# Facade in traditional Japanese architecture: a predecessor approach to the 'dressing' metaphor of Gottfried Semper

#### 1. Introduction

Metaphors have occupied a significant place in the architectural discourse for a long time. The philosopher Paul Ricoeur, defines metaphor as a rhetorical figure. In his own words, through a metaphor, eye of resemblance creatively finds 'the reason for substituting a figurative word for a missing or absent literal word' (1976). In this respect, metaphors are inventions which offer new perspectives to disciplines. For instance, with his 'dressing—Bekleidung' metaphor, Gottfried Semper became one of the leading figures of the 19<sup>th</sup> century architectural discourse. His metaphoric approach which called the notion of facade to the foreground challenged some traditional principles in architecture and paved the way for diverse interpretations of facades visible in the works of architects under his influence, ranging from Wagner to Loos. Semper associated his metaphor of 'dressing-Bekleidung' with a term frequently used in the discipline of geology, 'tectonics.' In architecture, the roots of this term can be traced back to ancient Greek period. In the oldest treatise in hand, Vitruvius claims that, the architect originally was a carpenter (1960); and, the Vitruvian triad—utilitas, firmitas, venustas— was a theoretical abstraction like contemporary aesthetics far away from properties of materials and rules of gravity (Hartoonian, 1994). In Renaissance, Leon Battista Alberti re-emphasized the importance of choosing the appropriate material for the appropriate place with reference to the concept of 'decorum.' He metaphorically argued that the wall consisted of two skins; the inner and the outer and architects' task was to find the appropriate materials for these skins (1991). In the 18<sup>th</sup> century, Carlo Lodoli was the first figure who used 'tectonics' as an idiosyncratic term of architecture. According to Lodoli, 'truth to material' was the basic principle that architects should follow by making the forces of materials visible in the surface (Frascari, 1989). In other words, Lodoli centralized materials as the core of the discipline. Unsurprisingly, in the 19<sup>th</sup> century, particularly in German speaking cultures, tectonics and truth to material became decisive factors of architectural thinking. For instance, the German art critic Karl Bötticher embraced tectonics with a two-fold explanation of architectural form in a tune reminding of Alberti. For Bötticher, architectural form was the integration of two sub-forms: work forms (Werkformen) which constituted the core and art forms (Kunstformen) which identified the surface (van Eck, 2009). Briefly, in his view, the art of building (Baukunst) was the act of bringing together these two forms. For many critics, this two-fold explanation inaugurated the disintegration of ornament and structure, although this had never been the intention of Bötticher.

In this discourse, what made Semper outstanding was his brave metaphoric approach which let him borrow a figure from daily life, 'dressing.' This metaphoric interpretation which implied an extension of meaning and renewal in the architectural thinking of the 19<sup>th</sup> century, would lose all its dynamism and metaphoric character by the second half of the 20<sup>th</sup> century and would become a 'dead metaphor' in the shape of a technical term that is commonly used: curtain wall (Ricoeur, 1976). In the last two decades, however, it is possible to see some attempts to awaken this metaphor. To contribute to these attempts, this paper aims to reconsider Semper's metaphoric approach.

Semper's use of the metaphor of 'dressing' constitutes the core of his understanding of architecture and architectural components. The primitive huts he studied in his search for the origins of architecture and particularly, the Caribbean hut model he saw during his visit to the Crystal Palace in London where he built the stands for Canada, Denmark, Egypt, Sweden and Ottoman Empire, supported his theory. As it can be seen in his primitive hut drawing (Fig.1), in his view, architecture consisted of four elements: the roof/framework, the hearth, the earthwork and the enclosing fabric/wall (1989). For Semper, among these elements the most important one was the enclosing fabric. Like dressing covers the human body, enclosing fabric does the same for a building. In other words, building enclosure acts like the dressing of a building according to him. In a recent reading of Semper's theory, Kenneth Frampton reduces four elements into two and claims that building consisted of the tectonics of the frame and the stereotomics of the earthwork (1995). To illustrate his two-fold explanation, Frampton draws on an alternative paradigm: the building traditions in Japanese culture where weaving and binding constitute the core of architectural activities. This paper seeks to reveal two hints traditional Japanese architecture offered to Frampton for his reinterpretation of Semper's theory. For this purpose, Semper's ideas about the metaphor of 'dressing,' knotting and the creation of ceremonial space will be analyzed in view of Japanese tradition of building and tea houses.

## 2. Knotting

## 2.1. Knotting in traditional Japanese architecture

Weaving and binding activities have played an important role for a long time in Japanese culture (Frampton, 1995). In fact, Japanese land-taking and agricultural rituals have begun with knotted or binded signs- known as *musubi* (Fig.2), coming from the word *musubu*, which means to bind in English (Nitschke, 1974). Furthermore, Japanese art of building has been structured through tectonic materials, such as knotted grasses or rice straw ropes called as *shrime-nawa*, meaning 'bound ropes' in English. In addition to these, bound pillars of bamboo and reed named *hashira* were also preferred (Frampton, 1995). Regarding the use of these components, it is revealed that Japanese architecture depends on light structures in the first place, rather than the idea of mass. Therefore, it is possible to claim that traditional Japanese architecture and facade making traditions remind us of the ideas of Semper regarding the metaphor of 'dressing,' especially with tea houses.

Although there are several types, a tea house in traditional Japanese architecture usually includes *ro* (the hearth), *nijiriguchi* (crawl door) and *tokonoma* (the alcove where wall scrolls are hung) (Fig.3, 4) (Nishi and Hozumi, 1985). Considering these qualities, it is possible to say that the traditional Japanese tea houses justify some of Semper's ideas regarding the primitive hut. For instance, in Semper's example, the Caribbean hut includes a hearth like the traditional Japanese tea house. Also, the facade of the tea house resembles the enclosing fabric/wall of the Caribbean hut.

## 2.2. Knotting for Semper

With his emphasis on the enclosing fabric/wall among the four elements which he identified, Semper was interested in textile. For him, the knot is actually the fundamental building piece (2004). It acts like the basic unit of energy in the tectonic

process, in a way; it represents an atomic model of matter for Semper (Hale, 2006). Semper writes that 'the knot is perhaps the oldest technical symbol and, [...], the expression for the earliest cosmogonic ideas that sprang up among nations' (1989). He also paid attention to the etymological root of the word 'knot.' Joseph Rykwert writes about it with reference to Semper's German background:

'By a curious use of word-play, Semper foreshadows his later reference to the knot as the essential work of art ... when he considers the term Naht: the seam, the joining. It is, he says, an expedient, a Nothbehelf for the joining of two planes of similar or dissimilar material. But the very juxtaposition of Noth and Naht suggests a connection. The seam is an analogue and symbol which has archaic roots, for the usage of joining originally separated planes. Here he presents the reader with a primary and most important rule of art in its simplest form: to make a virtue out of necessity' (1983).

Semper focuses on the physical qualities of the knot in his studies regarding textile arts (Fig. 5). He writes that knots have the purpose of joining the ends of two threads by the help of friction that occurs when the two threads are pulled in opposite directions and the weaver's knot becomes the strongest one when the friction is maximized (Fig. 6). Also, according to him, an ingenious and ancient use of the knot led netting, which would be used for surface decoration in architecture (2004). In other words, Semper saw the knot as the source of the surface decoration, which could be the most outer layer of the building.

## 3. The Ceremonial Space

### 3.1. Creation of space for Semper and ceremony

'Surface' is one of terms which Semper's theory of 'dressing-Bekleidung' focuses on together with 'frame.' In fact, with his theory, Semper was actually interested in the actual aim of architecture. He writes that the beginning of building depends on textiles and the wall makes the enclosed space visible on its own (2004). Indeed, considering his ideas for the primitive hut, it is possible to see that the enclosing fabric/wall is able to represent an enclosed space.

Semper's interest in textile reveals itself when he writes about space. For him, wickerwork is the original space divider, the essence of the wall. Also, hanging carpets act like the visible boundaries of space, primarily for the need of security and they became the earliest spatial enclosure (1989). In Semper's view, they were separating spaces as well as uniting them. He thinks that architecture begins with space, preceding structure.

Discussing 'dressing' and 'masking' functions of architecture, Semper writes that art is observed best during carnivals, when masking and acting occurs. Any product of art, including buildings is best enjoyed in a festive mood; carnival creates the true atmosphere of art (2004). With these ideas, he indicates a connection between carnival atmospheres and architecture. Furthermore, he claims that all arts, including architecture have theatrical qualities (2004). By mentioning the activities of 'dressing and masking,' (Bekleiden und Maskiren) Semper refers to main theatrical activities on a stage in the first place. Also, 'dressing and masking' (Bekleiden und Maskiren) activities in terms of buildings can lead to 'representation.' The dress or the mask represents the buildings with a different ontological status, regardless of the material and enclosed

spaces (van Eck, 2009). In this respect, it is possible to claim that Semper associates architecture with theatrical atmosphere in the creation of space, in a way leading to rituals. Japanese teahouses with their rituals seem to have some similar qualities with the architectural space that Semper writes about.

# 3.2. Traditional Japanese tea house

Traditions of space-making in Japanese architecture can also be thought to have similar qualities with the ideas related to Semper's metaphor of 'dressing.' For instance, Frampton argues that the primacy is given to the woven material as a place-making agent in traditional Japanese architecture (1995). In other words, the woven material defines a place, probably after having defined a space and its inhabitance, just like in Semper's theory of 'dressing-*Bekleidung*' the dressing represents an enclosed space. Semper also writes about the cosmogonic importance of space:

'Surrounded by a world full of wonder and forces, whose law man may divine, may want to understand but never decipher, which reaches him only in a few fragmentary harmonies and which suspends his soul in a continuous state of unresolved tension, he himself conjures up the missing perfection in play. He makes himself a tiny world in which the cosmic law is evident within strict limits, yet complete in itself and perfect in this respect; in such play man satisfies his cosmogonic instinct.

His fantasy creates these images, by displaying, expanding, and adapting to his mood the individual scenes of nature before him, so orderly arranged that he believes he can discern in the single event the harmony of the whole and for short moments has the illusion of having escaped reality. Truly this enjoyment of nature is not very different from the enjoyment of art, just as the beauty of nature... is assigned to the general beauty of art as a lower category (1989).

Here Semper depicts a space which is in harmony with the nature. Tea drinking is conducted as a ceremony in traditional Japanese culture which gives importance to nature and its rituals can be associated with these kinds of spaces which Semper writes about. To drink tea, visitors enter the tea houses via *nijiriguchi* (the crawl door,) which is only seventy-two centimeters tall (Nishi and Hozumi, 1985). The tea is boiled on the *ro* (hearth) and everyone gathers around it. When the tea is ready, it is served in a festive atmosphere. That atmosphere is also at one tranquil, yet at the same time maintains a certain spiritual and psychological tension (Isozaki, 2007). During tea drinking, the hearth becomes the center of the tea house. Furthermore, activities that take place during tea drinking can be thought to have theatrical qualities as Semper describes, since the tea house becomes like a stage. Regarding Semper's ideas, the hearth of the tea house also shows a similarity with the hearth of the Caribbean hut, which has the potential to become the center of the space when the hut is inhabited. Because the hearth can heat the space and can be used for cooking.

#### 4. Conclusion

reference to architectural space for Semper.

To sum up, it is not surprising that Semper became a leading figure in the 19<sup>th</sup> century architectural discourse, since how he dealt with the term 'tectonics' via his 'dressing-Bekleidung' theory suggests a different perspective than the previous studies. By

Therefore, it is possible to claim that the traditional Japanese tea house can make a

associating 'tectonics' with the metaphor of 'dressing,' he made the reinterpretation of facade and other components of a building possible. His ideas seemed new at that time; however, a similar approach could be found in traditional Japanese architecture according to Frampton. Indeed, Semper's metaphor of 'dressing' together with his theory of primitive hut has similarities with the design of traditional Japanese tea house in terms of the knotting activity and the creation of ceremonial space. It is possible to claim that both approaches are related to knotting in facades and the creation of space in terms of ceremony. Considering all these features, it is remarkable that Semper's ideas in the 19<sup>th</sup> century include some traces of traditional Japanese architecture at that time.

Figure 1 The Caribbean hut

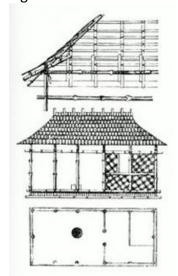


Figure 2 Musubi



Figure 3 A traditional Japanese tea house in elevation



Figure 4 A traditional Japanese tea house in plan

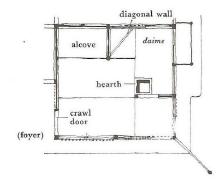


Figure 5 Basic Knot

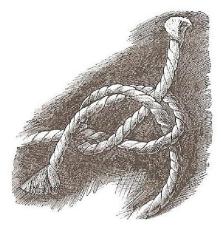
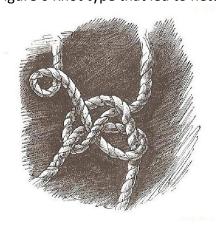


Figure 6 Knot type that led to netting



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