

MURAMATSU LAB.

Window and Sensibilia

the Past, the Present and the Future of Architecture seen through the Window

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Architectural History, Urban History, Urban Heritage / Resource Development

Department of Architecture

1.The Role Of Global Architecture History in the shift from Growing Society to that of the Steady State Society.

Japan, suffering historically from a great number of earthquakes and its consequences, has acquired specific knowledge and developed a palette of technologies concerning safety issues which are the subject matter for the structural studies and the fire protection management. Efficiency and reasonable use of the numerous developed facilities is the concern of the planning. The heat, the cold, sewage and waste diversion are taken into account by the environmental studies.

However the aforesaid disciplines are insufficient to the global risk prevention for, today, the human lifestyle and the sensibilia are increasingly becoming rather acute conditions. The Growing Society which praised expansion and efficiency is now being replaced by the Steady State Society with the core principle of sustainability (Herman Daly). Therefore, together with the concerns of safety, the sustainable lifestyle is to be taken into account. The research activity of the Muramatsu Lab addresses the issue of the Stable State Society and the practical application of different technologies which can be issued from the wisdom accumulated in the Global History or the History of Humankind.

2.Window of the Five Senses: the Past, the Present and the Future of Architecture seen through the Window

The notion of “window” in the narrow sense of the word, has developed together with the growing society. However the recent shift towards the mass production of the industrial goods also questions the importance of the window in terms of the interior environment of the building. Meanwhile, the richness of the future window is now to be considered: how does it interact with human senses, the comfort and the beauty of the architecture? Therefore our current research project focuses on the complex relationship between the interior of the building, the human and the perceivable environment together with the structure of the window itself. By analyzing the relationship of the different layers of space, how the five senses are implemented? From a broader perspective, we believe that our research is a step forward in the understanding of the new sustainable technologies for architecture.

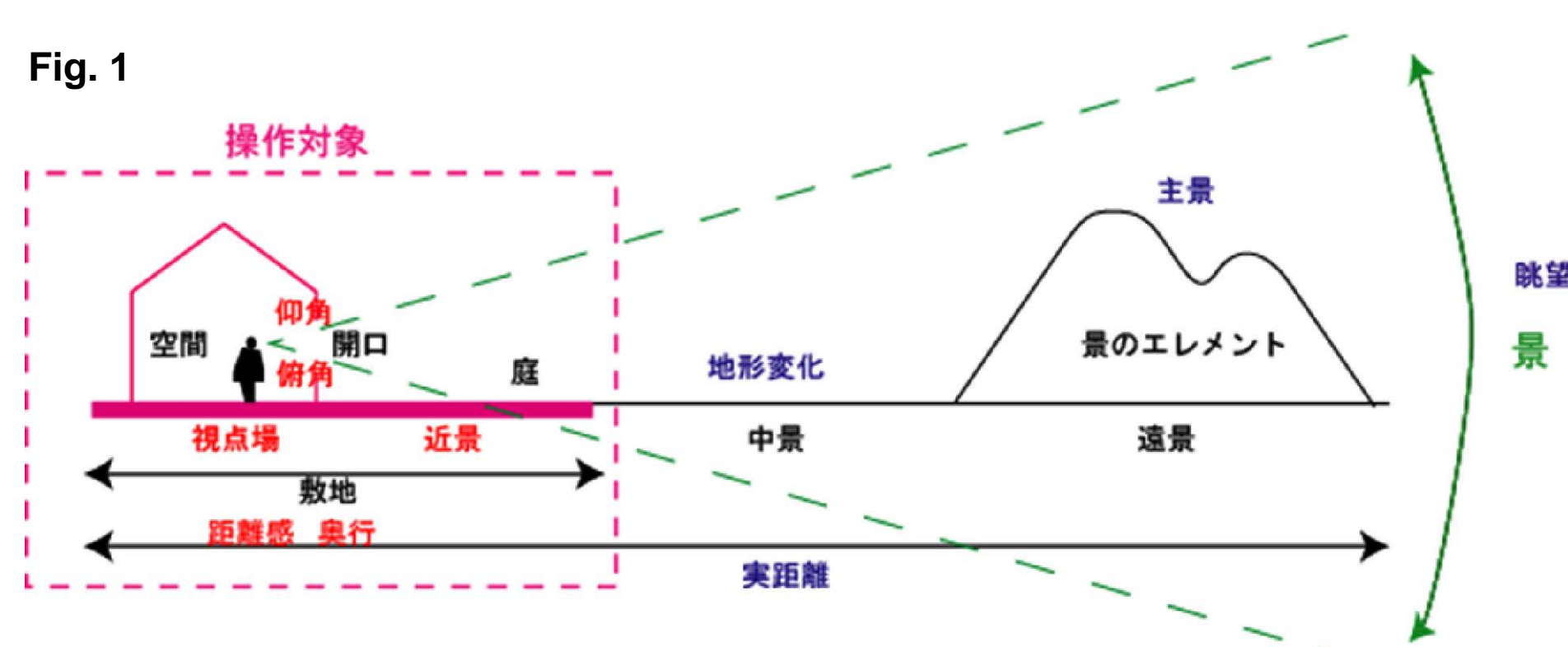


Fig. 1 General representation of space and window (relationship between window, exterior and interior).(Rokkaku Miru, 2014)

Fig. 2 Ecological Region of Windows. A. Monsoon climate Asia; B. Dry climate areas of the mid-latitudes; C. Sub-Saharan Africa; C. Northern Eurasia; D. Northern America; E. Latin America.

Fig. 3 Phylogenetic Tree of Windows

Fig. 2



Fig. 3 マトの系統樹



Fig. 4 I Spain Guadix II Iran Private house III Shisendo IV Istanbul Süleymaniye Mosque V WakitaSansou Outside, Incide



Fig.4 I Spain Guadix II Iran Private house III Shisendo IV Istanbul Süleymaniye Mosque V WakitaSansou Outside, Incide

4.The Diversity of the Window

Although the first archetype in the history of window is a simple opening or a ventilation channel (1), since recent times the diversity has become astonishing.

In the mid-latitude dry climate, in order to protect dwellings from dust, windows are turned towards the inside of the building. From the Mediterranean to northern China the architecture of passageways and the gardens was developed and the rich architectural space was born (2). The mingled form of the Monsoon Asia southern China architecture and the dry climate architecture features formed a rich culture of gardens in the hot and moist climate of Japan (3).

The religious window incarnates the fine relationship between human and the wilderness or the divine expressed through the light (4). Later, both in Europe and in Japan, a tremendous revolution in terms of structure and materials enabled modernist architects to overpass the bounds of natural constraints and broadened our relationship with the exterior (5). Finally today, we more than ever have freedom to conceive the new window and therefore the new space. The Window of the Five Senses is on the horizon. What will it look like?