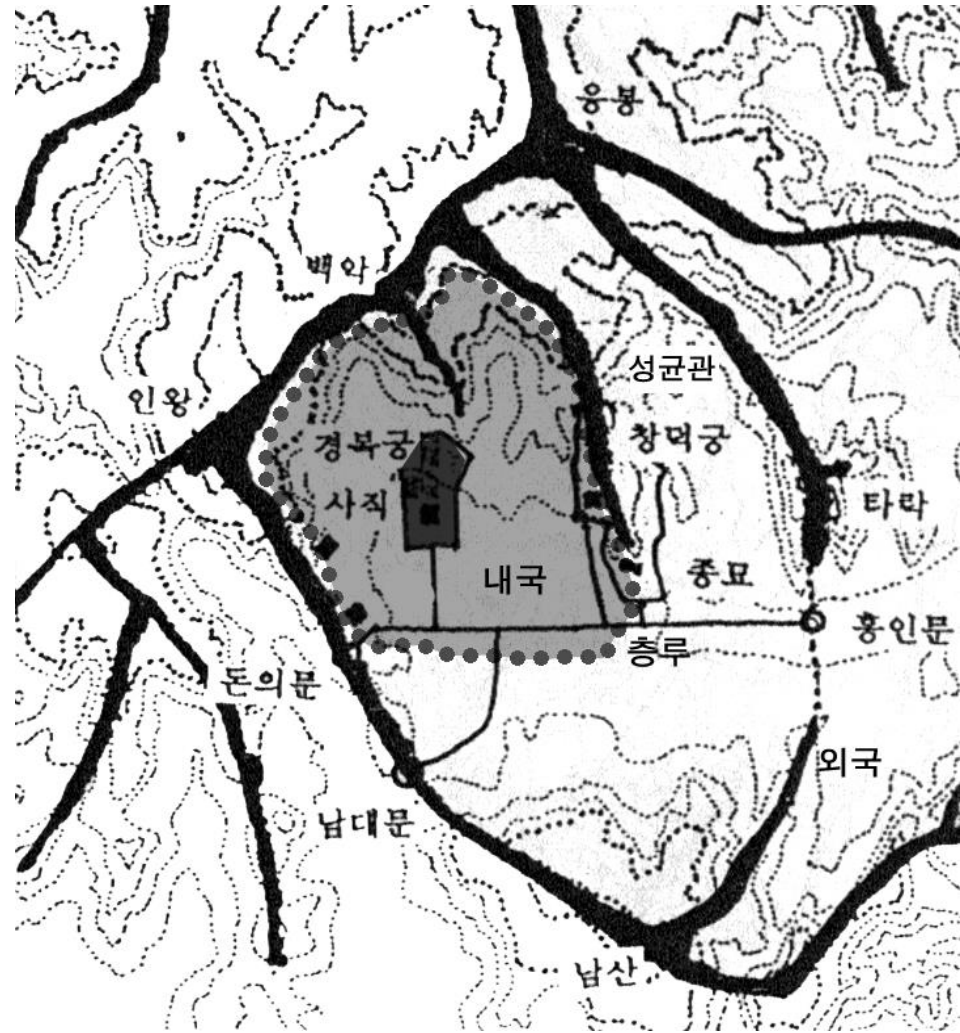
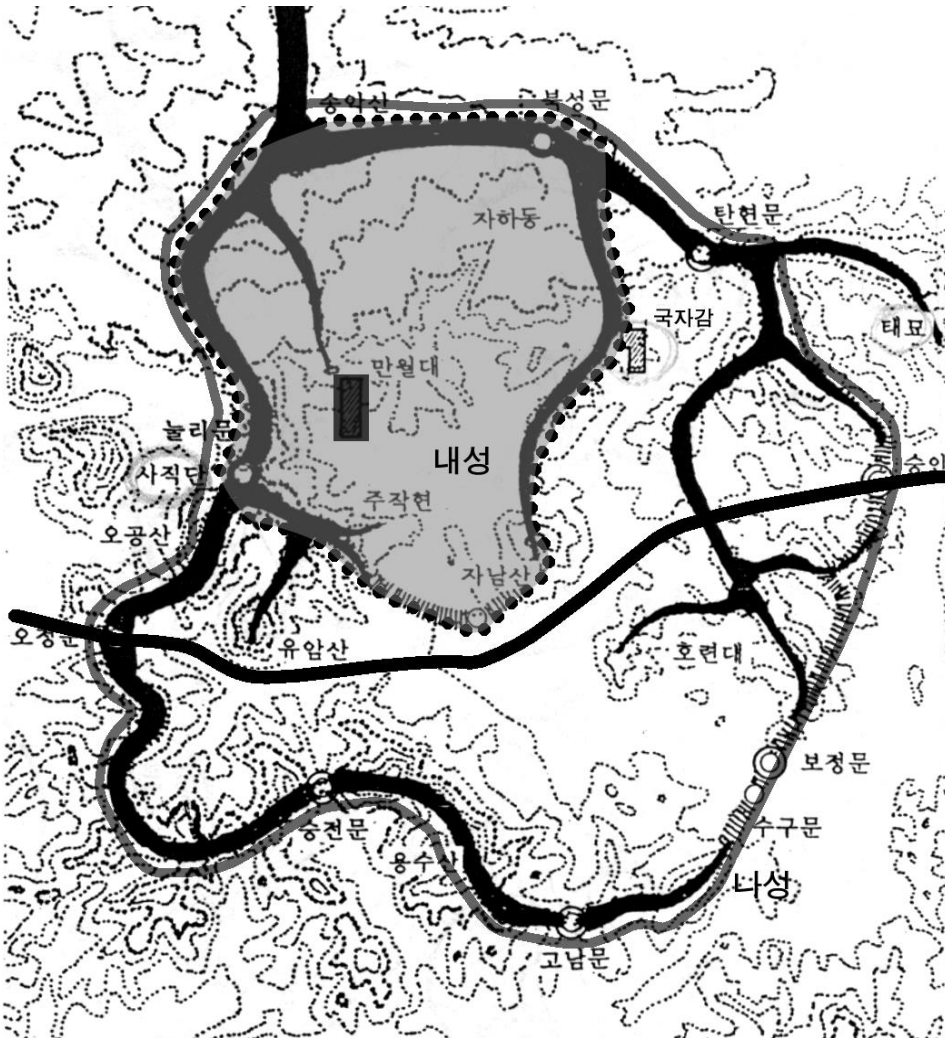
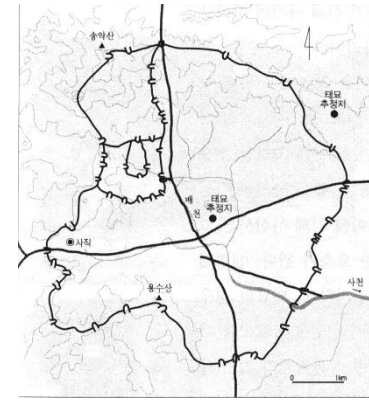
- 입지:무학, 하륜, 정도전
- 기본계획:신도궁궐조성도감
- 궁궐배치:정도전
- 건설실무:박자청

Feng Shui, 풍수지리

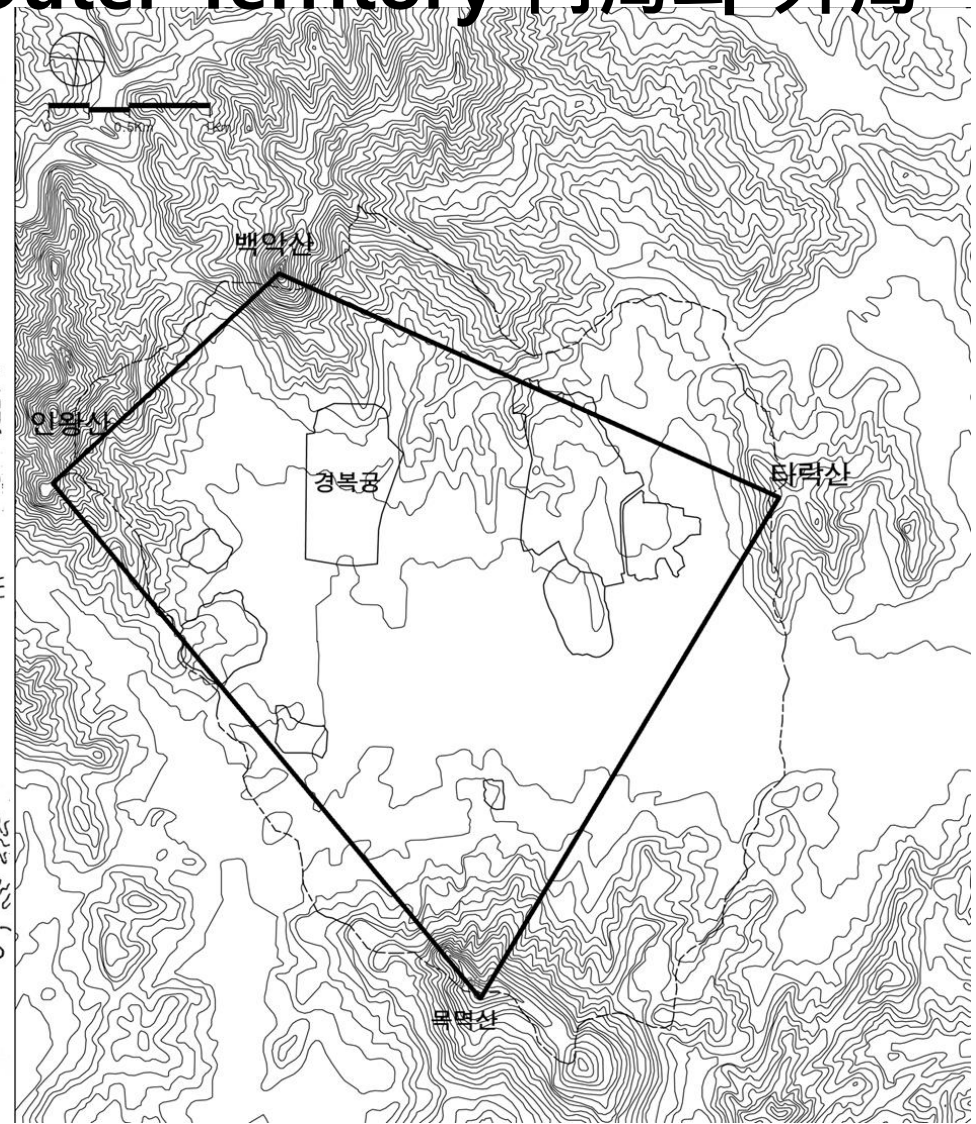
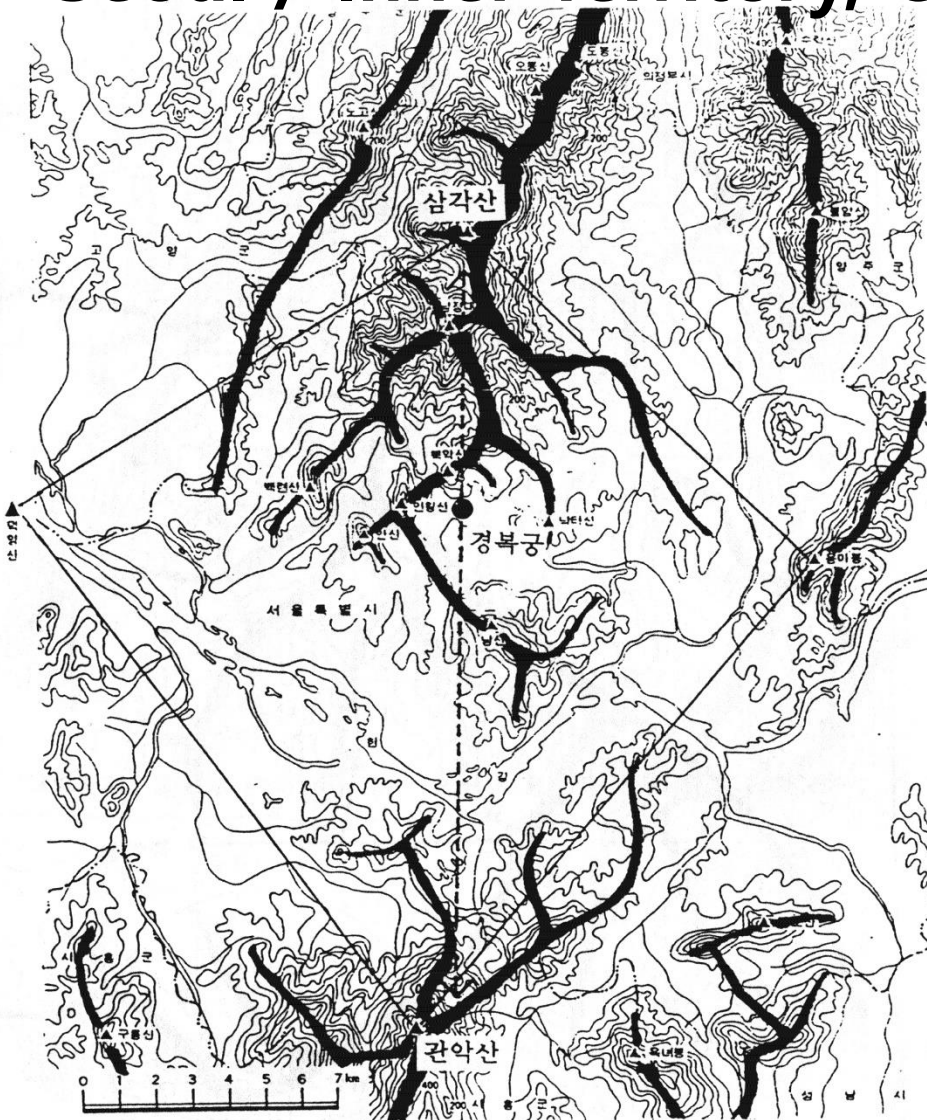


Korea(Gaekyung) and Joseon(Seoul)

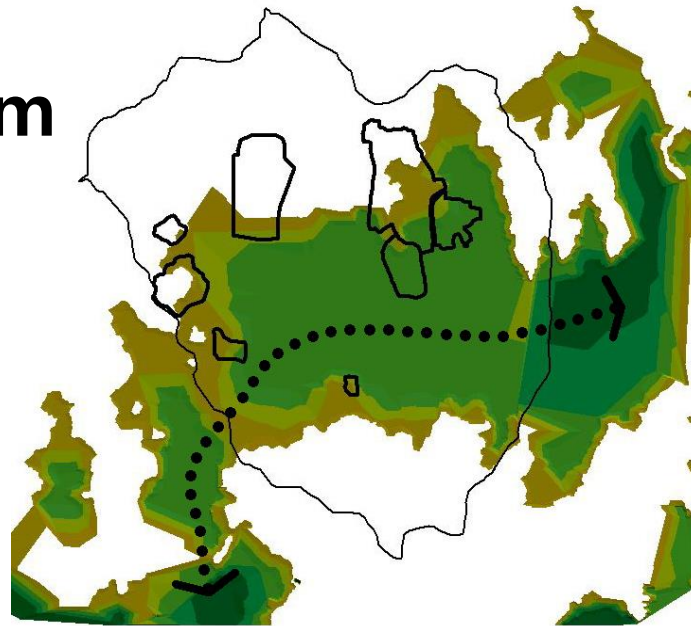
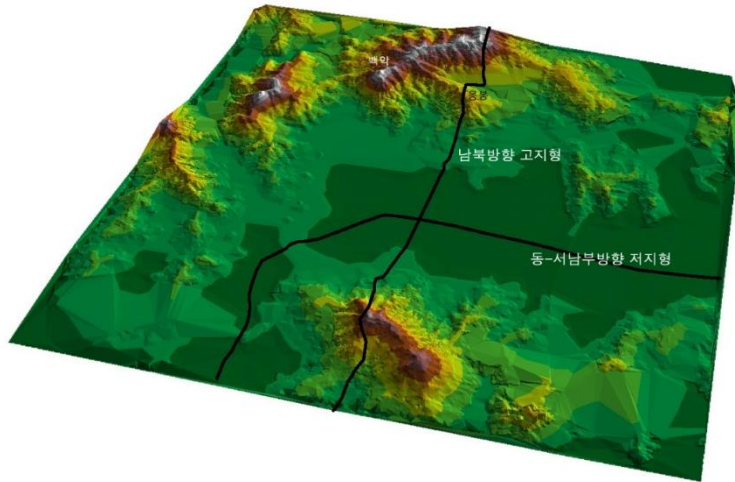
開京과 漢城府의 입지구조 - 권영상, 2003



Seoul / Inner Territory, Outer Territory 內局과 外局



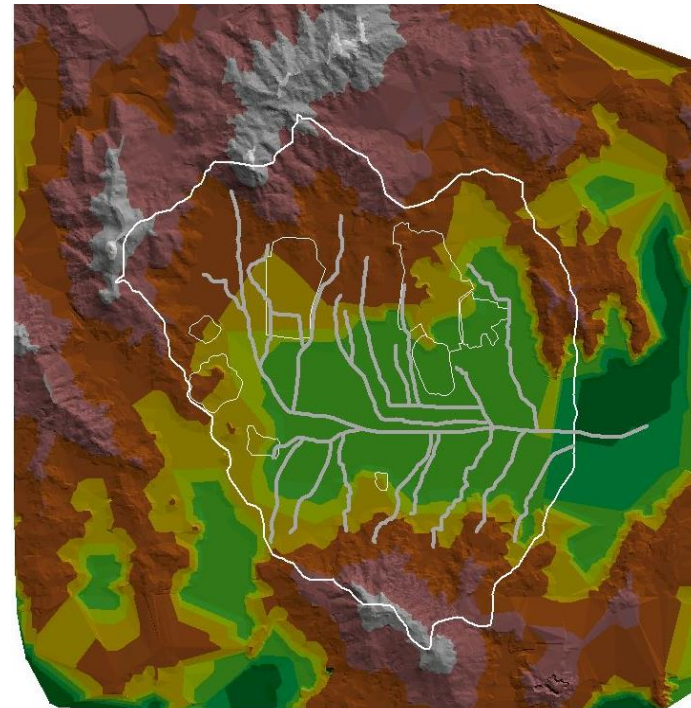
Seoul, Topography System



開京과 漢城府의 입지구조 - 권영상, 2003



19 漢城府와 로마의 도시형태와 지형
한성부의 지형은 수치지형도를 바탕으로 작성, 로마의 지형은 Edmund N.Bacon, *Design of Cities*에서 인용



Spatial Structure of Korean traditional village

Andong Hahoi



Spatial Structure of Korean traditional village

Andong Hahoi



Urban Structure of Korean traditional village

Bukchon Hanok Village

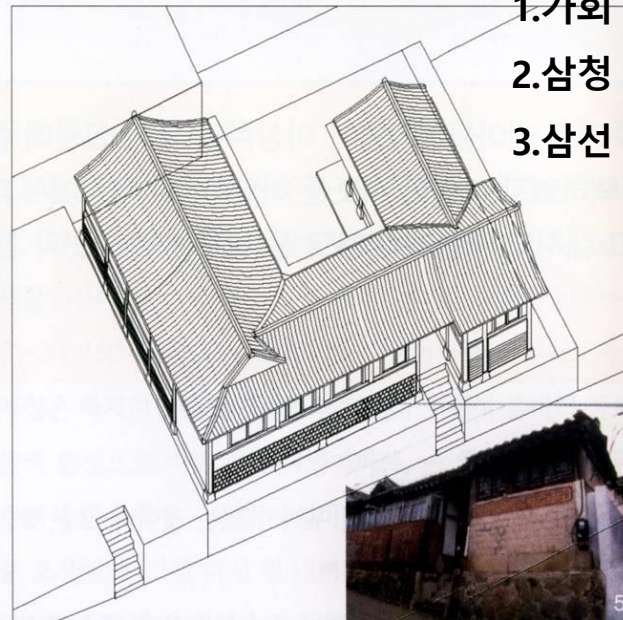
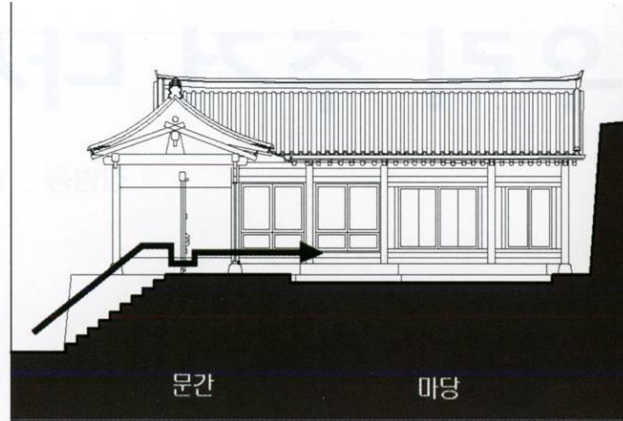
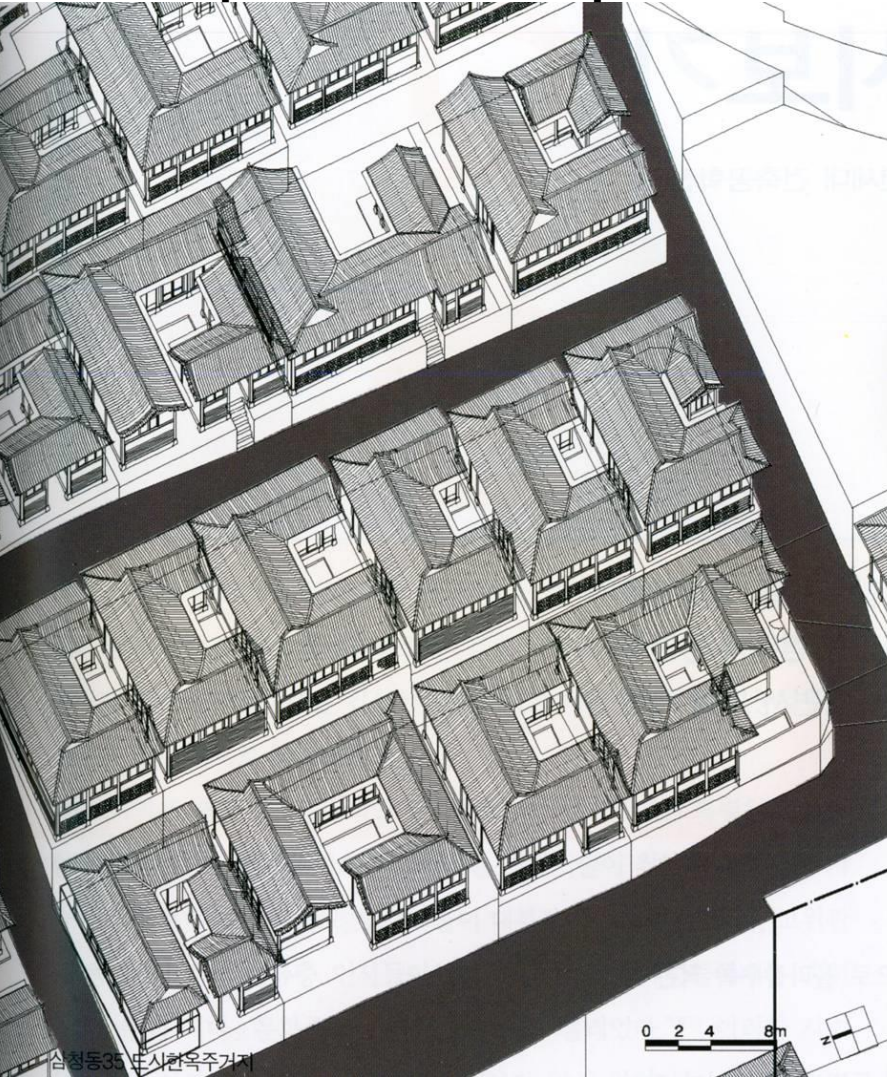
The Japanese colonial period (1900~1950), 마을 공간구조질서



Urban Structure of Korean traditional village

Bukchon Hanok Village

The Japanese colonial period (1900~1950)



- 1.가회 31,33 도시한옥주거단지
- 2.삼청 35 도시한옥주거단지
- 3.삼선 5 도시한옥주거지

Urban Structure of Korean traditional village

Junju Hanok Village

The Japanese colonial period (1900~1950)



#3. 근대이전 도시형태와 도시공간구조 연구예시

주종원, 1981. 서울시 도시형태의 형성에 관한 연구, 국토계획

서울市 都市形態 形成에 關한 研究 The Beginning of the Urban Form of Seoul, Korea

朱 鍾 元*
(서울大 工大 教授)

<Table of Content>

- | | |
|-----------------------|---------------|
| 1. Introduction | 3. Conclusion |
| 2. Formation of Seoul | |

<要 約>

本 論文에서는 李朝時代初期에 風水地理說을 適用하며 首都로서 選定하여 오늘날까지 發展된 서울의 都市形態의 形成과정을 分析 檢討하였다.

17키로미터의 城으로 둘러싸인 161평방키로미터의 서울의 土地는 國家所有였고 첫째로 宮殿, 宗廟, 사직 및 政府建物の 垓地, 大路, 下水道 및 市場의 立地가 선정되므로서 都市의 形態가 생겨나기 시작했다.

또한 서울市에서는 西洋의 古代都市에서 볼 수 있는 것처럼 종사하는 職種에 따라 그 住居地 域이 區分되었고 階層에 따라 垓地와 住宅의 규모가 定하여 졌다는 것을 알 수 있다. 그리고 市場과 오늘날의 백화점의 기능을 담당했다고 볼 수 있는 상업시설이 배치되었다.

또한 1400年代에 大火災가 發生하므로서 消防法의 시초라고 볼 수 있는 規定이 마련되었고 전염병의 예방을 위하여 河川개수事業을 벌이는등 都市의 現代化과정에서 거처야 하는 과정을 발견할 수 있었다.

이 研究를 통하여 서울市의 都市形態가 中國이나 日本의 都市에서 볼 수 있는 바와 같이 格子型이 아니고 自然地形에 調和되는 形態를 모색한 것을 발견할 수 있는 한편 中國이나 日本의 都市에서 볼 수 있는 ① 城으로 둘러싸인 것 ② 宮殿을 中心으로 하여 軸을 形成한 것 ③ 南向 ④ 中庭型 건축 등을 볼 수 있다.

그리고 人口는 1400年代에는 100,000정도였었고 그것이 1800年代부터 1920年頃까지 20萬人을 유지하다가 1930年代부터 成長하기 시작하여 오늘날에는 8,000,000人을 넘고 있다.

가마나 말을 타고 다니던時代에 마련된 計劃으로는 도로의 幅이나 그 시설이 지나치게 외국의 面을 엿볼 수 있다.

그러나 1400年代 人口의 80배 以上이 증가했고 그 面積은 7배가 증가했으며 그 當時 예상하지 못하였던 交通수단이 發達하여 새로운 次元의 問題가 發生하였다. 이미 風水地理說은 낡은 학설로 생각하고 있으나 그 說을 음미할 가치가 있다고 생각하고 과거에 이루어진 都市形態의 形成과정을 分析 檢討하므로서 좋은 點을 保存하고 잘못된 것을 보완하면서 이 問題를 緩和하고 거 하는데 本研究의 뜻이 있다고 볼 수 있다.

* 本學會 常任理事·工學博士



Fig. 1. "Ssu-shen (Four Deities) Tile,"
Ink-rubbing, ca. 200 B.C.

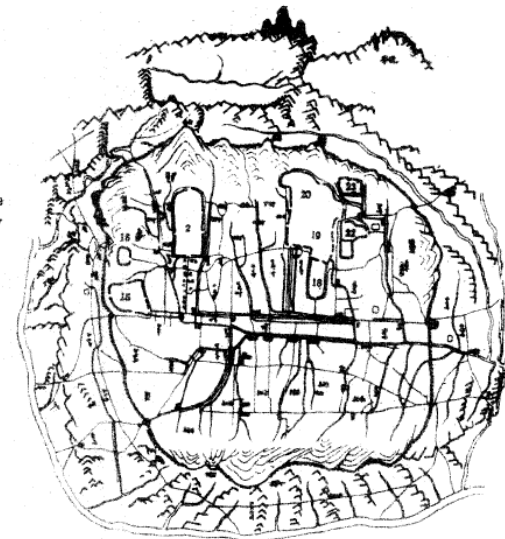
山局圖



1. Hole
2. Good Place
3. Ancestor Mountain
4. Main Mountain
5. Rear Entrance
6. Moon Head
7. Eyelid and Sand
8. Inner Blue Dragon
9. Inner White Tiger
10. Outer Blue Dragon
11. Outer White Tiger
12. Inner Water Inlet
13. Table Mountain
14. Outer-Water Inlet
15. Morning Mountain

Fig. 2. Diagram of the Ideal Location
Based on the Geomancy Theory

圖全善首

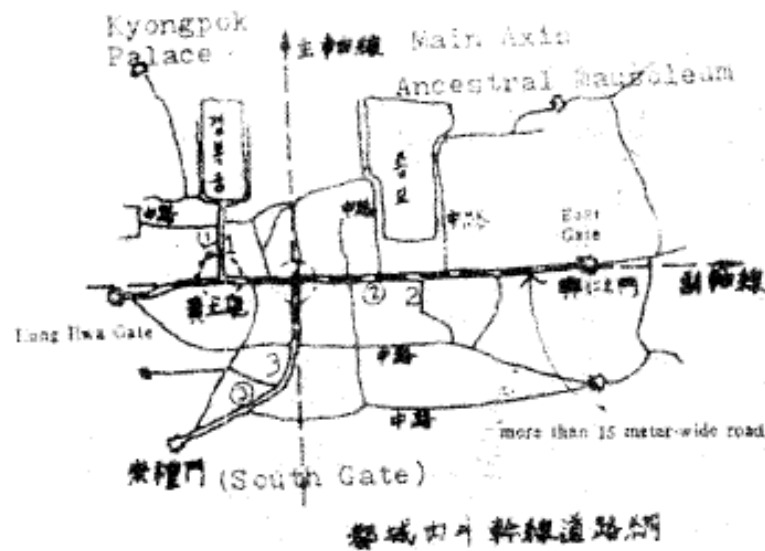


The sites of the important buildings
were selected applying the geomancy
theory.

2. Kyongpok Palace
15. Kyonghui Palace
16. Guardian Deities of the State
18. Ancestral Mausoleum
19. Changkyong Palace
20. Changdok Palace
22. Kyongmo Palace
23. National University

Fig. 3. Old Map of Seoul City

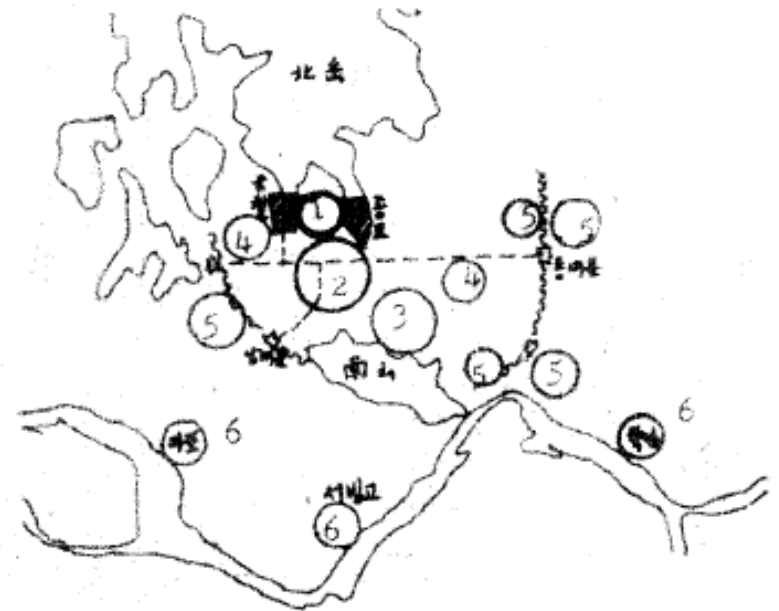
주종원, 1981. 서울시 도시형태의 형성에 관한 연구, 국토계획



1. Main Road for King and Administrative District
2. Shopping Road
3. Road for Envoies

Fig. 7. Main Road Network within the Wall

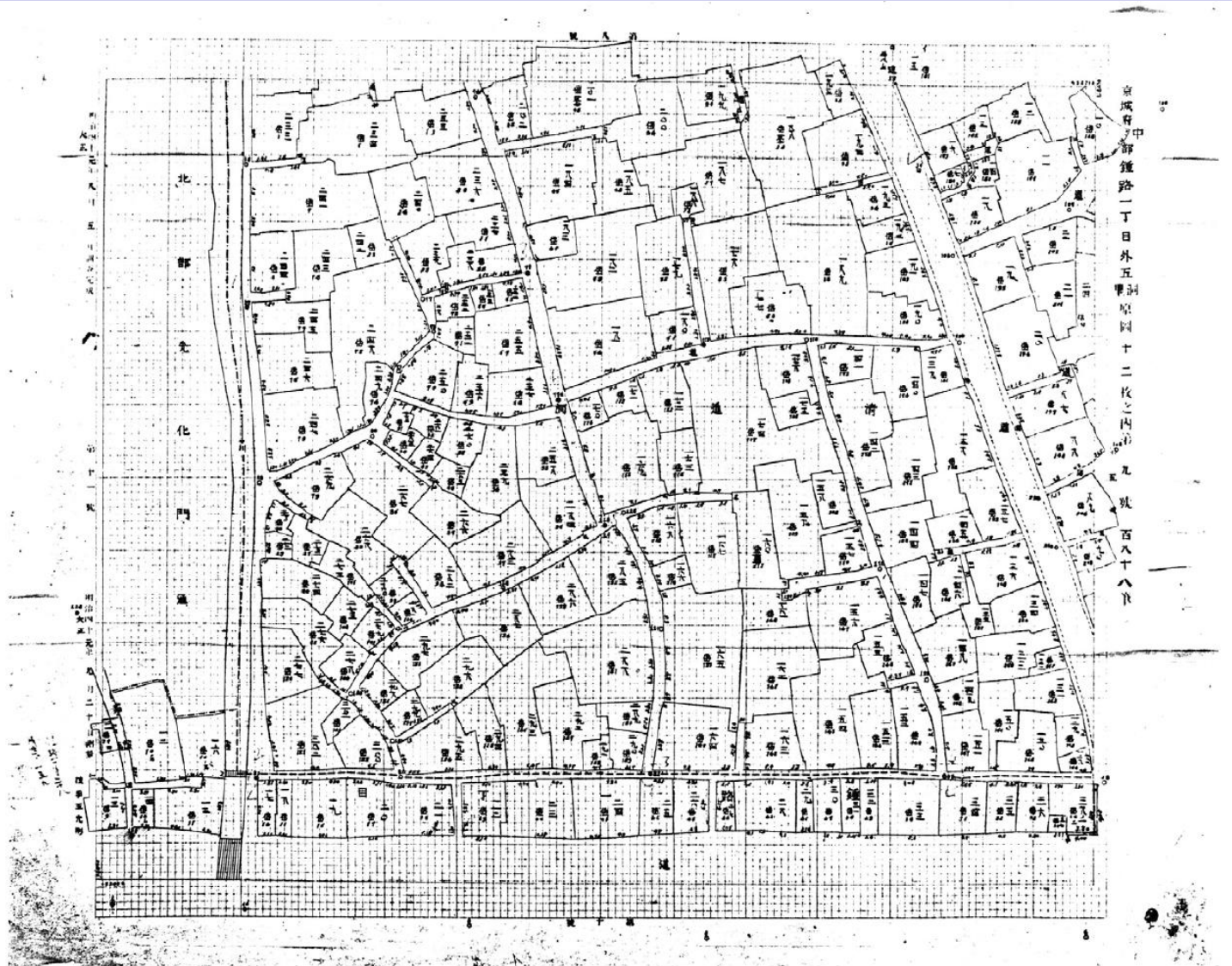
lanes were not systematic and the width of many lanes was only one meter. With the lapse of time the main streets and the middle streets were narrowed by temporary stores or houses which were built in violation of the regula-



1. North Village where High Officials lived
2. Shopping area
3. South Village where scholars lived
4. Offices of the Middle Men(physical doctors, interpreters, and artisans) and Military Training Center
5. Slum Area
6. Satellite Cities alongside the River

Fig. 8. Locations of the Different Centers and Areas

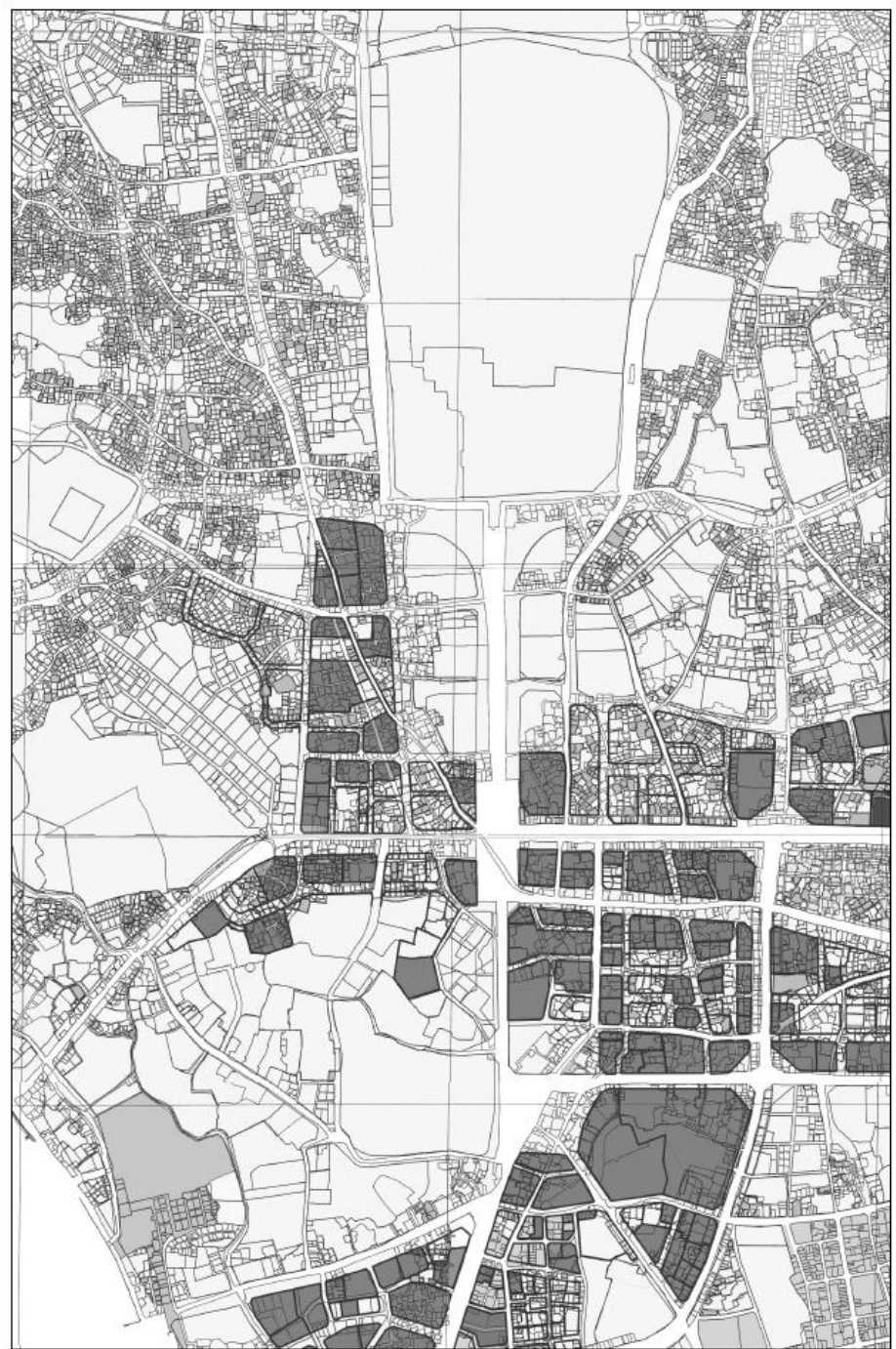
이상구, 지적원도를 통하여 본 서울의 옛 도시조직, 건축역사학회



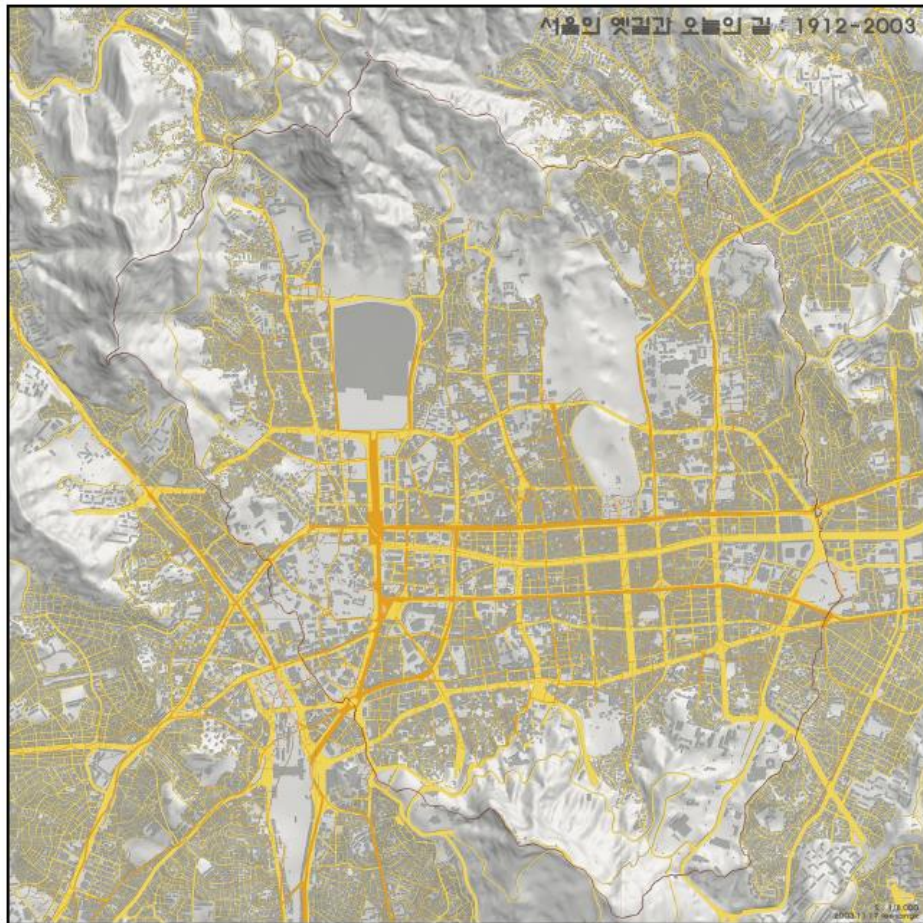
[그림 2] 지적원도 (현재의 청진동 일부)



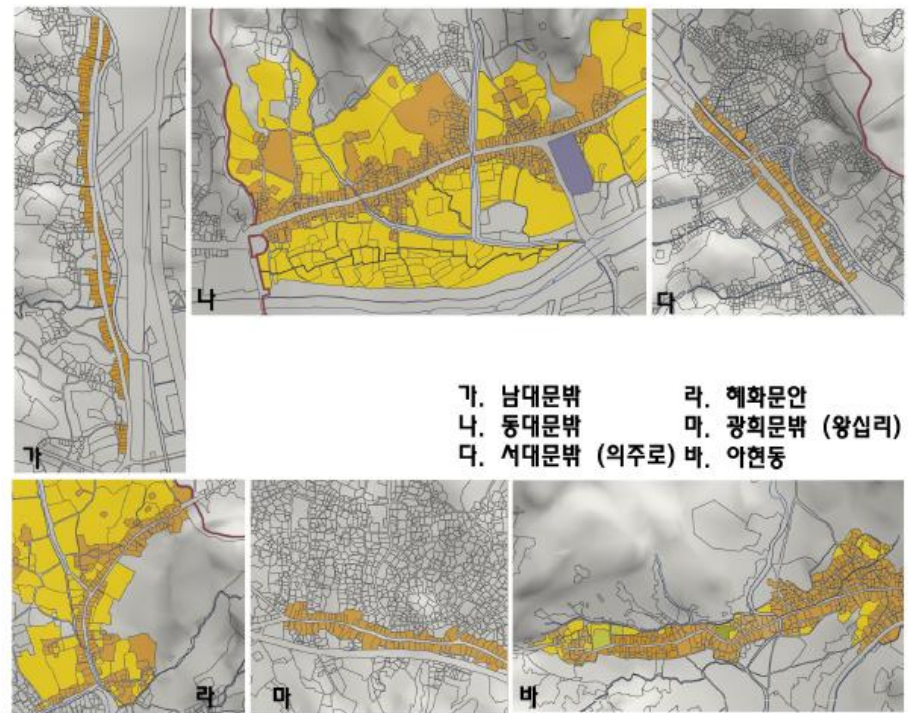
[그림 3] 서울의 계획



[그림 4] 서울 도심부 필지형태비교 (1912-1999) (부분)



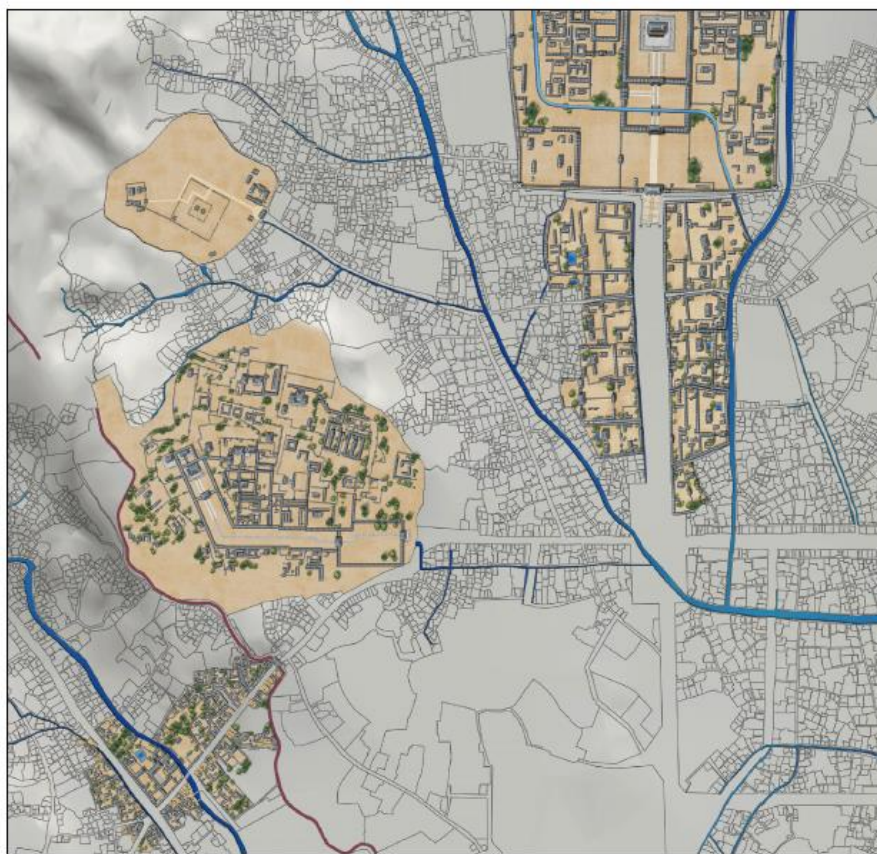
[그림 7] 서울의 옛길과 오늘의 길 : 1912 - 2003



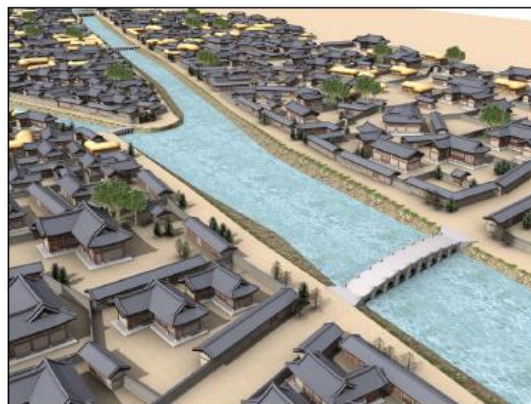
[그림 8] 지적원도에 나타난 가로형 도시조직들



[그림 9] 왕십리의 옛길, 옛 도시조직 (1972, 2002)

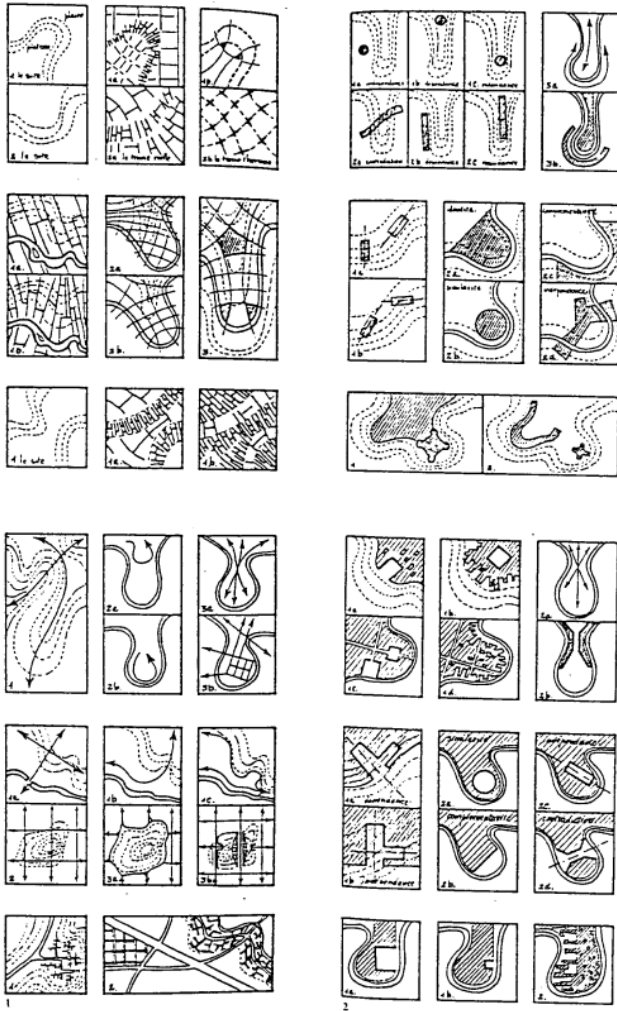


[그림 5] 디지털 한양 - 조선 후기 한양 도성의 복원 (부분)



[그림 6] 디지털 한양 - 천변 3D

이상구, 1993. 조선후기 도시입지형태의 연구, 서울대학교 박사논문



[그림 4-7] 圍繞形態의 分布

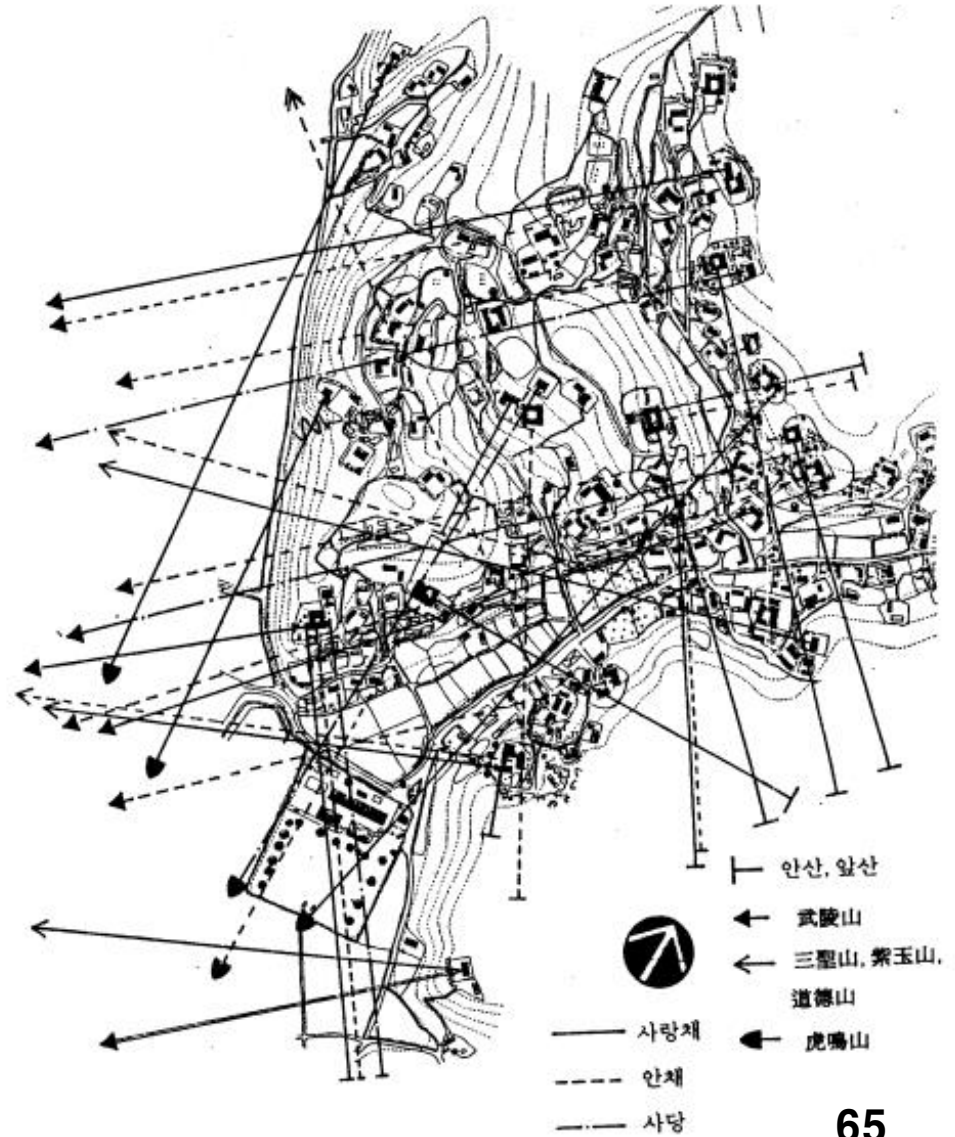
- 凡例
- △ 無圍繞
 - 完全圍繞
 - 圓形圍繞
 - 半圓形圍繞
 - ▲ 線形圍繞-背後
 - ◐ 線形圍繞-2方向開放
 - ◑ 線形圍繞-3方向開放
 - 形跡不明街道

[표 4-4] 圍繞形態別 圍繞開放方向과 市街地方向의 關係

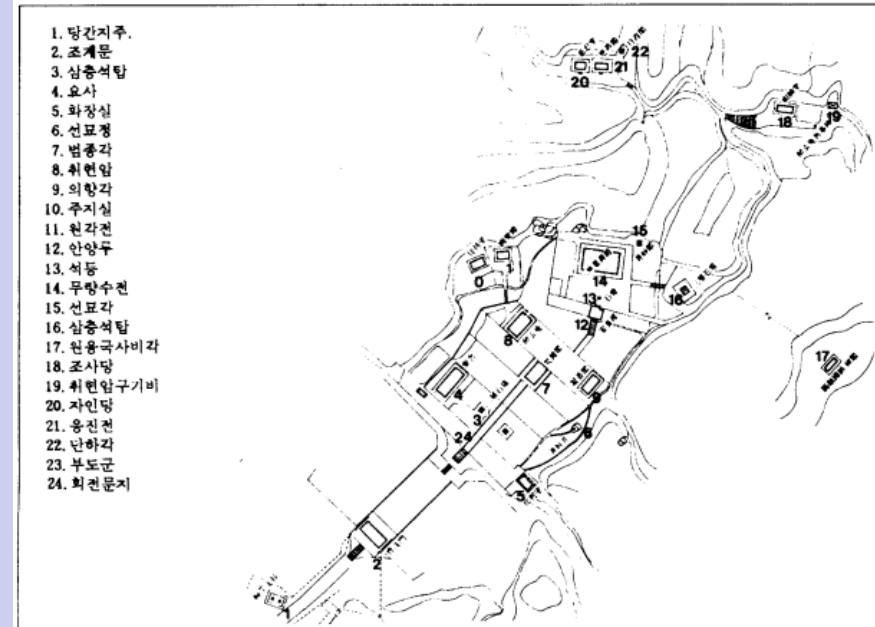
圍繞形態	圍繞開放方向	市街地 方向																			
		○	●	▲	◐	◑	◒	◓	◔	◕											
		CENTER 0	S 1	SE 2	E 3	NE 4	N 5	NW 6	W 7	SW 8											
無圍繞	0	NO 0	○																		
完全圍繞	1	○	NO 0	○																	
圓形圍繞	2	○	ALL 9	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
半圓形圍繞	3	○	S 1	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	
		○	SE 2	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	E 3	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	NE 4	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	N 5	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	NW 6	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	W 7	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
		○	SW 8	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
線形背後圍繞	4	○	S 1	+																	
		○	SE 2	+	+																
		○	E 3	+		+															
		○	NE 4	+			+														
		○	N 5	+				+													
		○	NW 6	+					+												
		○	W 7	+						+											
		○	SW 8	+							+										
線形2方向開放圍繞	5	○	S-N 1																		
		○	SE-NW 2																		
		○	E-W 3																		
		○	NE-SW 4																		

전봉희, 1992. 조선시대 씨족마을의 내재적 질서와 건축적 특성에 관한 연구, 서울
대 박사논문

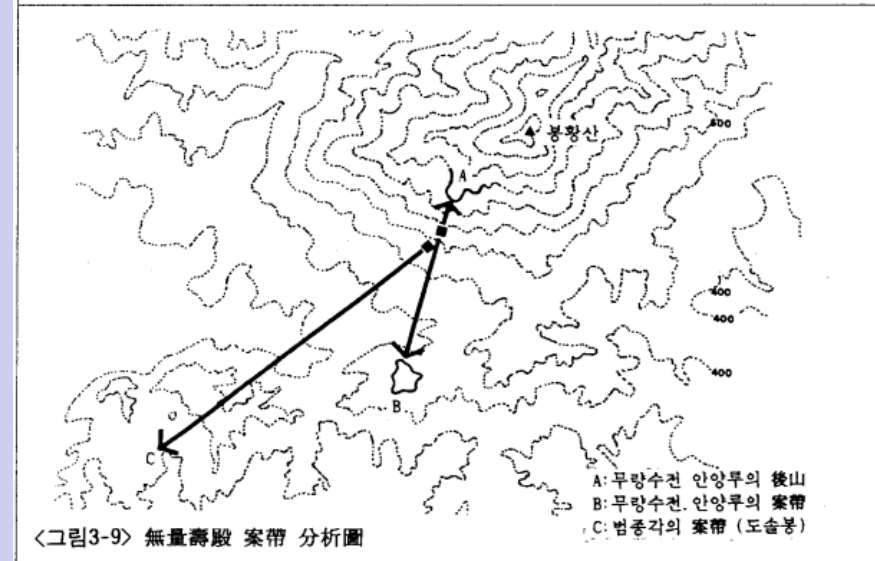
그림 6-4. 양동마을 주요 건축물의 안대 분석



이원교, 1993. 전통건축의 배치에 대한 지리체계적 해석에 관한 연구, 서울대학교 박사논문

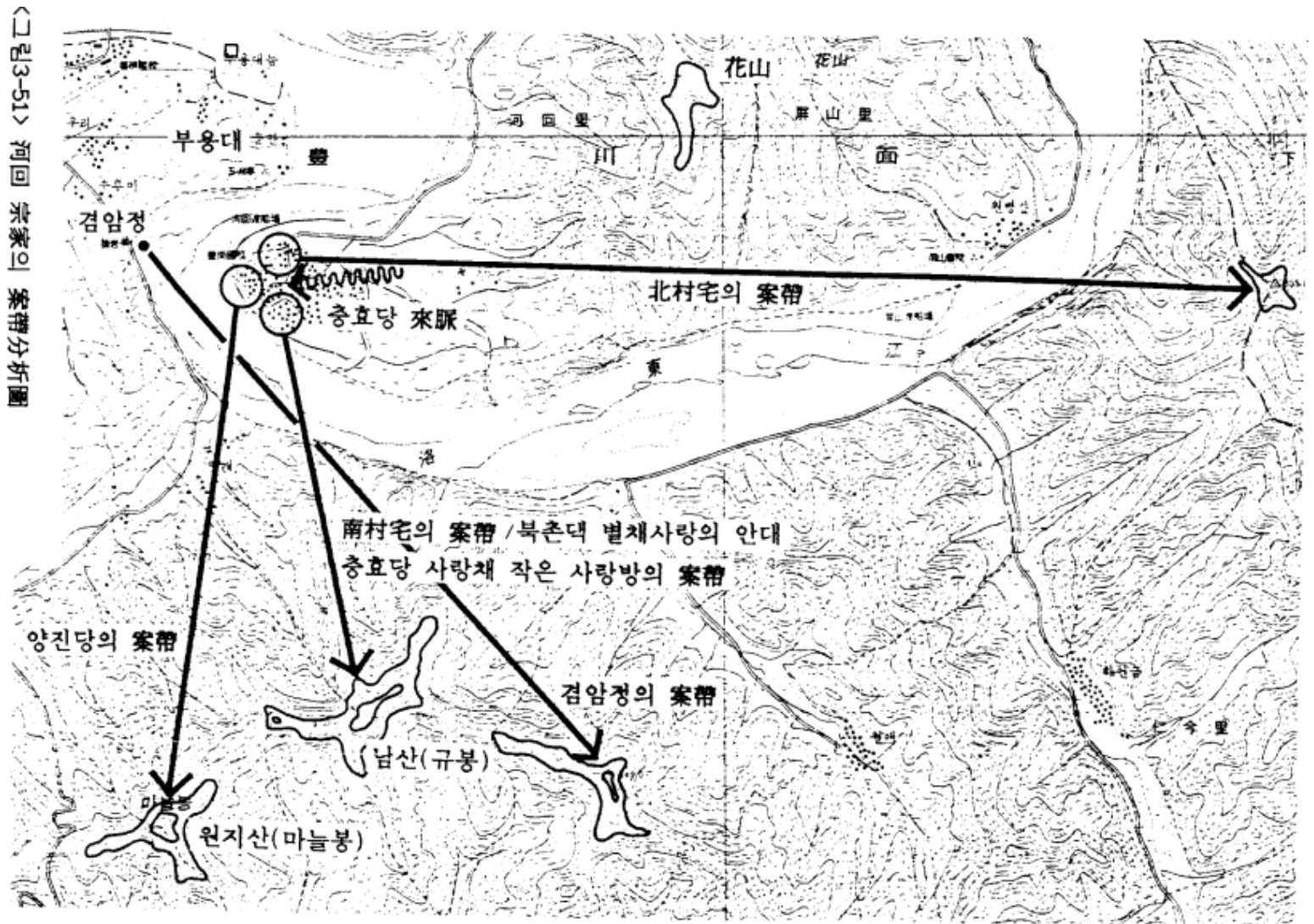


<그림3-8> 浮石寺 配置圖



<그림3-9> 無量壽殿 案帶 分析圖

이원교, 1993. 전통건축의 배치에 대한 지리체계적 해석에 관한 연구, 서울대학교 박사논문



The Seventeenth-century Transition of Seoul's Spatial Structure to Functional Pragmatism

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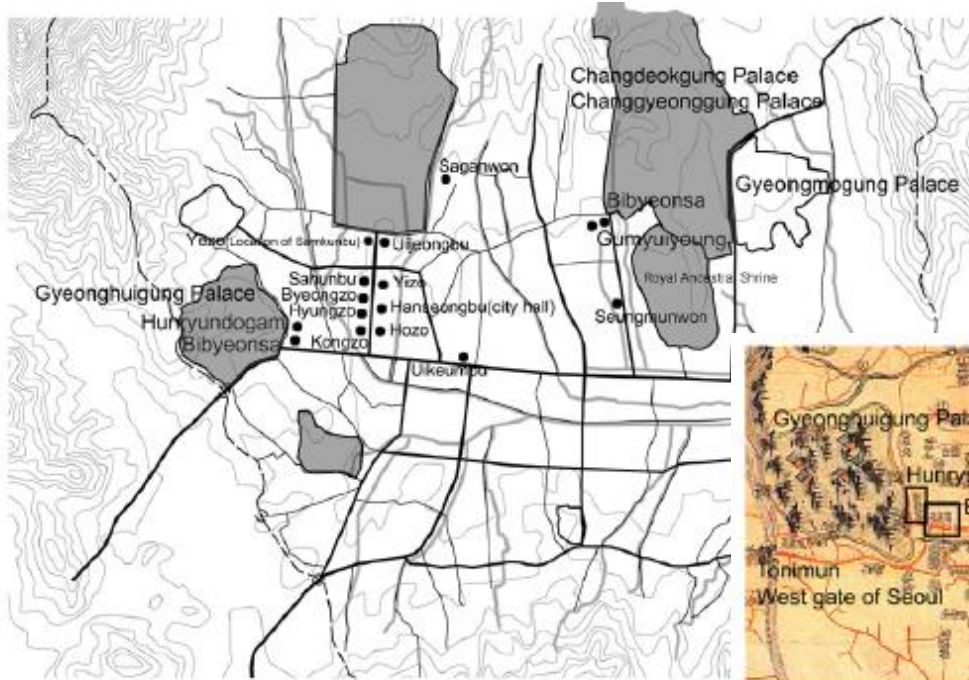
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Abstract

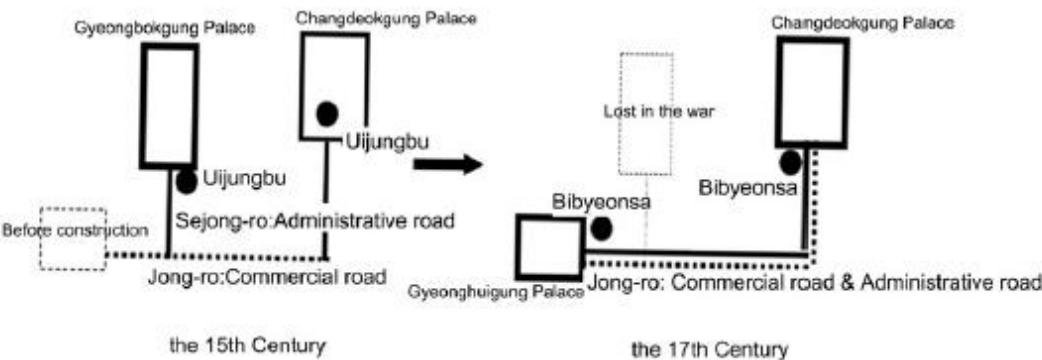
This paper explores the functional pragmatism embedded in the transformation of feudal Seoul's urban structure. Using historic maps drawn between 1751 and 1914 and an analytical method of space syntax, the paper documents changes in the distribution of major administrative buildings and streets in Seoul ("Hanseongbu") during the Joseon Dynasty. The results indicate that administrative buildings such as palaces, royal villas, economic authority buildings, and military headquarters were relocated along major commercial corridors such as Jongro and Namdaemunro Boulevard during the period. Based on a geographical information analysis, Jongro showed the highest street integration value over time, followed by the southwestern part of the city, because of the overlap between commercial boulevards and administrative buildings. The results suggest that the principle of urban design in which government districts were separated from commercial areas was incrementally abandoned during the late Joseon Dynasty. This functional merging was encoded into the shaping of contemporary Seoul instead of following the old Chinese regulation of urban-form making.

Keywords: urban history; Seoul; space syntax; urban design

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Research Purpose



B.



C.

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Research Method

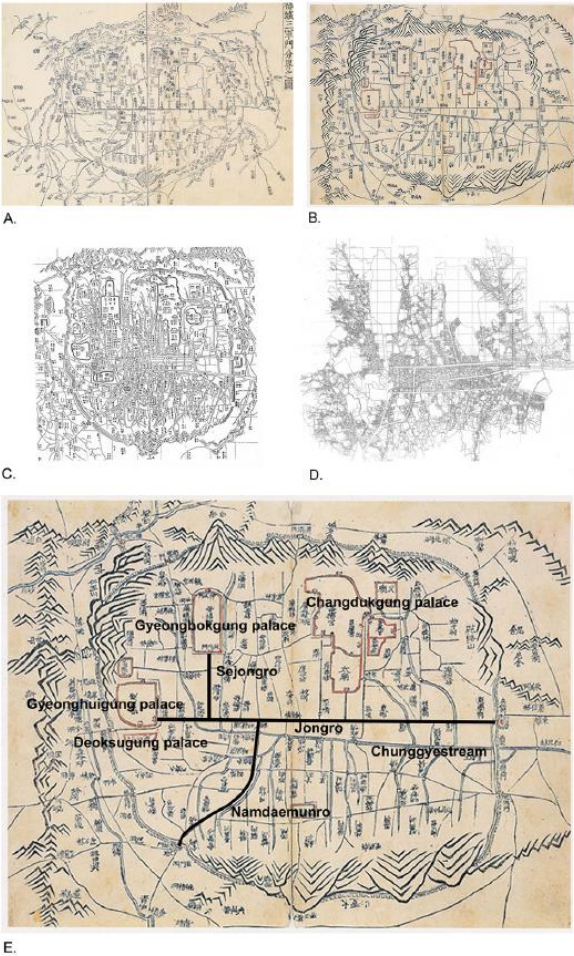
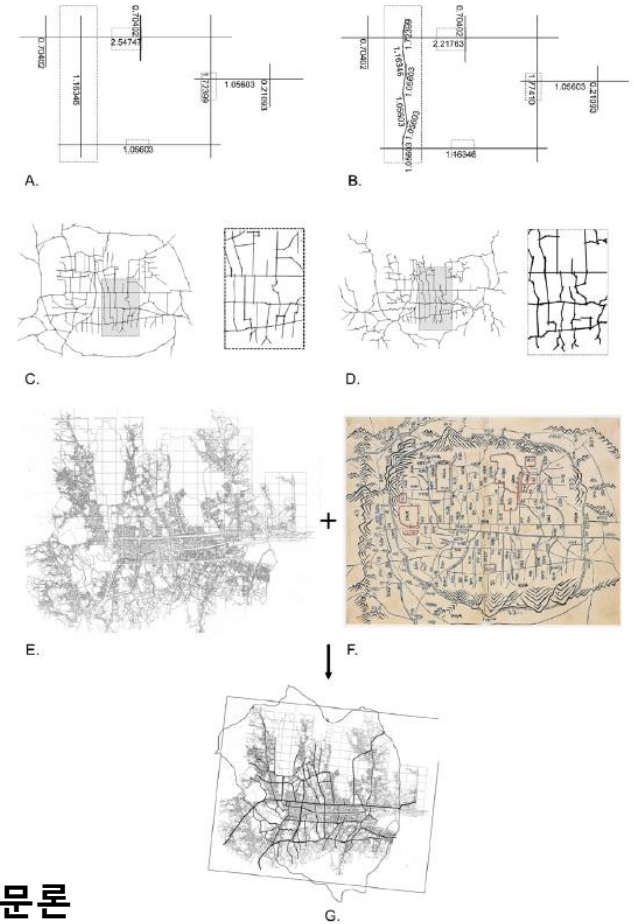
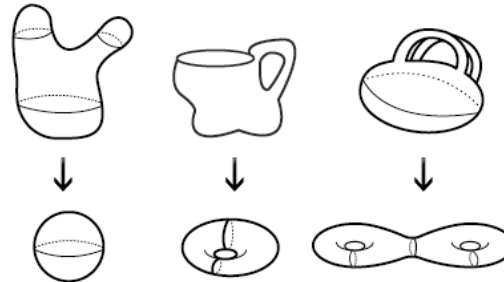


Fig.1. Old Maps of Seoul Showing the Locations of Palaces, Roads, and Streams (A: The Dosung Samkummun Bungoejido Map of 1751; B: The Daedong Yojido Map of 1861; C: The Hanseongbu Jido Map of 1902; D: The Seoul Map of 1914; E: Key Locations of Palaces, Roads, and Streams in Maps; Map Source: Hur (1994); Yang and Yi (1995); Gyeongseongbu (1914))

Typology, 위상기하학



Space Syntax, 공간구분론

Fig.2. The Method of Mapping Major Administrative Buildings and Street Patterns (A: Integration Values for a Map with Straight Lines; B: Integration Values for a Map with Curved Lines; C: An Axial Map of the Daedong Yojido Map of 1861 with Straight Lines; D: An Axial Map of the Dosung Samkummun Bungoejido Map of 1751 with Curved Lines; E: The 1914 Japanese Map of Hanseongbu; F: The Daedong Yojido Map of 1861; G: A Standardized Street Map Based on the 1914 Map)

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Old maps



Axial maps based on old maps



Standardized maps



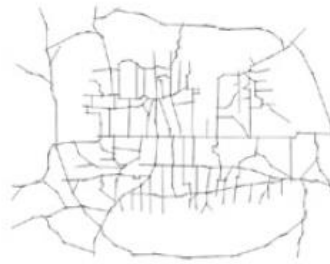
Axial maps based on Standardized maps



The Space Syntax Analysis Procedure (A: The 1751 Map of Seoul (Dosung Samkunmun Bungoejido); B: The 1861 Map of Seoul (Daedong Yojido); C: The 1902 Map of Seoul (Hanseongbu Jido))



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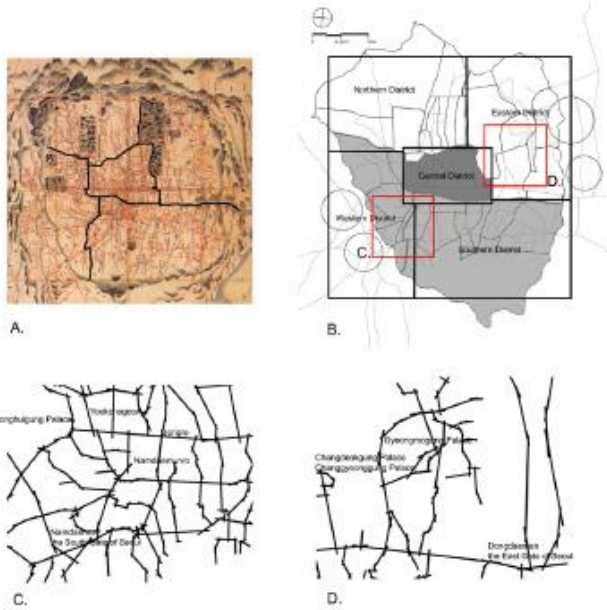


Fig. 5. Maps of the Distribution of Integration Values (A: Regional Boundaries Shown in the Map of 1770; B: The Distribution of Integration Values; C: An Axial Map of the Southern District; D: An Axial Map of the Eastern District; Map Source: Hur (1994))

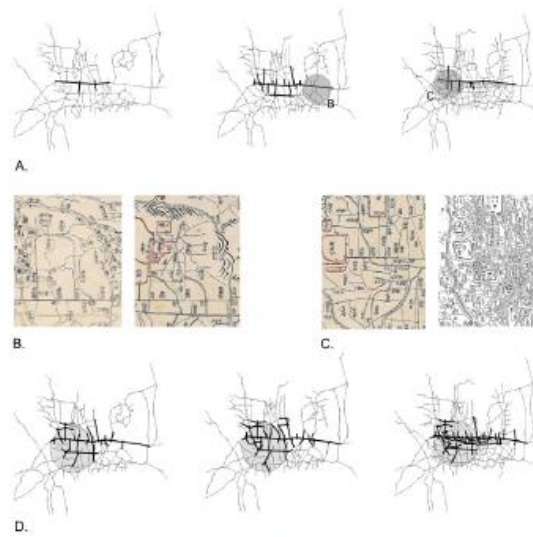


Fig. 6. The Distribution of Highly Integrated Streets in Hanseongbu (A: Streets with the Top 5% Integration Values in 1751, 1861, and 1902; B: The Transition of the Eastern District in the Dosung Samkummun Bungoejido Map of 1751 (Left) and the Daedong Yojido Map of 1861 (Right); C: The Transition of the Southwestern District in the Daedong Yojido Map of 1861 (Left) and the Hanseongbu Jido Map of 1902 (Right); D: Streets with the top 20% Integration Values in 1751, 1861, and 1902; Map Source: Hur (1994); Yang and Yi (1995))

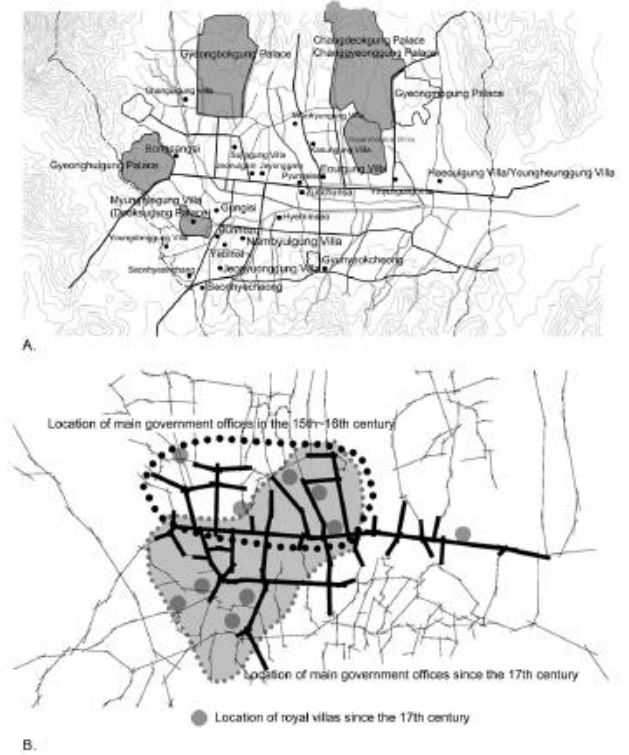


Fig. 9. A Comparison of Locations of Main Government Buildings in Areas with High Integration Values (A: Locations of New Government Offices Related to the Economic Policy Since the Seventeenth Century; B: Changes in Locations of Major Administrative Buildings such as Government Offices and Royal Villas and Streets with the Top 20% Integration Values)