THE ORIGINAL INTENTION – INTENTION OF THE ORIGINAL?
Remarks on the importance of materiality regarding the preservation of the Tugendhat House and other buildings of Modernism.

The author understands materiality as the manifestation of historic, artistic and other cultural attributes and designs of monuments in their material substances, their application techniques as well as their surfaces. The original idea or intention of an artist is not real without the material substrate which brings the artist's ideas and intentions to life and physical form.

“Ultimately, it is only the surface which is decisive for architecture. Human beings do not live in designed and constructed buildings, but rather in the atmosphere created by the architectural surface” (Theo van Doesburg, 1929).

Project designs in the field of restoration of Modern Movement buildings mostly aim to recover something that is called the “original intention” of the architectural design - the ideas of the architect - including the “original” appearance of the structure, its surface and its colour. But how do we know, what the original intention is and what the architecture originally looked like? What is the original appearance? What are possible criteria to define original appearance? Of what elements is the original building comprised of? And above all: what is the importance of the original material fabric for the aesthetical and functional intention of the architectural design?

This paper emphasizes the need to address the importance of the original fabric, its materiality, its colour and its surface and that they are an indispensable source for understanding the original intention. Even more so, the original should be understood as material substrate of the representation of the cultural, artistic and social intentions.
Autonomy of Art and Material

The conceptual statements of architects, as in art history generally, cannot be taken literally as the explanation of the meaning of the work of art; the statements can even be deceptive. The piece of art is much more than the conscious intention of the artist and the basic source of knowledge of original aesthetic intention is thus the monument itself, its fabric and the materiality of its surface. With the transformation of a building to a monument of cultural heritage, its fabric, its materiality and its appearance also become part of the authenticity that has to be protected. Even architecture - which in its artistic concept is intended to be a dematerialized structure - is based on material. In this context, the original appearance must be understood in a dialectic way as the aesthetic result of artistic and functional intentions: both the result of materials and techniques applied to the architectural surfaces. The materials and techniques themselves play their autonomous aesthetic role; their aesthetic appearance consists not only of the technology intentionally applied to architectural surfaces but also of the intrinsic, natural qualities of the materials and techniques. These intrinsic qualities have been described in 1929 by the Bauhaus Master Láslo Moholy Nagy with the terms “structure, texture, facture and agglomeration”

The image of what is presumed to be the original appearance of historic architecture is modelled in the social discourse, by (art-) historians, by expositions, sometimes by the architects themselves. Black and white photographs may enforce a somewhat purist image of functionalist architecture, an image which is an abstraction of materials, colour and natural changes of the architectural surfaces.

The awareness of materials and the techniques applied, and their importance in the aesthetic concept of architecture of the Bauhaus pioneers is well known. Nevertheless, modern art historical discourse does not refer much - if at all - to materials and colours of architectural surfaces in their interpretation of historical architecture.

The stereotype of the “white cubes” created in the landmark 1932 MOMA exhibition of Hitchcock and Johnson is somewhat devoid of the material reality. An example: the investigations of the facade of the Bauhaus Meisterhaus Muche-Schlemmer of 1925-executed by conservators-restorers in 2001/02- have proved that it was decorated with a very fine and varied polychrome paint. In the course of the previous renovation of the other Meisterhäuser of the Bauhaus in 1992 (Meisterhaus Feininger) and in 1997-2000 (Meisterhaus Klee/Kandinsky) much less emphasis was placed on the investigations of the architectural surfaces and their finishes. Finally these facades were renewed with a white
lime paint, surely influenced by the stereotype of what Modern Movement architecture should look like. On the basis of our knowledge of the polychrome of the facade of the Meisterhaus Muche/Schlemmer today, we can only assume that the evidence of polychrome strata was lost with the renewal of the facades of Meisterhäuser Feininger and Klee/Kandinsky.  

The Tugendhat House: Materiality  
Since 2003, the HAWK University of Applied Arts and Sciences in Hildesheim (together with other Universities such as University of Pardubice, Brno University of Technology and Vienna University of Applied Arts) has been investigating the Tugendhat House of Ludwig Mies van der Rohe which was built in 1928-30 and was listed by UNESCO as World Heritage in 2001.  
Originally, the surface of the final rendering of the façade of the Tugendhat House was smoothed with a wooden board, which created a certain roughness caused by the grains of the sand of the mortar and was painted with a yellowish white coating containing lime and a fine yellowish sand. The result was a tone similar to the Travertine stone, of which the dado, sills and footsteps are made. (Ill. 1). Material and surface appearance owe much to the traditional local craft and manner in terms of how the facades were coated. For example, during the investigation of the pavilion of the Academy of Applied Arts of Pavel Janák dating from 1928 in the Trade Fair area of Brno (ill. 2), we found the facade coated in much the same manner. The difference between the material and the finish of the final rendering of the façade of the Tugendhat House and the local craft tradition lies in the matching (Anspielung) of the colour of the facade paint to the subtle tone of the Travertine. This accentuates one of the most significant aesthetic features of the Tugendhat House by allowing a more pronounced presentation of “natural” colours of materials.  
Another feature of the materiality and polychrome of the façade may be understood in a way similar to the final rendering of the façade: The exterior sides of the metals, e.g. the frames of the windows, were originally coated not only with a bluish grey oil based paint on top of several preparatory layers, but also with a clear varnish (possibly acetate of cellulose). This type of varnish application is unusual and is not necessary for protection, but has only an aesthetic intention. It gives the metal colour a greater saturation and in the same time somewhat suggests a metallic surface. Certainly, it is not unintentional that the tonal value of this paint is similar to the tone of the oxidized lead which is protecting the bases of the window frames.
In the interior of the Tugendhat House we can notice a similar use of materials and techniques in the aesthetics of the architectural space and its margins. Ludwig Mies van der Rohe used precious decorative materials like the onyx stone or the Makassar ebony and other exotic wood veneers with highly refined surfaces. The plastered walls and ceilings are also designed to an unusually high degree utilizing fine craftsmanship and precision, particularly in the main part of the interior of the house, which was reserved to the Tugendhat family and the nurse. The walls and ceilings were not painted but polished like a mat stucco lustro (ill. 3). Again, like on the façade, the tone of the interior plaster was similar to the Travertine of which the flooring and the base of the interior walls consisted. Mies himself explained to his client Grete Tugendhat – as she reports in 1969 – “how important it was to use precious materials in, so to speak, plain and unadorned modern building, (which by comparison, had been neglected in works by Le Corbusier ...)”.

Regarding the intended appearance of all the original surfaces, we can assert the importance of the materials and and their refined surfaces in the Tugendhat House. This not only shows in the valuable materials and their highly refined, unadorned surfaces, but also in the modest materials of renderings and paints which were often neglected or attributed as mere craftwork. Mies van der Rohe does not use colour as decoration like the de Stijl Movement, Bruno Taut or Pavel Janák and others; instead, he places emphasis on the possible “natural” colour of the materials and on the non – hierarchical, ‘polyphone’ concert of materials and surfaces.

**The Challenge of Change**

The original appearance is never transferred to our time without change, due to faults of the original technique, weathering, use, deliberate changes through renovation or incompatible repairs. These changes have to be evaluated and decisions have to be made, which of the changes represent a significant trace of history manifested in the structure and surface of the monument and its materiality and are therefore part of the ‘original’ appearance.

Currently, the historic fabric and its materiality are often neglected in the practice of preservation. The repairs and renovations of original surfaces are often implemented with materials and methods which are not compatible with the physical and aesthetical character of the original architectural surface. The original surfaces are often destroyed in
the process of renovation (ill. 4).

The material losses which have been discussed may not seem very important in understanding the overall concept of aesthetics in architecture; however, one may note that the canonical understanding of what is called the “original intention” today is not adequate enough to the materiality of the architectural surface. The analysis of the materiality of the architectural surface reveals aesthetic features which may have a decisive influence to the canonical comprehension of the aesthetic intention of the architecture and the perception of the aesthetics of surfaces.

It is a widely spread myth, common with architects in particular, that Modern Movement architecture generally imposes new technical problems and therefore should be treated with criteria different to the –so called – traditional way of preservation. As we have seen during the investigation of the Tugendhat House and other Modern Movement buildings, many of the building elements have been produced by craftsmen. The problem of preservation and repairs are mostly due to implementation of materials and techniques of repairs which are incompatible with the original compounds which are not necessarily due to a lack of craftsmen who are skilled in the traditional repair techniques.

To avoid further destruction of original surfaces through current renovation practices and to enforce the application of methods and techniques compatible with the historic materials and techniques, we need to develop a much stronger awareness of the importance of the materiality of surfaces and an interdisciplinary cooperation of architects, scientists, technicians, conservators/restorers and craftsmen. The interventions into the original surfaces of our architectural cultural heritage cannot be left to the intention of renewal, which is inherent to the work of craftsmen and their modern methods. In order to preserve the materiality of the cultural heritage the investigation of the architectural heritage and the conservation of its historical substance - professional domain of conservators/restorers - is needed. Often times the conservators/restorers have to develop methods of repair of surfaces compatible to the historic architecture and to supervise the craftsmen’s work.

Currently, we may not understand all of the material qualities and their contextual meaning in the oeuvre of Ludwig Mies van der Rohe and the Modern Movement architecture. But if we respect and preserve the original surfaces, including techniques used and materials which they constitute, future generations have an opportunity to better understand what the Tugendhat House was intended to look like and maybe also to better understand what was the aesthetic intention of Ludwig Mies van der Rohe.
Doesburg, T. van, 1929, „Farben im Raum“, Die Form Jg. 4, H. 2, 36: „Letzten Endes ist doch nur die Oberfläche für die Architektur entscheidend. Der Mensch lebt nicht in der Konstruktion, aber in der Atmosphäre, die durch die Oberfläche hervorgerufen wird“ (translation: I. H.)

See the typical statement of Reinink, W., 1995, “Altern und und ewige Jugend – Restaurierung und Authentizität”, Daidalos, 56. Jg., 25; Reinink asks for “new criteria” and points out, that “… the general criteria of the World Heritage Program (UNESCO), which emphasizes the authenticity of material, cannot directly applied to Modern Movement Architecture. The new hierarchy of criteria is as follows: 1. the authenticity of the concept. 2. the form; and only then 3. the authenticity of material (translation I.H.) “… neue Kriterien …, weil das allgemeine Kriterium des World Heritage Program (UNESCO), das vor allem die Authentizität des Materials hervorhebt, für die Bauten der Moderne nicht ohne weiteres gelten kann. Die neue Hierarchie von Kriterien lautet wie folgt: 1. die Authentizität des Konzepts; 2. die Form; und dann erst 3. die Authentizität des Materials ….”


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In 2004, I was told by Irene Kalkofen, who lived in London, that the Tugendhat family did not repaint the interior wall but rather cleaned them with the crumbs of half dry bread – historically a common technique of mechanical cleaning of surfaces of walls and gildings.