

8th ERAHS, Gifu, Japan

two Thoughts on the Modern Transformation of Agricultural Heritage Landscapes in Korea

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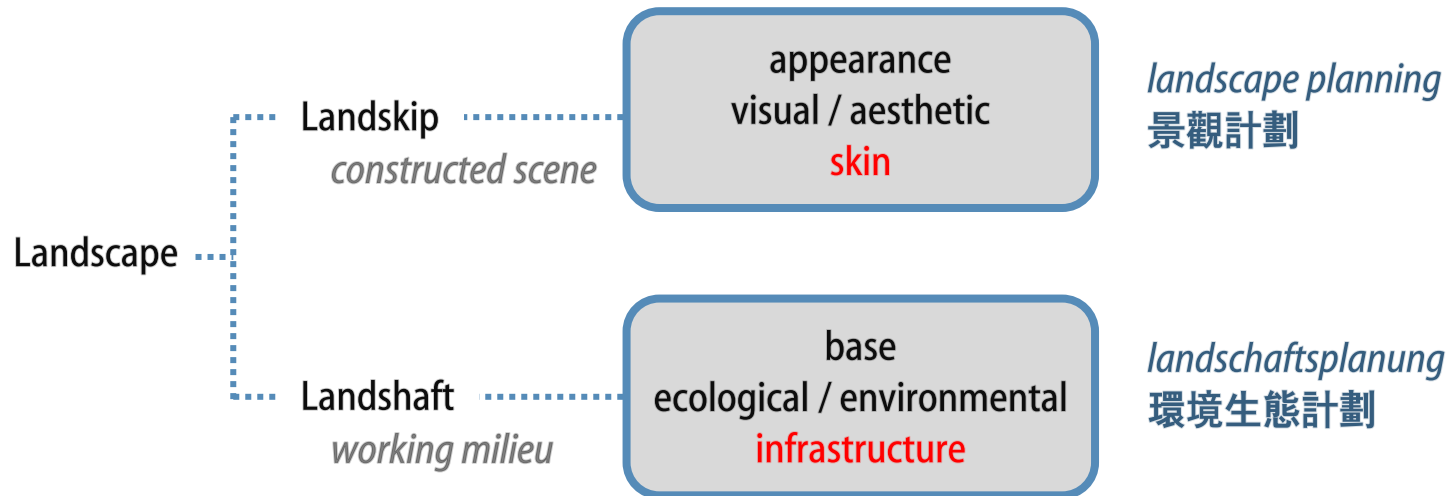
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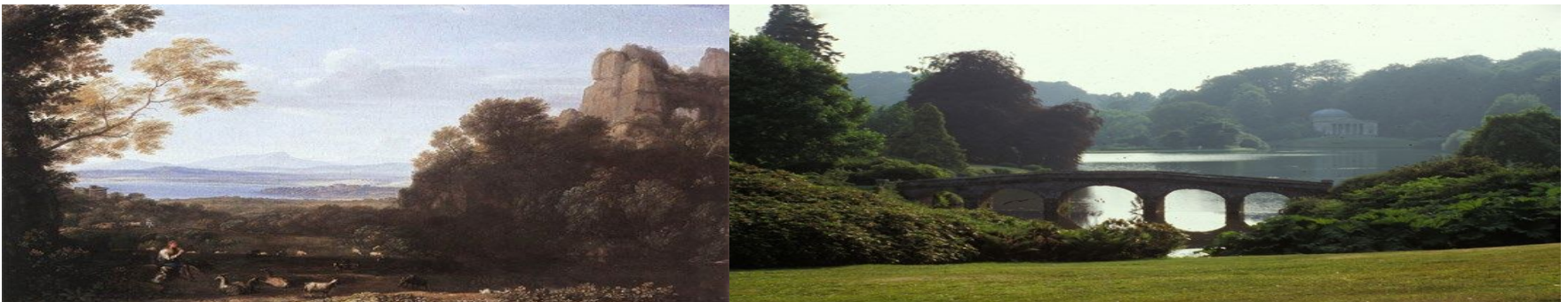
❖ Etymology of Landscape

- The etymology of the English word Landscape has both landskip, which means aesthetic and visual aspects, and landschaft, which has environmental and ecological implications



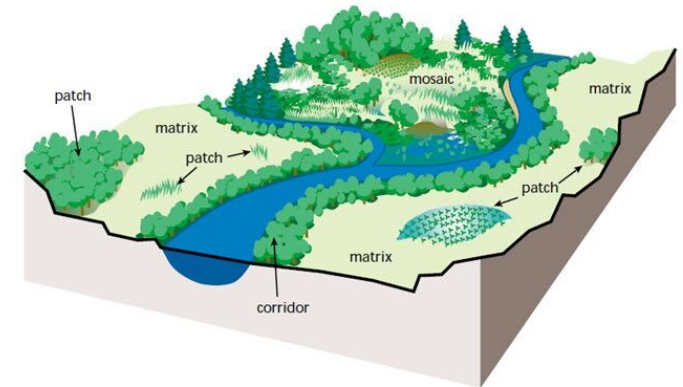
❖ landscape as scenery(景致, 風景)

- Influenced on the development of Italian landscape painting in the 16th and 17th centuries
- Ideal scenery for visual appreciation → Loss of its properties as an environment, pursuit of a two-dimensional pictorial effect
- The ideal state of nature is expressed in pictures according to a certain schema
- Setting a certain distance between humans and the environment

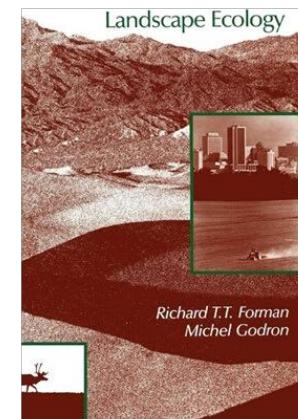


❖ Landscape ecology and Landscape

- landscape is a mosaic-like, uneven space of elements called patches
- The communities surrounding a patch constitute the matrix
- Patches of the landscape are often separated by unique boundaries
- The path that facilitates movement between pieces is a corridor
- Landscape consists of three main elements: sculpture, border, and movement path, all of which are included in the landscape background



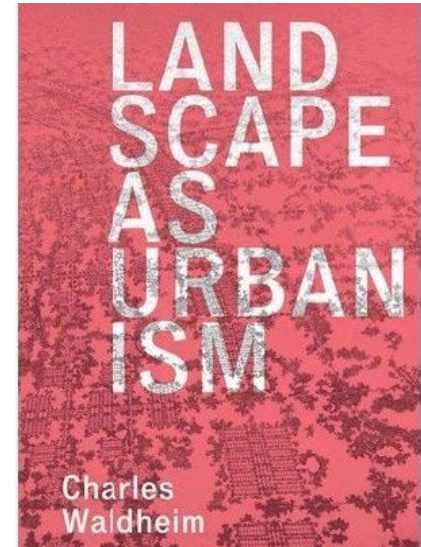
Nathan Brouwer et.al. ECOLOGY FOR ALL!. LibreTexts.
https://bio.libretexts.org/Courses/Gettysburg_College/01:_Ecology_for_All/21:_Landscape_Ecology_and_Island_Biogeography/21.02:_Important_Terms_in_Landscape_Ecology



Richard Forman & Michel Godron (1986) Landscape Ecology

❖ Landscape Urbanism

- landscape as a matrix like nervous tissue that encompasses not only objects and spaces but also dynamic processes and events passing between them
- A field that accommodates the evolution and creation of a city that includes buildings, roads, open spaces, and infrastructure
- a medium that can respond to change, transformation, and adaptation over time
- Landscape is similar to the recent process of urbanization and is a medium that fits the openness, uncertainty, and variability required by contemporary urban situations



(Charles Waldheim (2016) Landscape as Urbanism. Princeton University Press.)

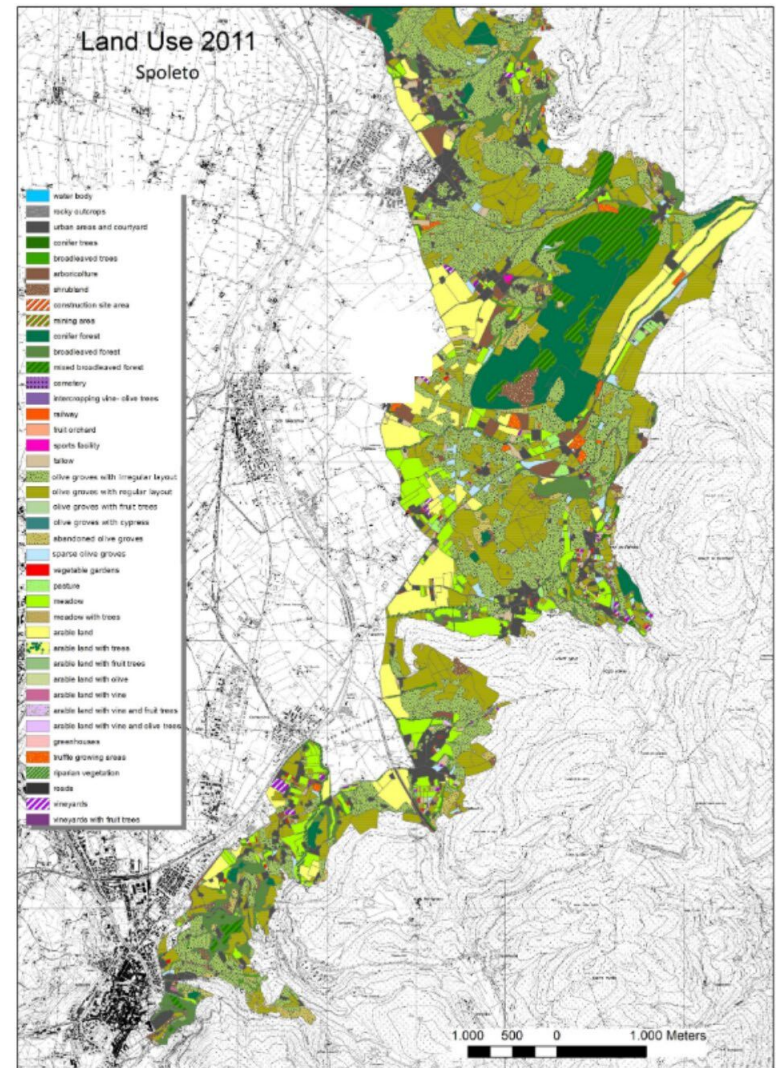
❖ FAO GIAHS

- GIAHS identifies changes in agricultural landscapes as land use changes
- Hill's diversity value: A value that quantifies what type of land use is dominant in a certain area

$$N1 = e - \sum \left(\frac{n1}{N} \right) * Ln \left(\frac{n1}{M} \right)$$

- single patch surface
- N = the total surface
- M = the total number of site and uses

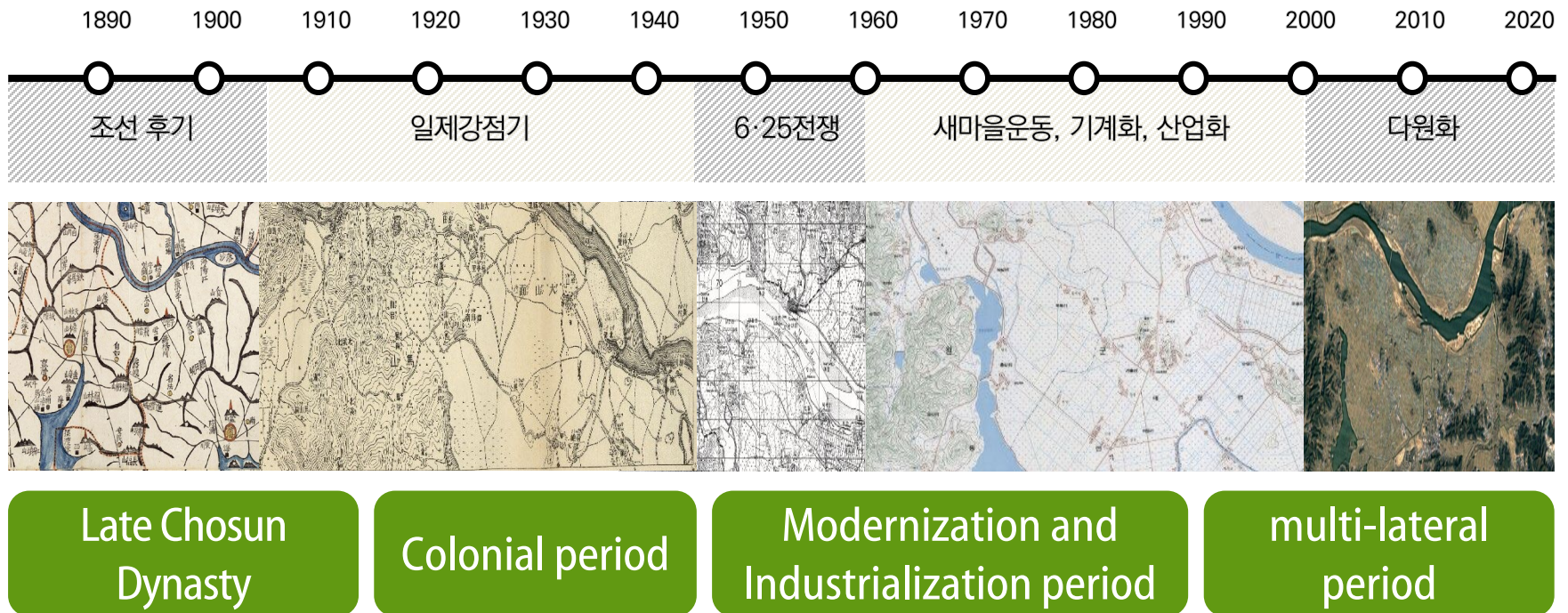
Landscape evaluation indexes	1954	2011
Total surface	9113	9113
Number of patches	7563	13802
Number of land uses	32	41
Hill's Diversity Number	8.2	10.7
Average surface of patches	1.21	0.70
Average surface of agricultural patches	1.28	0.67



(FAO (2023) Guidelines for Developing a GIAHS Proposal Document.)

❖ Modernization and industrialization of rural landscapes

- Korea's rural landscape has undergone significant changes through the period of colonization, modernization, and industrialization.



❖ About Issue 1

- It is desirable to track changes in landscape with changes in land use.
- However, there are technical and economic problems.
- This is because land use alters occur over a wide area over a long period of time, and it is very difficult to track and respond to such transformations in reality.

❖ About Issue 1

- Solutions to this problem should be considered along with the development of agricultural heritage monitoring and evaluation systems.
- It is true that monitoring and evaluation of agricultural heritage sites are progressing weakly compared to other heritage systems or geopark systems.
- It is necessary to develop a more efficient and realistic alternatives to landscape monitoring.

❖ About Issue 1

- When tracking landscape changes in agricultural heritage areas, it would be desirable to target certain core areas rather than its entirety,
- as well as how often and at what frequencies to consider these important criteria.
- In addition, regular and continuous monitoring as well as policy responses are required.

❖ About Issue 2

- The problem of changes in the agricultural heritage landscape that occurred through the colonial period, modernization, and industrialization is an overall and structural problem of Korea's rural landscape.
- This is because extensive changes are experienced during this period in farming methods, introduction of exotic species, and changes in agricultural production methods, and so on.

❖ About Issue 2

- The important point is whether these changes can be tolerated within the framework of dynamic conservation.
- It is important to note that agricultural heritage system is a living heritage and is still ongoing.
- However, dynamic conservation must be carried out at a level that does not damage the historical, ecological, agricultural, and landscape values of the heritage.

❖ About Issue 2

- In this respect, dynamic conservation in Korea is likely to generate controversy in many aspects.
- This is because it is very ambiguous and difficult to set the boundaries of how much dynamic conservation can be tolerated and where it cannot.
- In many cases, there is a high possibility of conflict of opinions between residents and experts.
- Therefore, there will be a need for continued discussion and dialogue by establishing a forum for public discussion on this issue.

Thank you

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