

On The Surface: Purposes of Architectural Enclosure

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Abstract

The essay examines the *Bekleidung* theory, or the theory of architectural cladding. It investigates the meaning of the *Bekleidung* notion as well as its various implications. Generally translated as the theory of cladding, *Bekleidung* also refers to the more fundamental role of architecture as the art of enclosure.

Since the beginning of its conception in the nineteenth century, the *Bekleidung* theory has undergone various interpretations throughout the twentieth century. While many leading theorists and architects were influenced by the notion, some others objected it. The essay traces the beginning and the transformation of the *Bekleidung* concept from the end of the nineteenth century to the beginning of the twentieth century through the theories of Gottfried Semper and Adolf Loos. While Semper's theory marked the beginning of the concept, Loos's opened its entrances towards the mainstream theory and practice.

The paper argues that the concept of architectural cladding is partly a response to the cultural expectation of frontality that calls for architectural order and definition. The purposes of cladding are responsive to spatial, material, and technical as well as symbolic aspects of the building. Cladding is not only a working of

the flat surface of the façade, but also a manifold of boundaries and enclosures, which binds architectural ensembles into a unified whole. Cladding is a tool to bind all parts and materials together into a new visible order. It also defines the way buildings are used and occupied. Architectural cladding is a response to the natural desire of humans to order, to bind, to shelter and to delimit. Such desire antecedes all human artifacts, and hence precedes all spatial construct. In order for space to be considered as a part of either an architectural body or a city, it needs to be bound, ordered and differentiated at the same time that it is integrated as part of a larger field. *Bekleidung* is what lends both material and form to space. The spatiality of architecture comes into being through this logic of binding and ordering the multiple levels of architectural boundaries in which we dwell.

Keyword : Architectural Cladding, Surface, Enclosure, *Bekleidung* Theory

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The architect's general task is to provide a warm and livable space. Carpets are warm and livable. He decides for this reason to spread out one carpet on the floor and to hang up four to form the four walls. But you cannot build a house out of carpets. Both the carpet on the floor and the tapestry on the wall require a structural frame to hold them in the correct place. To invent this frame is the architect's second task. This is the correct and logical path to be followed in architecture. It was in this sequence that mankind learned how to build. In the beginning there was cladding.

Adolf Loos,¹

In the beginning there was cladding,² proclaimed Adolf Loos in his essay *Das Prinzip der Bekleidung*, which addressed the very fundamental question regarding the origins of architecture. From the opening paragraph, regardless of his historical and anthropological accuracy, Loos had made it clear that the creation of a structural framework is historically and logically secondary. To invent walls and frames, the structural basis that allows architecture to stand, is the architect's second task. The original motive of architecture is the creation of livable space, which is formed by the configuration of the covering membrane, be it a carpet, a textile hanging, or an animal skin. Space is created according to purpose and need.

Loos acknowledged his sources explicitly. As an Austrian architect and writer, known for his polemics, Adolf Loos was familiar with Gottfried Semper's architecture in Vienna. Taking after Semper's brilliant pedagogy and rigorous research, Loos continued to claim that mankind learned how to build in this sequence. The essence of his essay lies in its first five opening paragraphs. However, with minute detailed emphasis on materials, the *principles of cladding* are at times diminished to a mere surface treatment for either technical or aesthetic effects. Thus, the readers are left to wonder what the notion of *Bekleidung* means to Loos. Generally translated as "cladding," is *Bekleidung* a matter of covering the surface of one material with another, or is it something else altogether?

Loos imagined the primordial man as follows : man (with or without body ornamentation) sought shelter and protection from inclement weather; hence, he sought to cover himself. Such covering is the oldest architectural detail. Originally it was made out of animal skins or textile products. Yet, the covering had to be put up somewhere if it was to afford enough shelter to a family. Man started spreading out carpets on the earth under his feet and hanging them up around him. Thus, providing protection from all sides marked the beginning of architectural enclosure. Yet those carpets could not stand on their own, and this marked the beginning of a solid, rigid framework to support those carpets, be it a structural framework or a wall. In this way, the idea of architecture developed in the mind of mankind.³

Membranes of some kind provide rooms or livable space. As man covers himself with clothing, he provides habitable rooms and livable space for his body. The primary impulse of architecture, according to Loos, is to clothe/to clad, an act that pertains to the way the building is occupied and used. Yet, Loos's essay split the *Bekleidung* notion into two seemingly irreconcilable components. On the one hand, Loos seems to suggest that the first motive of architecture is the cladding of surface for technical or aesthetic reasons. On the other hand, his argument also implies that enclosure-making is the first impulse for architecture, just as we clad in order to make a livable room. Thus the cladding concept refers simultaneously to the creation of surface finishing and the creation of inhabitable space.

For Loos, cladding both encloses and finishes. As the whole thickness of architectural enclosure, such as walls, floors and ceilings, defines space, the enclosure itself is also defined by its finishing. The cladding also needs to be clad. Cladding, be it for decoration or protection, is an act of ordering and defining the order of architectural enclosure. It is the definition of both space and materials.

It is through Loos's writings rather than Semper's that the notion of cladding entered the mainstream of architectural theory.⁴ Loos introduced his polemics with a great debt to, and perhaps at the great expense of, Gottfried Semper. Without Semper's concept of *Bekleidung*, perhaps Loos's idea of function and its relationship to form could not have been so clearly formulated.

The Art of Cladding

Gottfried Semper was among the leading German theorists whose arguments framed much of the Nineteenth-century debate on constructional and material expression.⁵ Semper seemed to devote critical attention to the higher value of artistic symbolism. He wrote of an artistic/utilitarian drive in which evolving materials and structural support systems were integrated with a representational language of artistic ornament, regarding the ideal symbolism of real buildings to be of vital importance.⁶

At the core of Semper's theory was his belief that materiality and production form a point of intersection where human intellect and will meet with the objective world. After a succession of German idealist philosophers who believed that art must transcend material reality, such as Kant and Schiller, Semper defended the materiality of architecture from the domination of the subjective imagination. He proposed that theorists to take into account man's handling of the physical world rather than considering solely the mind's imaginative faculty. For Semper, the unity of culture was located in the ways that people satisfied both their spiritual and material drives in the act of making artistic and useful things.⁷ This assessment of the nature of materials and technologies of production became central to Semper's thinking. It also involved an understanding of how architecture developed its physical form in earliest human culture. In contrast to the idealist philosophers, Semper placed great importance on the artistic expression of materials.⁸

In his 1934 essay, *Preliminary Remarks on the Polychrome Architecture and Sculpture in Antiquity*, Semper entered the polychrome debate. Along with Jacques-Ignace Hittorff, Semper believed that Greek temples had been painted in antiquity. The Preliminary Remarks was a work that provided the first key to Semper's *Bekleidung* theory. Semper considered polychromy as a continuous historical process - that is, as a practice characteristic of every period of high artistic achievement and therefore manifest in both pre-Greek and post-Hellenic architecture.⁹ In the opening pages of the Preliminary Remarks, Semper described

the human delight in color as fundamental to our being, residing in our instinct for play and adornment.¹⁰ Thus the first crude shelters were varnished or dyed with an imagination favoring bright colors in variegated combinations. Concurrent to the first surge of religious concepts, this instinct went through refinement. Technically, the process of polychromy was additive in its overlaying of procedures and celebratory motifs while stylistically, it was a process of symbolic and visual refinement.¹¹

Over the next few decades, this plea for the empirical understanding of materiality would be developed and refined in many ways, yet Semper would remain adamant in his belief that a deeply rooted appreciation of color was paramount to Greek artistic thinking and that this propensity revealed something of fundamental importance to all artistic activity.¹² In his mature work on style published three decades later, Semper developed this idea further and introduced his theses of cladding (*Bekleidung*) and material transformation (*Stoffwechsel*) which would later be the basis for Loos's idea of the aesthetics and functions of cladding.

Despite Semper's emphasis on materials, his notion of function was not one-sided as Alois Riegl would later interpret it. For Semper, buildings and other artistic objects did not spring into being solely from the demands of the physical world. Architecture could not be reduced to materialism. Ingrained with the demands of production and an inclination toward comfort and warmth, were other drives toward symbolism and spiritual expression. The world of ideas emerged in alliance with materiality and needs.¹³ In other words, architecture sprung from both its purposiveness and its purpose.

Semper's next theoretical efforts appeared seventeen years after the Preliminary Remarks, due largely to the success of his practice and six difficult years of political exile. *The Four Elements of Architecture* was a work that Semper composed in 1850, shortly before and after moving to London. While the first part dealt with the continuing issue of polychromy, the second part focused on the development of arts' primeval motives through the theory of the four elements.

While in Dresden, Semper had already begun to advance the idea of the primordial forms (*Urformen*) in architecture and had delineated two ideas or motives generating the first abodes, the enclosure (*Umfriedung*) and the roof.¹⁴ Subsequently, he added the hearth to this list, and defined the surrounding wall (*Einfassungmauer*) as the first element of antique architecture among the southern races, and the primordial seed (*Urkeim*) for dwellings.¹⁵ The enclosure acquired its architectural value by defining a new spatiality, or inner world, separated and protected from the outer, also by surrounding the hearth, or the social and spiritual counterpoint for the dwelling. In his Dresden lectures, Semper formulated two themes that were to be the focus of *The Four Elements*.¹⁶ The notions of hearth gathering, walling, and roofing were regarded as basic ideas giving rise to architectural form. Another theme was the division of these motives into two fundamental dwelling types: the wall-dominated architecture of the south and the roof-dominated dwelling of the north.¹⁷

The Four Elements was based on the symbolic-structural function of the art form and its relationship to the tectonic concept of a building. Semper formulated a theory of artistic development in which all forms ultimately derive from the four social and artistic motives of hearth-gathering, mounding, roofing, and walling. Corroborated by the evidence of the Caribbean hut he saw in the Crystal Palace Exhibition of 1851, Semper's four elements were comprised of a hearth, an earthwork, a framework, and an enclosing membrane. (figure 1) Semper assigned certain tectonic crafts to each of the four elements: textile to the art of enclosure and thus to the wall, carpentry to the structural frame, masonry to the earthwork, and ceramics to the hearth. After presenting the four motives, Semper focused on the enclosure and began to outline what later became central to his thinking: the metamorphosis of the motive into the idea of cladding (*Bekleidung*). The theory of cladding, thus, evolved from his thesis of the transformation from mats, carpets and wickerwork into the wall.¹⁸

This last motive, for Semper, arose in aboriginal societies with the definition of spatial boundary by means of hedges and vertically-hung mats. This hanging mat was later transformed into the art of textiles, first used alone as spatial enclosures, and then later applied to the more durable wall that served as its backing.¹⁹ Semper further argued that this spatial motive underwent another transformation around the time of the first Mesopotamian civilizations when the textile characteristics of the wall hanging were symbolically and visually transposed onto such materials as tile, brick, mosaic and alabaster wall panels. With the formation of Greek architecture, the textile, or dressing, motive attained its artistic culmination by transforming itself into a thin veneer of paint - a spatial dressing that for Semper covered the whole exterior surface.²⁰ Here Semper proposed an interpretation of the development of architectural form as a process of symbolic transformation, where the desire was to clad the construction's materiality with the expressive form.

This idea underlies the *Stoffwechseltheorie*, the theory of symbolic conservation, in which the mythical or spiritual values attached to certain structural elements cause them to be translated into petrified forms. Here the dressing or cladding of the wall was viewed as a kind of petrified fabric that symbolized a transformation of nomadic textile forms into a more permanent material.²¹ This *Stoffwechseltheorie*, "deals with the product of human artistic skill, not with its utilitarian aspect but solely with that part that reveals a conscious attempt by the artisan to express cosmic laws and cosmic order when molding the material."²² Thus, material and construction were subject to the same evolutionary process as every other artistic phenomenon.

Nine years separated *The Four Elements* and Semper's best-known publication *Der Stil in den technischen und tektonischen Künsten; oder praktische Ästhetik* (Style in the Technical and Tectonic Arts or Practical Aesthetics), written during the period 1860-1863. His emphasis on the four elements is superseded by a comprehensive consideration of the more basic technical operation underlying artistic creation.²³ Semper then developed a theory where material imagination

stood at the center of architectural activity: the theory of cladding (*Bekleidung*). Merging the ideal and the real within the course of history, Semper saw the evolutionary path of architecture as linked by material and spiritual demands.

The subject of *Der Stil* was twofold, focusing on the development of art's primeval artistic motives and a dissertation on the notion of *Bekleidung*.²⁴ The main body of *Der Stil* is divided into four primary divisions: textiles, ceramics, tectonics and stereotomy. These are the classes of motives underlying architectural creation. This subdivision depends on the process of creation and the degree of elasticity of matter, from the "flexible," the "plastic," and the "elastic" to "solid" material. Semper eventually added the fifth division of metal, which he believed developed later and borrowed its motives from the other classes. These divisions compose the two volumes of *Der Stil*, with the subject of textiles consuming the entire first volume. Semper appended the *Bekleidung* thesis to this textile section.

The textile section begins with a definition of the motive's basic function: 1) to string, to bind, and 2) to cover, to protect, and to isolate. Semper then examined style as it is conditioned by the material, the material's treatment and the transposition of the motive into cladding.²⁵ The cladding thesis was introduced in *Der Stil* by a subheading on the correlation of clothing with architecture, a subject that was never fully developed as he deferred the discussion on this topic to a never-completed third volume.²⁶ Nevertheless, Semper continued onto the principle of cladding and its influence on architecture. In introducing this principle, he suggested that in Greece the cladding principle had become spiritualized, serving beauty more in a structural-symbolic than a structural-technical sense.

Core-form and Art-form

For Semper, each part of architecture could be thought of as being realized by two elements: the *core-form* and the *art-form*. The *core-form* of each part is the mechanically-necessary and statically-functional structure. It refers to the material and static function of an architectural element; for instance, the column's function of support.²⁷ The *art-form*, on the other hand, is the characterization by which the mechanical-statical function is made apparent.²⁸ It designates how the static

function of the *core-form* becomes apparent; for instance, the way the Greeks rendered the supporting role of a column in a way that was artistic and expressive of its function. For Semper, the *art-form* might be conceived as a conceptual veil that overlays the column, giving it its characteristic expression.²⁹

The sense of wholeness in architecture is generated by materials and elements being joined together, not by a natural unfolding such as the growing branches of a tree. Thus the work of architecture is unlike a work of nature with a tectonic structure. Architecture is made of dead and static materials. The *art-forms* of the building do not grow naturally out of its *core-forms*. Yet Semper remarked that

“decorative symbols have no real static function, but it is wrong to conclude that they are applied and added from outside.”³⁰ Semper later gave the example of the Greeks, the only people who achieved “giving their architecture structure and tectonic products an organic life so to say... Greek temples and furnishings are not constructed and skillfully joined, they have grown, they are not structures adorned by having floral and animal forms attached to them; their forms are like those that organic forces call forth when striving against mass and weight.”³¹

Semper saw the *art-form* as arising at the same moment when the mechanical scheme of the *core-form* is conceived, so that the two are thought of as a unity and are born simultaneously.³² For Semper, both the structural part and the decorative symbol are closely related so that one cannot be altered without affecting the other. In other words, each must be a primary element born simultaneously with the whole. In this way, decorative symbols are not considered pure adornment but rather as coverings suggestive of a function performed by the core to which they are closely related.³³ As Semper suggested, human artistic skill revealed a conscious attempt by the artisan to express cosmic laws and cosmic order when molding materials. The making of ornament is also a making of order to arrive at an articulated surface. In this way, ornament might be seen as a legible surface or as a covering suggestive of the function performed by the core.

As Semperian rationale illuminated the architecture of antiquity, it also opened the door for the externalization of the façade. While the *Stoffwechseltheorie* allows for an “evolution” of materials which are modified when changed from one to another, this evolution also allows ornament to increasingly free itself from the core to which it closely clings. If this suggests certain autonomy of cladding motives, a moment may arise when ornament conceptually emancipates itself from the core and becomes mere adornment. The formerly symbolic decoration may also become more and more of an arbitrary addition to the body of architecture once it is fully emancipated. In other words, the theory of the art-form and core-form relationship that seemed to fit Greek architecture became problematic in the stylistic eclecticism of the Nineteenth century. Cladding at times became arbitrary rather than an answer to necessity.

Binding, Weaving, Dressing

In the *Four Elements*, Semper differentiated the walls from the compressive earthwork, or load-bearing mass. This distinguishes the massiveness of the fortified wall as indicated by the German word *die Mauer*, from the light screen-like enclosure signified by the term *die Wand*. Although both terms imply enclosure, it is the latter that is etymologically related to the German word for “dress” (*Gewand*) and the verb *winden*, “to embroider, to sew.”³⁴ The German word *Bekleidung* derives from the verb *kleiden*, “to dress,” which came from the root *Kleidung* meaning “clothing.” Both *Kleidung* and *Gewand* are connected both etymologically and logically to the concept of binding or *Verbindung*.

According to Semper’s rationale, the acts of weaving, binding, knotting or sewing were the first of all arts answering to human need.³⁵ (figure 2) As cladding is an answer to the human instinct to bind, to order all architectural elements and parts to create livable space, it is also symbolic, suggestive of the cosmic order and the function performed by the core.

The concept of *Bekleidung* became problematic when it was interpreted only as the covering, paneling, or sheathing of a building in a technical or aesthetic

sense. The art of cladding was at times taken as synonymous with the externalization of architecture, an application of arbitrary decorative surface at will. The interpretation of the *Bekleidung* concept as the literal mask, the externalization of the façade, was the basis of attacks that other theorists lashed upon Semper.

For some of the Nineteenth Century theorists, the “*art of cladding*” had led architecture down the false path of “*externalization*,” the path in which undue prominence is given to the façade of a building.³⁶ Theorist such as Alois Riegl and August Schmarsow failed to acknowledge Semper’s idea of the reciprocity between the spiritual and the material drives, thus neglected the fact that the *Bekleidung* theory was also suggestive of spatial creation. Cladding was thus misinterpreted as something diametrically opposed to the creation of architectural space.

The Purposes of Cladding

On January 24, 1856, at the Polytechnikum of Zurich, Semper gave a short inaugural lecture on ornament, which was focused upon the double meaning of Greek *kosmos*. *Kosmos, cosmos*, from which “cosmetic” was derived, signify both the order of the heavens and ornament. This ambiguity between order and ornament allowed Semper to view early Greek adornment as a process of applying decorative order (*Gesetzlichkeit*) to form: “*when one decorates, one more or less consciously imposes a natural order on the object that is adorned.*”³⁷ This instinct of cosmic adornment, for Semper, was the key to Greek tectonics. Such instinct was also manifested in everyday life in the Greeks’ intelligible adornment of their bodies.³⁸ Semper further argued that this intelligibility of body adornment, derived from decorative instinct, also carried a purpose. Bodily accessories that modify one’s physical appearance, such as a mask, were based on the impulse to terrify a foe. Along with the mask, painting and tattooing of the body were other manifestations of this tendency. Finally he arrived at the conclusion that: “*It would not be too paradoxical to seek the origin of certain traditional surface ornament in the art of tattooing.*”³⁹ This suggests architectural ornament as a form of body-dressing or the masking of physical appearance. Semper wrote:

I think that the dressing and the mask are as old as human civilization, and the joy in both is identical with the joy in those things that drove men to be sculptors, painters, architects, poets, musicians, dramatists, in short, artists. Every artistic creation, every artistic pleasure presupposes a certain carnival spirit, or to express myself in a modern way – the haze of carnival candles is the true atmosphere of art. The denial of reality, of the material, is necessary if form is to emerge as a meaningful symbol, as an autonomous human creation.⁴⁰

By suggesting the masking of reality and of material, Semper implied different levels at which cladding performs. Men also mask the material of the mask. First, the dressing may camouflage the material in a physical sense in the same way that Greek polychromy covers the marble underneath in order to conceal its material nature so it can be perceived as a pure form. Second, the art-form or artistic dressing may also camouflage the thematic content of the work and represent a message otherwise unrepresented, just as a man may wear a mask to presume another identity.

Semper's attention to the mask lies in its content, the virtue of which is artistic symbolism. The goal of the mask is the representational language it conveys. By tracing the historical and artistic/utilitarian drive in which evolving materials and structural support systems were clad by the language of artistic ornament, Semper attempted to construct a universal account of the nature of building more than a stylistic or technical aspect of the surfacing itself.

The purpose of cladding is the point that separates Semper's theory from Loos's. Although Loos's idea resonates with Semper's *Bekleidung* notion, his theory also rejects certain symbolic representations of the surface. The task of the surface was to cultivate the property natural to the materials and the nature of each setting. Leaning toward the technical and formal language of materials, Loos's *Bekleidung* theory was a way to create the unity of each setting through the nature

of cladding material, not through its symbolic language. Despite the differences, Semper's symbolic language and Loos's material language were a means to unify the ensembles of elements within each setting. They illustrate the will to create *Gesamtkunstwerk* with a certain level of pictorial reality. While Semper considered cladding to be symbols, Loos's cladding was considered to be materials. For Loos, the ethics of the mask lie in the applicability and methods of production of materials. This ethical concern, however, was generated by new technology and material that emerged without their own language of form. The elasticity of material such as poured cement allows it to be molded into all forms. Loos's *Bekleidung* theory coincides with one of the major effects of industrialization: the increased use of veneered construction.⁴¹ At the time Loos was writing, the adverse effects of this type of construction were much clearer to him than they had been to Semper. Hence, the difference between Semper and Loos toward the *Bekleidung* notion was partly marked by the effects of new technology, materials and methods of construction.

Loos' attitude toward the ethics of material underlies his objection to the *Ringstrasse* buildings in Vienna. During the Nineteenth Century, Vienna witnessed a major change in its urban structure. The city walls and fortifications were demolished, and replaced with a wide tree-lined boulevard, the celebrated *Ringstrasse*, or Ring Street. (figure 3.) Along this ring road encircling the old city, major building projects were launched. Many public buildings as well as private dwellings were constructed in styles thought to be proper for each projects. It resulted in the new Gothic church, the Baroque imperial theater, the Greek parliament and the medieval town hall. (figure 4-7) As for the private dwellings, each and every apartment building employed different styles deemed grand and majestic. The architecture of the *Ringstrasse* freely borrowed architectural vocabulary from the past to create the image of the golden era. Constructed in the Nineteenth Century, the *Ringstrasse* buildings employed modern materials and techniques of construction. Yet, behind the façades of the *Ringstrasse*, another type of Viennese life loomed. The working class's struggle, the trace of the era's economic hardship, the physical and mental problems of the city, all were hidden behind the constructed façade.

Loos's critic towards the *Ringstrasse* architecture was about its deception. In his essay *Die Potemkinsche Stadt, or the Potemkin City*, of 1898, Loos asserted that Vienna was not different from a village built in Ukraine by Count Potemkin, a Russian field marshal and favorite of Catharine II. In 1787, Potemkin built a sham villages for the occasion of the Empress's visit, giving the impression of a high level of prosperity among the impoverished population. In this essay, Loos objected the fictitious language implying the opposite of reality and the way such language was carried out. In the interest of rent ability, the landlord is forced to nail on a particular kind of façade to the building. Loos linked the façades of the *Ringstrasse* building to props made out of canvas and pasteboard or figurative surface applied to the building.

As for Loos, the problem of masking the *Ringstrasse* buildings was due to the unethical language of materials. Cladding works as far as there is no confusion between the cladding and the materials clad. The boundary must be clear. Cladding must respect its own language of form. With poured cement imitating the stonework of the entire façade, such as in many cases of the *Ringstrasse*, the mask becomes a deception rather than the revealing of another content.

Every material possesses its own language of forms, and none may lay claim for itself to the forms of another material. For forms have been constituted out of the applicability and the methods of production of materials. They have come into being with and through materials. No material permits an encroachment into its own circle of forms. Whoever dares to make such an encroachment notwithstanding this is branded by the world a counterfeiter. Art, however, has nothing to do with counterfeiting or lying. Her paths are full of thorns, but they are pure.⁴²

There is a level at which forms convey the nature of materials and methods of production. The virtue of cladding, for Loos, lies in its performative representation more than its symbolic aspects. Loos's critical view towards the ethical function of architectural cladding became evident in his critique of ornament. His critique was not directed at a problem of ornament or not ornament, but at a problem of meaning.

The designers of that time often regarded surface as a provocation for the ornamental inventor.⁴³ For Loos, ornament must be integrated with the way the building is built. As well as the way it is used which is opposite to the decorated sheds his contemporaries purveyed.

In his famous essay, *Ornament und Verbrechen or Ornament and Crime* published in 1908, Loos aimed to distinguish different kinds of ornament, not different ornamental shapes, nor different ornamental styles but two kinds of ornament, the first being indicative or capable of pointing away from itself towards something necessary but otherwise unrepresented, and the second being ornament which distracts or fails to represent and is unnecessary.⁴⁴ Such unnecessary ornament is what is exemplified on the surface of the buildings of the *Ringstrasse* and was criticized by Loos. Architectural cladding is not a matter of covering up but a matter of indicating, pointing or revealing in the similar way that the small details of everyday life reveal the physiognomy of the culture.

According to Loos, as cladding clads, it also encloses. Apart from the material and technical aspects of cladding, Loos was also concerned with the empathetic language that cladding exerts upon the inhabitant. (figure 8) Surface cladding is that which is responsive to the character and function of the building, hominess on a house, security for a bank, and respect in a secular institution.⁴⁵ These effects are produced by both the materials and the form of the space. What Loos proposed here was a kind of empathetic emphasis on *Bekleidung* to which Semper did not allude.

Conclusion

From Gottfried Semper to Adolf Loos, the concepts of architectural surface, cladding, dressing, or the *Bekleidung* notion is partly a response to the cultural expectation of frontality that calls for architectural order and definition. The purposes of cladding are responsive to spatial, material, and technical as well as symbolic aspects of the building. Cladding is not only a working of the flat surface of the

façade, but also a manifold of boundaries and enclosures, which binds architectural ensembles into a unified whole. Cladding is a tool to bind all parts and materials together into a new visible order. It also defines the way buildings are used and occupied. Architectural cladding is a response to the natural desire of humans to order, to bind, to shelter and to delimit. In this sense, Semper's proposal of the wreath as the archetypal work of art, responds to the instinct and desire of mankind. Such desire antecedes all human artifacts, and hence precedes all spatial construct. In order for space to be considered as a part of either an architectural body or a city, it needs to be bound, ordered and differentiated at the same time that it is integrated as part of a larger field. *Bekleidung* is what lends both material and form to space. The spatiality of architecture as well as the city comes into being through this logic of binding and ordering the multiple levels of architectural boundaries in which we dwell.

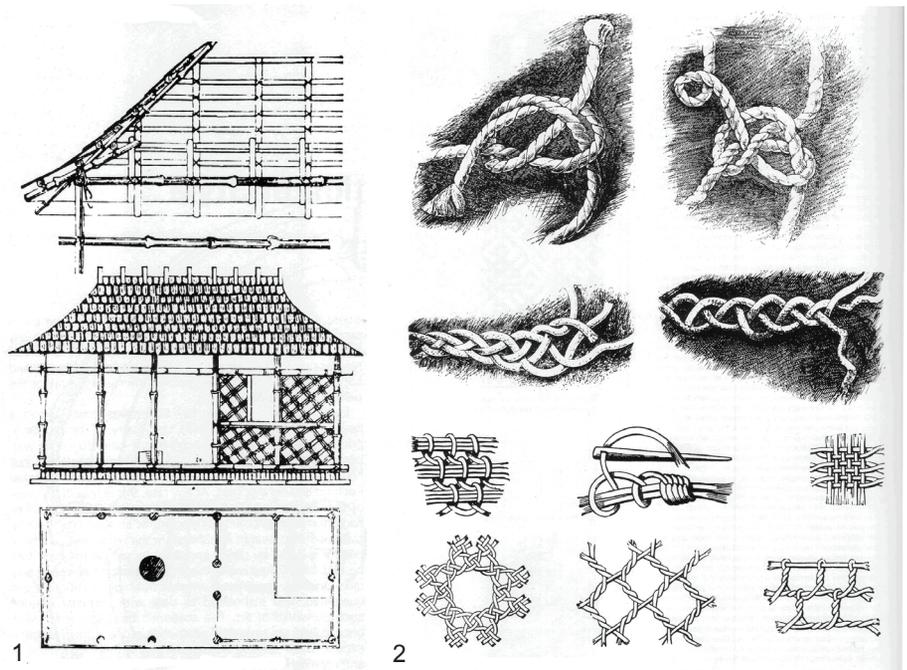


Figure 1 From Gottfried Semper, Der Stil, Caribbean Hut

Figure 2 From Gottfried Semper, Der Stil, examples of knotting, weaving techniques

Öffentliche Einrichtungen und Bauten in der Ringstraßenzone im Jahre 1910

Bearbeitung: o. Prof. Dr. Rudolf Wurzen · Kartographie: Kurt Molik

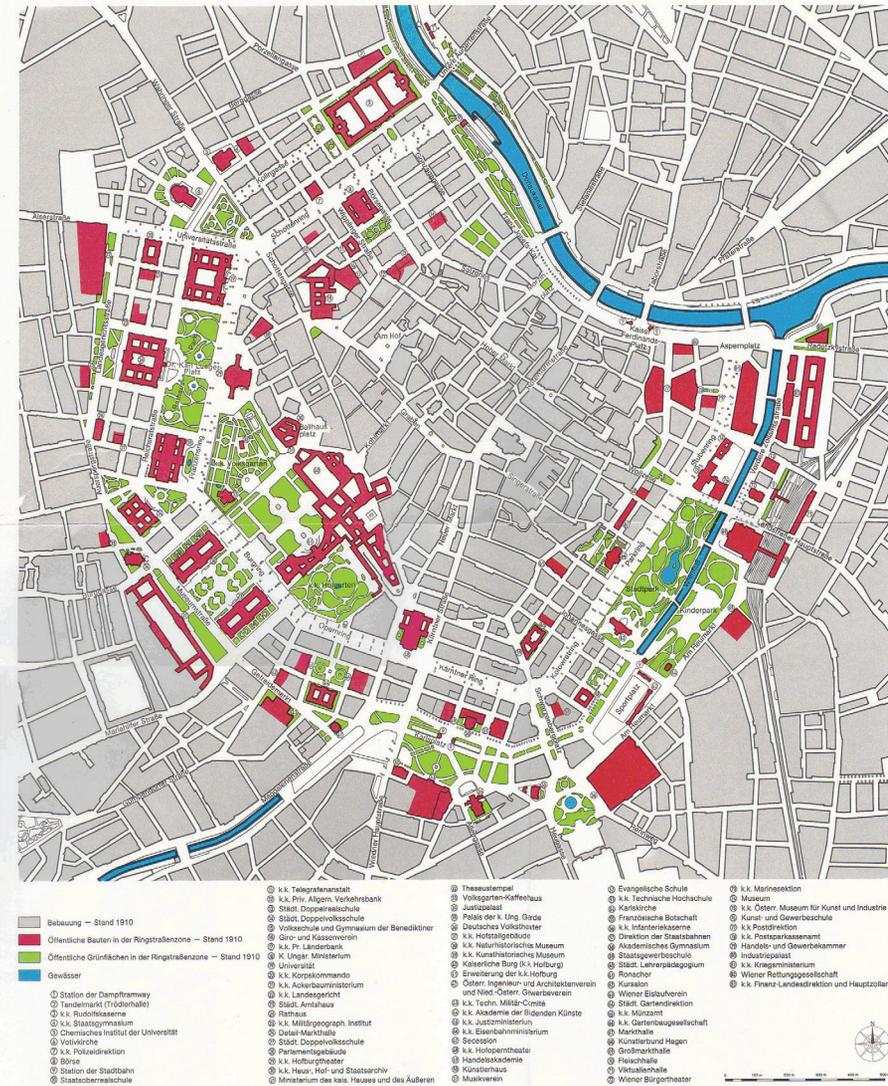


Figure 3 The Ringstrasse, 1910

Figure 4 The Votive Church
(Heinrich von Ferstel)

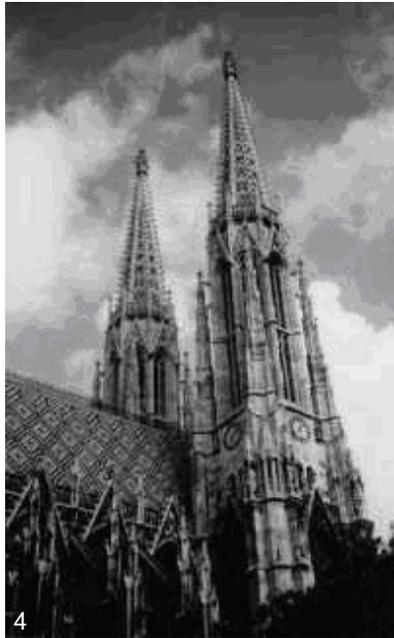


Figure 5 The University (von
Ferstel)



Figure 6 The Parliament (Theophil
Hansen)



Figure 7 The Hofburg Theater
(Gottfried Semper and Karl von
Hasenauer)





Figure 8 Adolf Loos, Villa Müller

References

- ¹ “Hier hat der architect die aufgabe, einen warmen, wohnlichen raum herzustellen. Warm und wohnlichen sind teppiche. Er beschließt daher, einen solchen auf den fußboden auszubreiten und vier teppiche aufzuhängen, welche die vier wände bilden sollen. Aber aus teppiche kann man kein haus bauen. Sowohl der fußteppiche als auch der wandteppiche erfordern ein konstruktives gerüst, das sie in der richtigen lage erhält. Dieses gerüst zu erfinden, ist erst die zweite aufgabe des architekten.” The first paragraph of Adolf Loos, “Das Prinzip der Bekleidung,” first published in *Neue Freie Presse*, September 4, 1898. Translated as “The Principle of Cladding,” in Adolf Loos, *Spoken into the Void*, pp. 66-69.
- ² “Im anfang war die bekleidung.” Loos, “Das Prinzip der Bekleidung.” Second Paragraph.
- ³ “Der mensch suchte schutz vor den unbilden des wetters, schutz und wärme während des schlafes. Er suchte sich zu bedecken. Die decke ist das älteste architekturdetail. Ursprünglich war sie aus fellen oder erzeugnissen der textilkunst. Diese bedeutung erkennt man noch heute in den germanischen sprachen. Diese decke mußte irgenwo angebracht werden, sollte sie genügen schutz für ein familie bieten! Bald kamen die wände dazu, um auch seitlichen schutz zu bieten. Und in dieser reihenfolge entwickelte sich der bauliche gedanke sowohl in der menschheit als auch imindividuum.” Loos, “Das Prinzip der Bekleidung,” Second Paragraph.
- ⁴ See Joseph Rykwert, “Architecture is All On the Surface. Semper and Bekleidung,” in *Rassegna* 1998, v.20, n.73, pp. 20-29.
- ⁵ See Michel Schwarzer, “Freedom and Tectonics,” in *German Architectural Theory and the Search for Modern Identity*, Cambridge, MA, 1995, pp. 167-200.
- ⁶ Schwarzer, *German Architectural Theory and the Search for Modern Identity*, pp 172-176.
- ⁷ See Michel Schwarzer, “Freedom and Tectonics,” in *German Architectural Theory and the Search for Modern Identity*, Cambridge, MA, 1995, pp. 167-200.
- ⁸ Ibid.
- ⁹ See Harry Mallgrave’s introduction of Gottfried Semper, *The Four Elements of Architecture and Other Writings*, translated by Harry Mallgrave and Wolfgang Herrmann, p. 14.
- ¹⁰ See Gottfried Semper, “The Preliminary Remarks on the Polychrome Architecture and Sculpture in Antiquity,” in *The Four Elements*, pp. 45-74.
- ¹¹ For further discussion, see Wolfgang Herrmann, *Gottfried Semper: In Search of Architecture*, Cambridge, MA, 1989, pp. 125-126, and Mallgrave’s introduction to *The Four Elements*, pp. 2-16.
- ¹² Mallgrave, *The Four Elements*, p. 13.

- ¹³ For further details on the subject, see Herrmann, *Gottfried Semper*, pp. 121-123, Mallgrave, *The Four Elements*, pp. 16-41, and Schwarzer, *German Architectural Theory*, pp. 175-179.
- ¹⁴ From a manuscript dated circa 1846, see Wolfgang Herrmann, *Gottfried Semper theoretischer Nachlass an der ETH Zurich: Katalog und Kommentare*, Basel, 1981, p. 81. See also Mallgrave, *The Four Elements*, p. 23.
- ¹⁵ Ibid.
- ¹⁶ From the same manuscript dated circa 1846.
- ¹⁷ Herrmann, *Gottfried Semper*, pp. 165-173. See also Mallgrave, *Gottfried Semper, Architect of the Nineteenth Century*, New Haven, 1996, pp. 182-189.
- ¹⁸ For further details see Herrmann, "The Genesis of Der Stil," in *Gottfried Semper*, pp. 88-100. See also, Mallgrave, *Gottfried Semper*, pp. 290-302.
- ¹⁹ Gottfried Semper, *The Four Elements of Architecture*, pp. 74-129.
- ²⁰ Ibid.
- ²¹ See further discussion in Herrmann, *Gottfried Semper*, p. 149.
- ²² Quoted in Herrmann, *Gottfried Semper*, p. 151.
- ²³ Mallgrave, *Gottfried Semper, The Four Elements*, p. 29.
- ²⁴ See Harry Mallgrave's introduction of, *Empathy, Form, and Space: Problems in German Aesthetics*, Santa Monica, CA, 1992, p. 33.
- ²⁵ Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten; oder praktische Ästhetik (Style in the Technical and Tectonic Arts of Practical Aesthetics)*, written during the period of 1860-1863. See further analysis in Mallgrave, *The Four Elements*, pp. 29-40.
- ²⁶ Mallgrave, *The Four Elements*, pp. 29-40.
- ²⁷ See Wolfgang Herrmann, "Semper and the Archeologist Bötticher," in *Gottfried Semper: In Search of Architecture*, pp. 139-152. See also Harry Mallgrave, *Gottfried Semper, Architect of the Nineteenth Century*, New Haven, 1996, pp. 219-222. And Mitchell Schwarzer, "Freedom and Tectonics," in *German Architectural Theory and the Search for Modern Identity*, Cambridge, MA, 1995, pp. 167-200.

- ²⁸ Karl Bötticher. "Das Prinzip der hellenischen und germanischen Bauweise hinsichtlich der Übertragung in die Bauweise unserer Tage," in *Allgemeine Bauzeitung* 11 (1846), pp. 111-125. Translated as "The Principles of the Hellenic and Germanic Ways of Building with Regard to Their Application to Our Present Way of Building," in *In What Style Should we Build?: The German Debate on Architectural Style*, translated with an introduction by Wolfgang Herrmann, Santa Monica, CA, 1992, pp. 150-151.
- ²⁹ Herrmann, *Gottfried Semper: In Search of Architecture*, pp. 139-152.
- ³⁰ From Semper's manuscript, quoted in *Ibid*.
- ³¹ *Ibid*.
- ³² See also Mallgrave's discussion of Semper in *Empathy, Form and Space*, pp. 32-34.
- ³³ *Ibid*.
- ³⁴ For further discussion about the words *die Wand* and *die Mauer*, see Kenneth Frampton, *Studies in Tectonic Culture*, Cambridge, MA, 1996, pp. 61-92.
- ³⁵ *Ibid*.
- ³⁶ *Ibid*.
- ³⁷ Semper, *Über die formelle Gesetzmässigkeit des Schmuckes und dessen Bedeutung als Kunstsymbolik*, Zurich, 1856, p. 6. "Wo der Mensch schmückt, hebt er nur mit mehr oder weniger bewußtem Tun eine Naturgesetzlichkeit an dem Gegenstand, den er ziert, deutlicher hervor." See further discussion in Mallgrave, *Gottfried Semper*, pp. 269-274, and note n. 62, p. 406.
- ³⁸ Mallgrave, *Gottfried Semper, Architect of the Nineteenth Century*, p. 270.
- ³⁹ Semper, *Über die formelle Gesetzmässigkeit des Schmuckes und dessen Bedeutung als Kunstsymbolik*, Zurich, 1856, p. 9. "...so dass es nicht zu paradox ware den Ursprung gewisser überlieferter Flächenornamente in der Tätowierungskunst zu suchen." See further discussion in Mallgrave, *Gottfried Semper*, p. 406.
- ⁴⁰ Semper, *Der Stil*, I, p.231 n.2, translated in "Style: The Textile Art," *The Four Elements*, p. 257.
- ⁴¹ E. Ford used the word veneered construction, to exemplify non-load bearing cladding. See E. Ford, *The Details of Modern Architecture*, Cambridge, MA, 1990.

- ⁴² “*Ein jedes material hat seine eigene formensprache, und kein material kann die formen eines anderen materials für sich in anspruch nehmen. Denn die formen haben sich aus der verwendbarkeit und herstellungsweise eines jeden materials gebildet, sie sind mit dem material und durch das material geworden. Kein material gestattet einen eingriff in seinen fomenkreis. Wer es dennoch wagt, den brandmark die welt als fälscher. Die kunst hat aber mit der fälschung, mit der lüge nichts zu tun. Ihre wege sind zwar dornenvoll, aber rein.*” 5th paragraph of Loos, “Das Prinzip der Bekleidung.” Translated in *Spoken into the Void*, p. 66.
- ⁴³ Joseph Rykwert, “Adolf Loos : The New Vision” in *The Necessity of Artifice* (New York: Rizzoli, 1982): 67.
- ⁴⁴ David Leatherbarrow, “Interpretation and Abstraction in the Architecutre of Adolf Loos” in *JAE* (Summer 1987): 2-9.
- ⁴⁵ Yet Loos overlooked that Semper himself invented ornament constantly. But while Semper did so with direct historical reference, Olbrich and Hoffmann later invented ornaments seemingly out of thin air. These kinds of unhistorical surface ornaments offensive to Loos, were not far from those proposed earlier by Owen Jones. In his *Grammar of Ornament* published in 1857, Jones suggested that natural forms, particularly flowers and leaves provided for a new and completely unhistorical kind of surface treatment. This was demonstrated through various structural analyses of natural forms such as flowers in his book. This structural analysis was provided by Christopher Dresser, who later proposed a different approach to surface ornament which would inspire response that is directly stimulated by the ornament that might vary from room to room. See discussion regarding Jones and Dresser in Rykwert, “Architecture is all on the Surface,” pp. 28-29.