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# The design of surfaces, between empathy and new figuration

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**Abstract:** Nowadays design languages seem anew defined through images and figures that appear increasingly distant from abstraction. In the time that we live in, where it is prevailing a dominance of individual needs rather common desires, an abandon of abstraction in favour of new figuration, stimulates the opportunity to investigate a new dyad, 'Project and Empathy'; these terms could summarize well the expanded modality of physical and psychological interaction between people – as individual – and artefacts, through the increasing role of surfaces. The whole world of postmodern image, especially through the digital technologies, tends to offer hyper realistic aesthetic simulacra, altered nature: this is the current world of extension of feelings and sense, in which we are immersed daily. This condition affect the approaches to design, which require a new thinking around technologies, method and tools from training to practice the activity of design: a new attitude for materiality of things, beyond the immateriality of digital reality.

**Keywords:** Design, Surfaces, Technologies, Tectonics, Semper

## 1. Introduction

There are terms and words that appear in our language every now and then, moving away from their specific fields and registers until they become part of everyday language. Even in their emptiest, most commonly repeated forms, these terms represent the prevailing zeitgeist. Nowadays, we hear the word 'empathy' employed in various contexts: from politics – as a worthier substitute for emotions and gut feelings (as opposed to rational thinking) – to sociology, marketing and design. This work aims to investigate a phenomenon closely connected to this word, which is clearly influencing formal outcomes in the field of design and which brings together, on different levels ranging from architecture to design, the assumed superiority of empathy between individuals and artefacts. This condition of interaction has attributed a new role and semantic value to the surface of things, which becomes the testing ground for an investigation into new and old formal fields: decoration, representation and materiality. It is difficult to establish precisely when this phenomenon began. However, there is no doubt that since the start of the new millennium, different factors linked to both new technology (IIT) and changes in society have begun to transform the relationship between

people and materiality, encouraging a system of relationships based on sense-feel-think-act-relate with objects and devices, in a new kind of consolatory materialism. The aim of this essay is not to investigate the reasons behind this phenomenon, which features across the entire range of artistic expression from cinema to art and from architecture to design. The academic Giuliana Bruno researched this back in 2002 in her work “Atlas of Emotion: Journeys in Art, Architecture, and Film” (Bruno, 2002), an essay that became a global reference point straddling different aesthetic disciplines (cinema, architecture, art) and tackling the emotional and sentimental dynamics of the interaction between the individual and artistic expression through movement and sentiment. More recently, she identified in the two-dimensional nature of the surface of things not only a medium, but a new field of meaning (Bruno, 2014). By observing this phenomenon from the various viewpoints available to us, we can find many possible reasons for this change in the social relationships between people and their needs, where the centrality of the individual – and his/her hedonistic/materialistic diminution in a post-industrial society – is one of the recognised traits that everyone agrees on: from sociology and psychology to economics, politics and technology. Our point of view aims to investigate the formal aspects and tools through which this new ‘supremacy of empathy’ reveals itself. Our hypothesis revolves around the semantic role taken on by the surface of things, which seems to satisfy a demand for materiality and sensory interaction with artefacts, using new tools and processes. These are often closely linked to a belief in the evolution of technology, which is becoming more pervasive than ever in human activities, backing up the hypothesis that today we recognise it as an end rather than a means. (Galimberti, 2002).

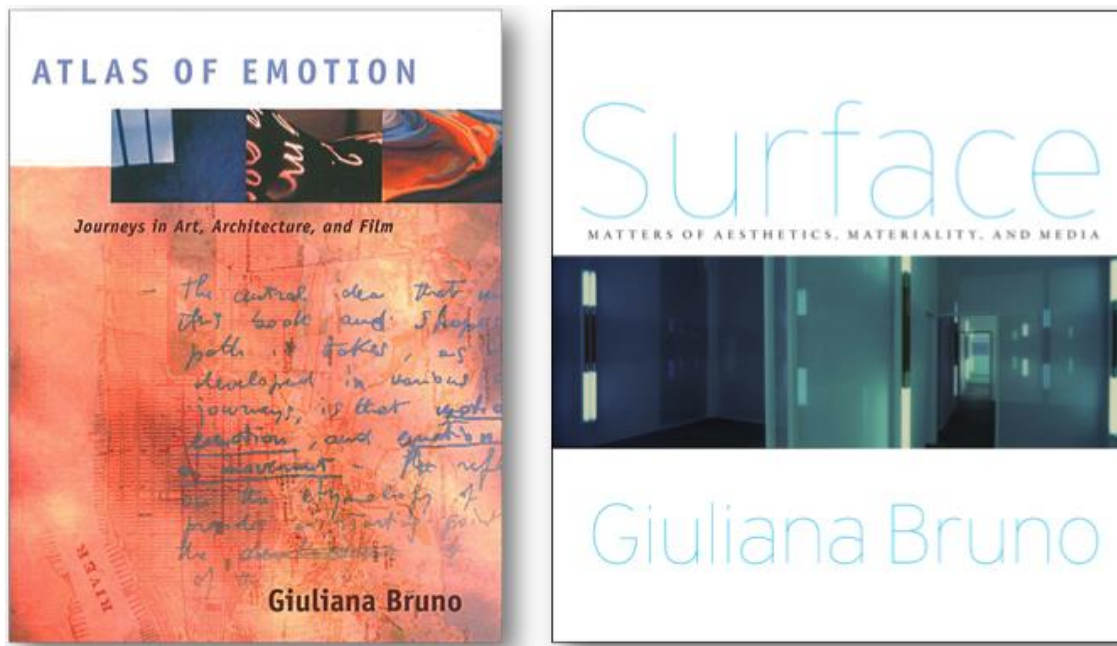


Figure 1. Two Covers. Left: Giuliana Bruno, *Atlas of emotion. Journeys in Art, Architecture, and Film*. New York: Verso 2002. Right: Giuliana Bruno, *Surface. Matter of aesthetics, materiality, and media*. Chicago: University of Chicago Press 2014.

## 2. An experience of survey: the transformation of the industrial production through the column ‘Rassegna’ in Domus 2013-16 and some frequent issues in current design

“I believe that the interior world deploys like a project: it can be mapped out and given form in terms of architecture of the stratification [...] In other words, the film, architecture and clothing find a common point here as they ‘stratify’ on the surface of things. All three have the ability to shape a surface landscape that acts as a casing. They are our second skin, our sensory suit. They communicate our inner configuration and are the site of the dynamics of emotions.” (Bruno, 2014, p.18)

Over the years, the gradually diminishing thickness of the surface of things has gone beyond the role of a medium and developed many meanings. It could be claimed that a number of premonitions by Italo Calvino’s “Lezioni Americane. Sei proposte per il prossimo millennio” (Six Memos for the Next Millennium) predictions – lightness, speed, and plurality – are coming true, in the ways and contents via which we perceive the objects around us and assign value to them.

It is important to highlight the context from which the considerations outlined in this essay arose. They were deduced from two different observational environments: research carried out while curating the ‘Rassegna’ column of the magazine *Domus* from 2013 -2016, and an investigation into certain relevant design experiences.

With regard to the first field of reference, it should be noted that from its outset, *Domus* magazine has dedicated a specific section called ‘Rassegna’ to a carefully thought out and analysed selection of materials and products for the home. The products selected have always represented the end result of research and innovation carried out by flagship or emerging companies in the numerous sectors of the homeware industry, from product design to furnishings, finishing touches and even building materials. This selection allows us to take a snapshot of the formal and expressive transformations taking place as well as the dominant themes, starting with the constant revamping of corporate catalogues of products, components and systems for our homes. It therefore represents an important ‘test’ that allows us to understand the aesthetic features and themes of recurring designs, which become more or less stable in increasingly short periods of time. From the magazine's first issue, “*Domus. Architettura e arredamento dell’abitazione moderna in città e campagna*”, through to “*Domus. L’arte della casa*”, the *Quaderni* (Supplements, author’s trans.) of the 40s and 50s and the “*Rassegna. Come allestire la casa*” (How furnish your home, author’s trans.), to topics which seem ‘minor’ but are in fact crucial in terms of homeware have long been the subject of attention and research by the magazine, for whom the relationship between manufacturing innovation and the opportunity to transform the environment and the quality of domestic life have been a key aspect of the magazine's innovative function. The magazine's introduction, which I have been responsible for curating since 2013, and whose reworking is the subject of this piece, aims to reflect precisely on the relationships between the evolution of the production of technologies and materials, and the subsequent implications for the form and language of products.

From this particular viewpoint, it was possible to ascertain two things. Firstly, the supremacy of the representative function of the contemporary habitat over its other meanings. Secondly, the prevailing formal characterisation of the surface of artefacts, via forms that stimulate the broadest possible sensory scope and which tend to favour a new figurativeness rather than formal trends towards abstraction in the modern mould.

“Im Anfang war die Bekeleindung” (Rykwert, 1998, p.20). Even Adolf Loos, in “*Das Prinzip der Bekleidung*” (The Principle of Cladding) published in 1898, reclaims the studies of Semper and argues that a true architect always thinks in terms of skin and surfaces, because it is the surface that determines the reaction of those who live there. Through considerations gleaned by observing a significant sample of products selected over a three-year period at the magazine, it is worth highlighting a point which relates to both form and production at the same time; one which, despite

differences, characterises and unites a variety of products for the modern home. Today, finishes in architecture and our habitats are characterised by figures and environments which are increasingly far from abstraction, rather than by forms. This has happened in other periods of history, and not just before the modern era. The recurring and now normal presence of figures, references to nature and small or large ornaments and decorations makes it worth reflecting on this phenomenon, which ranges from the details of a *texture* to the finishing touches of our interiors and the surfaces that give contemporary buildings their expressive qualities, in a kind of new unwitting reference to a materialistic and naturalist mould shaping the appearance of artefacts.



domus 974 November / November 2013

L'ultima delle sei lezioni americane<sup>1</sup> di Italo Calvino, successiva a *Moltiplicità*, si sarebbe dovuta intitolare *Consistenza* (in inglese, *Consistency*). Il discorso sarebbe rotolato intorno a Bartleby di Herman Melville. Non si è mai completata. E questa mancanza, per molti aspetti, è coerente con la previsione di *Consistenza* del millennio da poco iniziato. *Moltiplicità* e *consistenza*. Due paradigmi, due qualità che, se applicati ai materiali dell'architettura, si prestano a un'interpretazione dialettica. La *consistenza* è un valore che ci riporta all'idea di massività e permanenza, si fa pensare alla grande architettura del passato, solida, fatta per durare, stratificarsi e invecchiare. La *moltiplicità*, viceversa, ci conduce – coerentemente con le profetiche intuizioni di Calvino – nei materiali del nostro millennio. Questi sono sempre più sofisticati e, grazie alle tecnologie in lenta ma continua evoluzione, ci offrono prestazioni sempre più efficienti e molteplici, in spessori e sezioni sempre più sottili. Se pensiamo all'evoluzione dei materiali vetrai, osserviamo una progressiva riduzione della consistenza delle sezioni e, allo stesso tempo, a un aumento del numero di funzioni e prestazioni assolate dal singolo materiale. Andrea Deplazas<sup>2</sup> ha rappresentato questo fenomeno con un'ionica analogia, presa dal mondo dell'aeronautica: lo stesso confronto la tuta di un astronauta lunare – una pesante corazzata fatta di molti strati ciascuno dei quali assolve una specifica funzione – con la leggerissima *skin* per Marte – una pelle leggera con pochi strati polifunzionali. L'evoluzione nel campo dei materiali è in corso, anche in nome del paradigma ambientale, verso una perdità di consistenza fisica e materica a favore di una sempre più immateriale-efficienza. Nel campo dei materiali per l'edilizia, il processo è più lento e si pone in rapporto persino con la necessaria funzione di *firmata* dell'architettura e con il nuovo paradigma della sostenibilità. Questi fattori stanno determinando due scenari consolidati, dai nuovi pannelli in legno strutturale (CLT o Xlam) ai blocchi portanti e termici in laterizio abbellito o alle numerose varianti produttive del cemento autocurante; dall'altro, invece, l'architettura secondo l'evoluzione del semprario *"Prinzip der Bekleidung"*, cioè fatta di strati – ciascuno con una specifica prestazione – che rivestono le strutture, ebbene appare rappresentabile. In questo secondo scenario l'edificio di una volta, capace di *"invecchiare"*, viene materialmente *"superato"* da un edificio con pezzi ed elementi da sostituire, una volta guasti, e dove l'invenzione nella consistenza estetica della *terrazzatura* è sempre più rilevante. Al vertice di questa possibile dialezione *consistenza/moltiplicità*, sta la durata del manufatto architettonico, la sua reazione al tempo, la sua attitudine a perennare, modificandosi, oppure a essere sostituito, una volta concluso un ciclo di vita sempre più breve. Se il tema della durata dell'architettura diventerà nuovamente necessario nella nostra contemporaneità, se ci saremo confrontati in modo sostenibile con il nostro immenso patrimonio costruito da recuperare, riciclare e migliorare, allora la consistenza materiale potrà trovare un rinnovato spazio nella produzione per l'architettura.



Figura accanto e sopra: Museo di Storia Naturale, Berlino. 2013. Invenzione project by Daniel A. Galper. Archibau.com. View of the facade, with integration in pre-molded concrete.

The last of Italo Calvino's Six Menos for the Next Millennium, following the one on *Multiplicity*, was to have been titled *Consistency*, with Herman Melville's *Bartleby, the Scrivener* as its subject-matter. It was never completed. This gap in many ways rings true with the loss of *consistency* of the new millennium. *Multiplicity* and *Consistency*. Two paradigms, two qualities, which, if applied to the materials of architecture, lend themselves to a dialectic interpretation. *Consistency* is a value that brings us back to the idea of massiveness and permanence, reminiscent of the great, solid architecture of the past – built to last, to be stratified and to age. *Multiplicity* on the other hand leads us – true to Calvino's prophetic intuitions – into the materials of our millennium. Increasingly sophisticated and, thanks to technologies, slowly but steadily evolving, these materials offer ever more efficient and multiple performances in progressively thinner gauges and sections. If we think of the evolution of glazed materials, we can observe a steadily reduced consistency of sections, together with a larger number of functions/performance provided by a single material. Andrea Deplazas<sup>2</sup> has represented this phenomenon with an iconic analogy drawn from aeronautics. He compares a lunar astronaut's suit – a heavy armour made of many layers, each performing a specific function – with the ultra-light *skin* for Mars – a light skin with just a few multifunctional layers. The evolution of materials in building us – also in the name of the environmental paradigm – towards a loss of physical and material consistency in favour of an increasing immaterial efficiency. With building materials, the process is slower, relating eventually to the necessary function of *firmata* in architecture and to the new paradigm of sustainability. These factors are creating two recognisable scenarios. On the one hand, we have a massive new solidity of architectural materials, ranging – to mention a few consolidated examples – from new structural wood panels (CLT or Xlam) to load-bearing and thermal blocks in autocured brick, or to the numerous industrial variants of autocured concrete. The second scenario concerns architecture according to the evolution of Semprario's *"Prinzip der Bekleidung"*, made of strata and each with a specific performance, used to clad structures while concealing or representing them. In this latter situation the ancient building, with its capacity to *"age"*, is materially *"supered"* by a building with parts and elements to be replaced when broken and in which invention on the aesthetic connotation of *"bodywork"* is increasingly relevant. At the top of this consistency/multiplicity dyad is the duration of the architectural product, its reaction to time, its aptitude to last and to change, or to be substituted once its ever shorter life cycle is over. If durability in architecture becomes once again necessary in our contemporaneity, and if we can sustainably deal with our immense built heritage to be restored, recycled and improved, then material consistency will find a renewed place in industry for architecture.

1. Italo Calvino, *Lezioni americane* (ed. e trad. di Italo Calvino), Garzanti, Milano, 1988. 2. Daniel A. Galper, *Archibau.com*, University Park, Cambridge, Massachusetts, 2013. Andrea Deplazas, *Sustainability* (ed. e trad. di Italo Calvino), Garzanti, Milano, 2013. *Prinzip der Bekleidung*, Semprario, Roma, 2012, p. 202.

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Figure 2. Opening pages of the column *Rassegna* in *Domus Magazine*, edited by the author since 2013. Pages 120-121. Issue n. 974 / 2013.

Surfaces and a search for the meaning of pleasure indulge the current trend towards individual narcissism, which attributes meanings and desires to objects which go beyond being merely functional and/or representative.

The category of empathy, borrowed from Wilhelm Worringer's theories on the psychology of style (Worringer, 1908) therefore becomes effective again, as a condition – today derived mainly from the strategies used to market homeware products – which affects the formal characterisation of contemporary artefacts. The restlessness of modern life requires formal solutions which have an easy impact and whose 'aesthetic pleasure' is immediate and not linked to lengthy contemplation or conceptual references.

In the work of W. Worringer, the term Empathy (*Einfühlung*) was declined dialectically with Abstraction (*Abstraktion*): it was an attempt to overcome the category of empathy which, according to Vischer's theory and Lipps, was liable to an understanding of classical art and Renaissance art, that arise from a feeling of identification with the organic forms; Worringer shifted the interest on

Abstraction and on the prevalence of an anti-naturalistic feeling in the art of primitive, pre-classical and oriental civilization, closer to the rising of avant-gardist complex phenomena of first decades of XXth Century.

In this way, abstraction takes up less space, if not in the frequent-simplistic figures of the various minimalisms, then in the tactile and perceptive characterisation of surface materials, through the 'modern' categories of transparency, reflection and dematerialization.

The entire world of imagery, especially moving images and above all digital animation, tends to offer hyper-realistic, aesthetic simulacra of expanded mimesis, modified from nature: this is the world of sensory demands which we find ourselves immersed in every day, a long way from abstract modernity, which we are increasingly breaking away from.

The extension of an infinite landscape, which brings to mind Morris' Arts and Crafts figures, is therefore the result of surfaces and forms which can now be reproduced by infinite digital algorithmic processes. These explicitly modernise a catalogue of figures, taking from nature's impulse towards imitation. The result, however, is far from being art and not always interesting: tiles with leaf prints, Arabesque ornaments, natural and repeating patterns. In this recurring attitude, we can identify a new search for intimacy in things, the expectation and desire for a human relationship with objects – one which is not simply functional, but not humanistic either.

“Everyday products are used, seen, touched. The tactile and expressive qualities of materials are important means of communication, and ask for a hands-on design process, an intense exploration of textures that appeal to the human scale. By means of its language and employment of techniques, good design expresses both the *zeitgeist* and a deep awareness of the past.” (Jongerius & Schouwenberg, 2015, p.1)

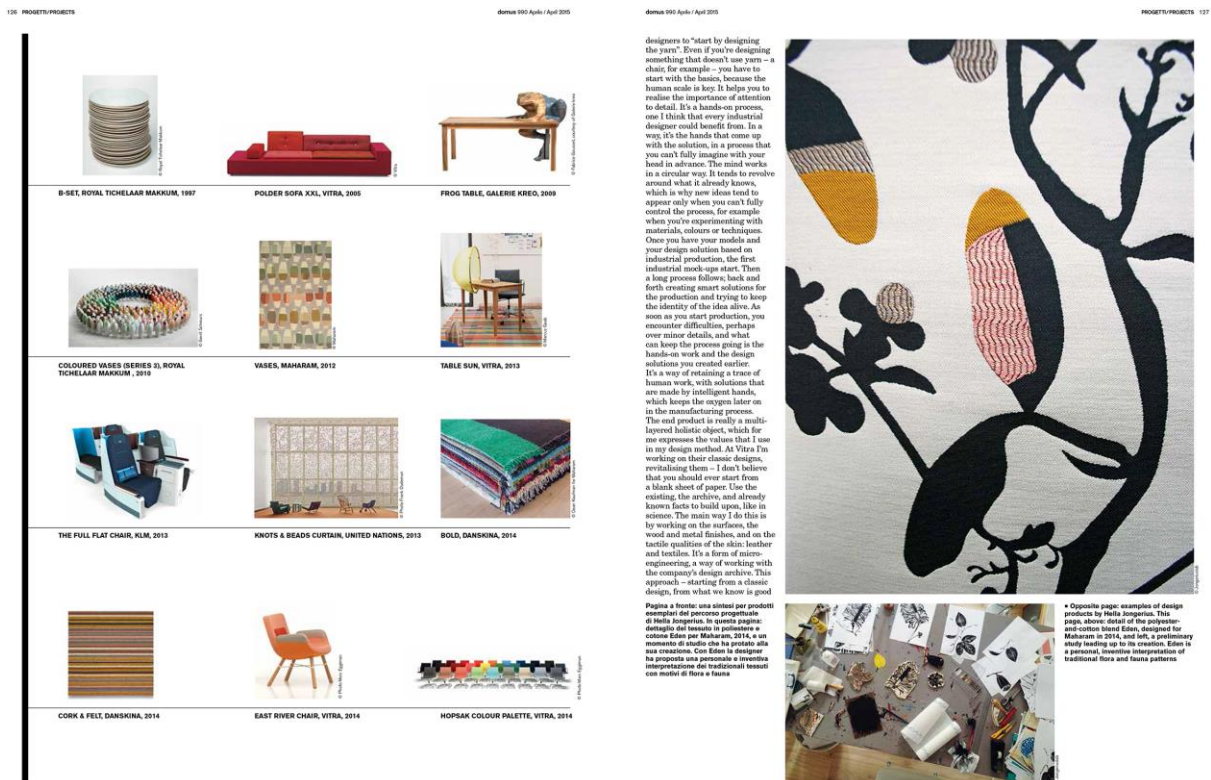


Figure 3. Hella Jongerius, *Il progetto parte sempre da un filo /Start by designing the yarn*. Photo of pages 126-127, Domus 990 /April.

It is no coincidence that in the field of product design, textile design has recently become hugely significant in a number of contemporary products. A precursor to this was the number 10 of Domus' Quaderni (Supplements, author's trans.) edited by Cini Boeri and Carlo Pagani dedicated to curtains. This theme can be seen in the forms of a great deal of furniture and home furnishings, above and beyond upholstery. It often acts as an intermediary between architecture and design, from Sevil Peach with its alcoves for the Vitra office to the chromatic experiments of Textile Field, a carpet by the Bourollec brothers exhibited at the London Design Festival from 15th-25th September 2011. We could also mention the multiple tactile surfaces in projects by Urquiola, David Chipperfield's boutiques for Valentino where he uses plaster reliefs to represent the shapes of a curtain, and finally specific themes in textile design as seen in the experiences of Hella Jongerius (Jongerius, 2015). Today, she plays a specific role in curating the selection of upholstery fabrics and textures for Vitra's furnishing catalogues, such as designing the coordinated 'image' of the company's upholstery and furnishing accessories for KLM's business class.

The same design actions for textile surfaces (Carullo & Pagliarulo, 2013) take on formal and technical content of their own when it comes to manufacturing. The actions of folding, sewing, weaving and layering, typical of 'textile' design, are entirely similar to the architectural design of 'thickness', such as the articulated assembly of planes and lines.

Significant experiences in the design of cladding surfaces are numerous, from those of the textile industry's most important companies (such as Kvadrat) to those of cladding for homes, involving famous and emerging designers. These experiences investigate the superficial implications of the casing of objects, i.e. the ability to trigger mechanisms of interaction which involve senses beyond the visual sphere which is favoured by our idealistic and modern culture. They are numerous and concern artefacts on all scales, from micro (product) to mega (product) architecture: superficial cladding patterns have extended the field of investigation into the tactile implication of the components, referring back to the 'textile' nature of artefacts evoked in Central European interpretations (cf. Ursprung, 2005; Beccu & Paris, 2008).

The reference is to the tectonics of surfaces and decorations in our homes, which combine textile characteristics with plastic forms. In all of them, the techniques – digital and material – find space, although they are not always aware of it, for 'technical' methods of assembly and shaping, capable of determining aesthetic and expressive implications, the details of a new 'art of manufacturing.'

### **3. Forms of empathy in design: synthesis of surfaces, between technologies and languages**

"The ultimate goal of technology, the telos of techne, is to replace a natural world indifferent to our wishes – a world of hurricanes, difficulties and broken hearts, in which we must resist – with another equally as sensitive to our desires to be, in reality, a mere extension of ourselves." (Franzen, 2011)

The prophecy mentioned by Franzen above stemmed from the observation, personally experienced with his Blackberry smartphone, of the pervasive nature of information technology as it rapidly develops in a very short space of time. Our daily gestures have been affected by the often-obsessive relationship we have with our smartphones and devices, which have become artificial limbs and extensions of our physicality.

These interfaces, which house all the sensory implications of the objects, establish a need for pleasure, as does their form. Nowadays, this value seems to be prevalent in the multitude of objects amidst which we move and live.

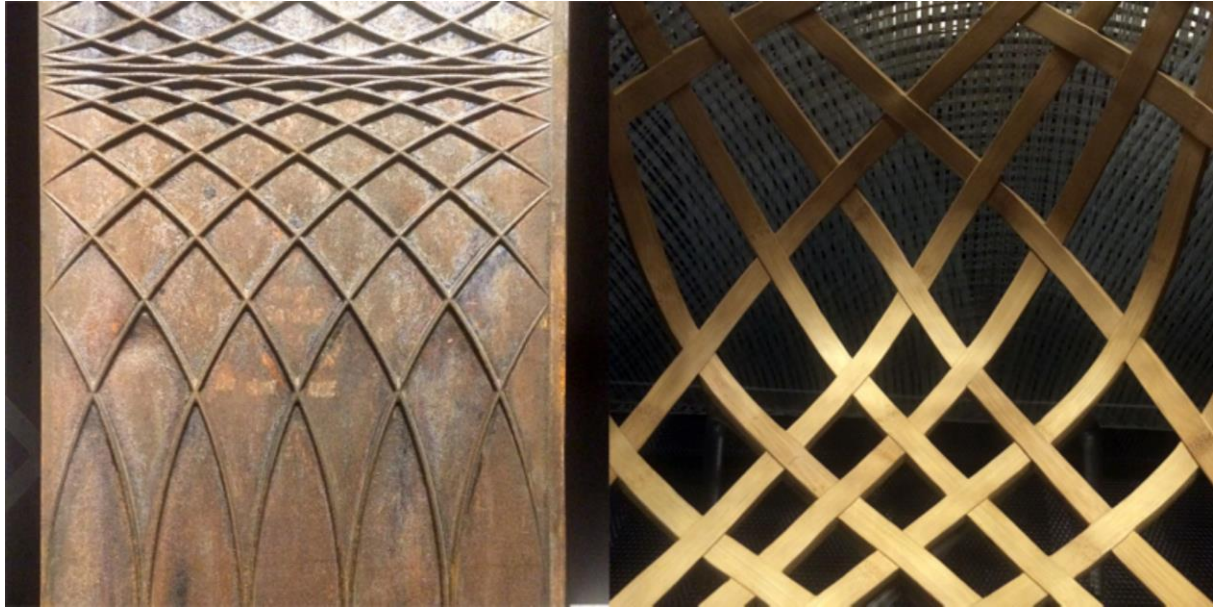


Figure 4. Left: Detail of cast iron panel of façade, 11 Albemarle Street shop front for Paul Smith, London, 6 Architects, 2014. Right: Detail of 'Air' bamboo weaving chair by Pinwu, 2013. Photos by Spartaco Paris at "Sempering" Exhibition at Mudec, editors L. Collina, C. Zucchi, Milan 2016.

From the very first educational experiences of the preparatory Bauhaus courses in design (cf. Albers, 2011), the properties of the material (consistency, color and shape) and its surface were linked to the psychology of perception, pre-empting contemporary topics like interaction, empathy, epidermis, surfaces: complex and precise means of establishing multi-sensory relationships between man and artefact, and between body and work. Over time, these experiences have been validated by the positions held, among others, by Bruno Munari, Tomás Maldonado and Giovanni Anceschi in the field of basic design.

Maldonado has recently recognised the 'return' to a new representation – with easier empathy – observing the new disruptive dominance of figurative representation and visual perception over abstraction, and attributing it partly to the role of digital technologies (Obrist, 2010).

We can observe how the role taken on by the surface of objects, spaces and the artificial environment around us has progressively emphasised its own formal characterisation, defining all the elements capable of stimulating the sensory sphere of perception. In Riegl's words, we are now witnessing a victory for the creation of the 'limits of space' over the creation of the space itself. In this dialectic, the role of surfaces and design research into their endless features are fertile topics which concern not only interior architecture and furnishing products, but which also affect the relationship between buildings and urban space, where the theme of 'decoration' takes on new values by updating the original ones.

We can see how the world of material and production techniques – thanks mainly to digitalisation and miniaturisation – is responding reactively to these demands and formal tendencies: multiplicity and a loss of consistency appear to be specific characteristics of contemporary materials. In other words, if on the one hand a single material or component can cover a number of functions and requirements, the increase in performance is accompanied by a progressive reduction in weight and thickness, a loss of consistency compared to the solidity of antique materials that live on today.

While the techniques allow for a potential reduction in the amount of material needed to make products, a new phenomenon – derived from semiotics and transferred to the material world of artefacts – characterises their functional components and above all their aesthetic experience:



synaesthesia. Thanks to production technology on the one hand and the inevitable indifference towards the choice of material caused by digital design tools, due to which the surface of a digital form can take on any material appearance, we are observing a growing search for semantic contrasts in materials. They become ambiguous or imitate other materials, incorporating perceptions and relations which can even be contradictory: cold/hot, soft/hard, smooth/rough. In the field of lithoid or ceramic materials, to mention one of the most representative cases, many companies have ceramic tiles in their catalogues that simulate other materials, sometimes warm ones, pursuing sensory synaesthesia through 'images' of warm materials. It seems that we are witnessing the growing supremacy of perception in design as well as contemporary architecture. The new surfaces therefore take on values whereby sensory and emotive qualities, amplified by the technology available, become the main design themes. In the field of wood-based materials, a potentially infinite number of surface finishes can be created upon request with features that differ greatly from those of the original material. Production systems allow us to work with increasingly thinner materials, while digital printing offers the potential for limitless formal investigation when it comes to surface finishing techniques. This is the case with light-sensitive or three-dimensional wallpaper, recomposed wood beams, thermochromic cement, and materials with dynamic configurations, to cite just a few examples of surfaces that offer us unprecedented sensory synaesthesia. They encourage new ways of perceiving and expressing reality as they look to layer various stimuli simultaneously.

#### **4. Conclusion: The topicality of Semper for a new tectonic characterisation of Industry 4.0 artefacts**

Interest in the aesthetic connotations of cladding, the surfaces of artefacts and the evolution of production techniques suggests a final, open debate recognising the relevance of Semper's theories concerning the genesis of artefact design. On the one hand, a renewed 'tactile' characterisation of the objects of our time seems to confirm Semper's hypotheses on the textile-based origin of applied art (design) and architecture, albeit many years later (Rykwert, 1990). For Semper, the principle of *Bekleidung* implied a textile origin for all the arts, thus granting logical priority to ornament rather than structure. In Semper's system, the major arts share the same formative laws as applied art (*kunstgewerbe*), attributing supremacy to the representative component, which nowadays is empathy. Secondly, it validates the hypotheses that give the world of techniques a role which is not merely functional in generating the forms of the project in the field of design. 'Sempering', the recent exhibition curated by Luisa Collina and Cino Zucchi (Collina & Zucchi, 2013) during the XXI Triennale was the ideal opportunity to once again turn the spotlight on the influence of Gottfried Semper and his theory on the principle of cladding, in order to highlight the function of techniques in relation to design concepts as part of the architecture-design dyad. The subject of his best known publication, "Der Stil" (The Style), was a reference to the 'necessary' relationships between art and technique while designing in the four arts (textiles, ceramics, carpentry and masonry). Semper attempted to define several ontological matrices of architecture itself in a structuralist dialectic between plastic and tectonic. Today we can find this in the field of applied arts and design, where the manufacturing processes customised by the fourth industrial revolution inevitably call for a customised production model.

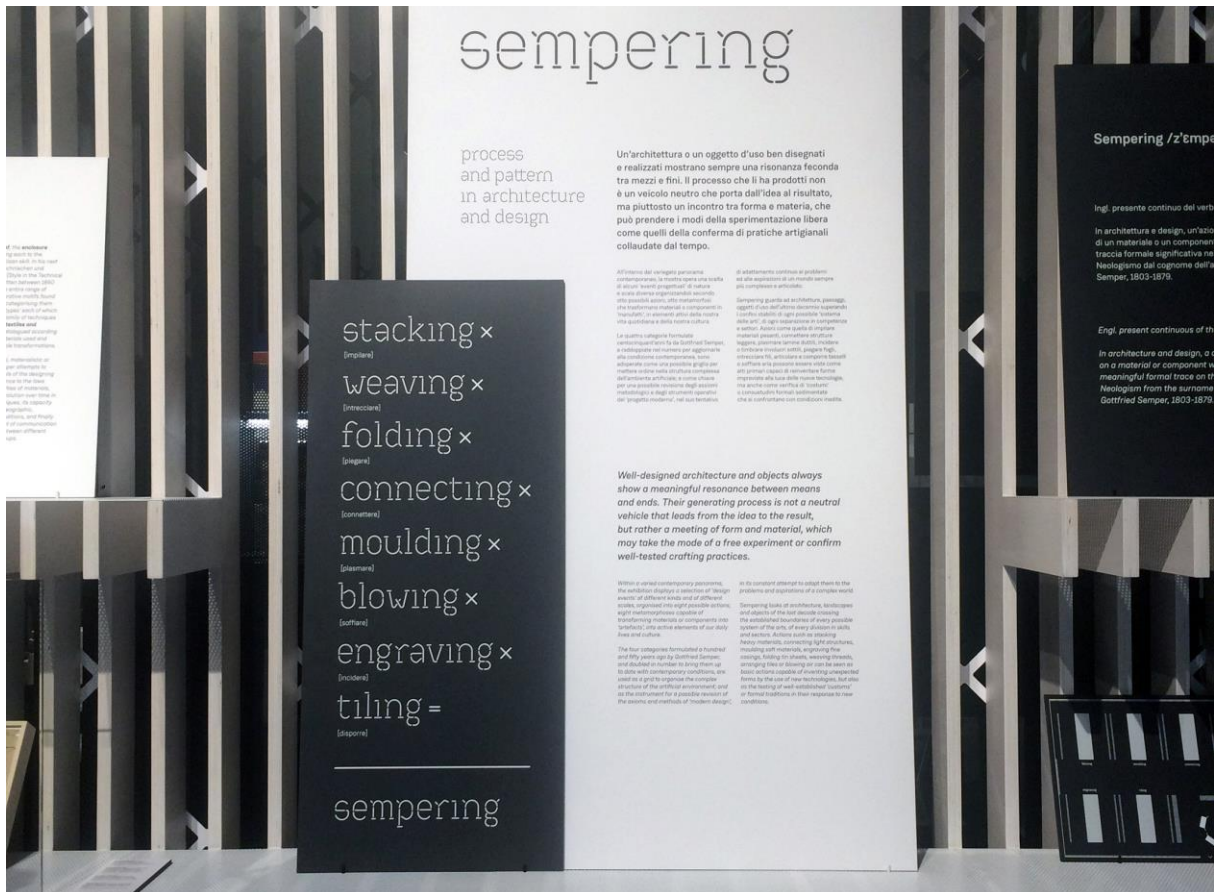


Figure 5. "Sempering. Process and pattern in architecture and design". Photos by Spartaco Paris at "Sempering" Exhibition at Mudec, editors L. Collina, C. Zucchi, Milan 2016.

The field of techniques therefore seems to have become crucial once again in establishing new formal investigations, in two ways. On the one hand, coherent with a process-based interpretation of the definition of form, it finds in production not only the elements for the verification of formal frameworks, but a field for the definition of new morphological paradigms. In the repeating patterns generated by digital design tools (Processing, Arduino), for example, we can identify a reworking of the ornamental motifs of traditional techniques. On the other hand, the field of digital techniques and three-dimensional modelling processes allows us to connect any formal premise with mathematical, rational and therefore producible parameters. This creates a reciprocity between artistic requests and production techniques and infinitely expands the possibilities for customised production, complying with needs and desires for representation which grow ever more individual.

It is an appeal to a new tectonics of form and to developed methods of 'doing and making' which are no longer basic and taxonomic as they were in Semper's time, but manifold and sophisticated. Techniques are once again a fertile field for design development, capable of liberating us from the contemporary misunderstanding of the reduction to a 'concept' – sometimes even mystical – which is more a marketing plan than a design activity. At the same time, it describes the world of forms.

Design therefore appears to revolve around the relationship between techniques and the supremacy of decoration – as the last real domain of the designer – and therefore around the surface of the artefacts, where the representative component finds a field for design-based investigation in the empathy of the surface of things.

## References

- Albers, J. (2011). Teaching Design. In M. Pierini (Eds.), *Josef Albers*, (p. 92). Cinisello Balsamo, Milano: Silvana Editoriale.
- Beccu, M., & Paris, S. (2008). Contemporary architectonic envelope between language and construction (1st ed.). Roma: RdesignPress.
- Boeri, C. & Pagani C. (1952). Quaderni di Domus n.10. Le tende nella casa, [Domus' Supplements n.10. The curtains in the home] Milano: Editoriale Domus.
- Bruno, G. (2002). Atlas of emotion. Journeys in Art, Architecture, and Film (1st ed.). New York: Verso.
- Bruno, G. (2014). *Surface. Matters of Aesthetics, Materiality, and Media* (1st ed.). Chicago: University of Chicago Press.
- Carullo, R., & Pagliarulo, R. (2013). *Interior | Design. Action on surfaces. Softness* (1st ed.). Soveria Mannelli, Catanzaro: Rubbettino Editore.
- Collina, L., & Zucchi, C. (2016). *SEMPERING. Process and pattern in architecture and design* (1st ed.). Cinisello Balsamo, Milano: Silvana Editoriale.
- Franzen, J. (2011). Liking Is for Cowards. Go for What Hurts, May 28th, Opinion Pages, New York Times.
- Galimberti, U. (2002). *Psiche e techne. L'uomo nell'età della tecnica* (2nd ed.). Milano: Feltrinelli.
- Jongierius, H. (2015). Start by designing the yarn. *Domus. La città dell'uomo*, 990 (4), 121-127.
- Jongierius, H., & Schouwenberg, L. (2015). *Beyond the new. A search for ideals in design*. Retrieved April 10, 2015, from <http://beyondthenew.jongieriuslab.com/>.
- Obrist, H. U. (2010). Figurazione e nuove tecnologie. In T. Maldonado (Eds.), *Arte e Artefatti. Intervista di Hans Ulrich Obrist*, (pp. 23-27). Milano: Feltrinelli.
- Paris, S. (2013). *Design and technology. Lectures* (2nd ed.). Trento: LIStLab.
- Paris, S. (2013). Rassegna. Materials. *Domus. La città dell'uomo*, 974 (11), 120-121.
- Rykwert, J. (1990). Morfologia di Semper. *Rassegna. I sensi del decoro*, 41(3), 40-47.
- Rykwert, J. (1998). L'architettura è tutta superficie. Semper e il principio del rivestimento. *Rassegna. Problemi di architettura e di cultura materiale*, 73(1), 20-29.
- Semper, G. (1992). Lo stile nelle arti tecniche e tettoniche o estetica pratica: manuale per tecnici, artisti e amatori [The style in the Technical and Tectonic Arts, or, Practical Aesthetics]. Bari: Laterza Editore.
- Ursprung, P. (2005). *Herzog & de Meuron: Natural History* (1st ed.). Baden: Lars Müller Publishers.
- Worringer, W. (1908). Astrazione e empatia. Un contributo alla psicologia dello stile [Abstraction and Empathy. A contribution to the psychology of style]. Torino: Piccola Biblioteca Einaudi.

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