

LESS MATERIAL / MORE INTELLIGENCE

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EXTENDED ABSTRACT

“Meno materia” potrebbe essere il principio che guida l’azione archetipale tesa alla forma essenziale, l’azione di sottrazione della materia alla ricerca dell’idea più forte, immediata e convincente. In questa direzione vanno, ad esempio, le frasi di Auguste Rodin, “scelgo un blocco di marmo e tolgo tutto quello che non mi serve”, oppure di Michelangelo Buonarroti, “ho visto un angelo nel marmo ed ho scolpito fino a liberarlo”.

In questo saggio si cercherà di indagare tutta quella “diversa sensibilità” che nel design ha postulato un pensiero essenziale, ricercando nell’uso di meno materiale un’occasione di ricerca estetica, funzionale, ma anche di innovazione tecnologica. E’ una sensibilità che ci riporta a quella che, provocatoriamente, potremmo definire un’ecologia del pensiero e che rievoca, in chiave contemporanea e con forti ricadute sulle risorse naturali, la lezione teorica di Mies van der Rohe. Questa sensibilità era presente già nel modo di lavorare di un maestro (molto noto anche a Carrara) come Angelo Mangiarotti, che quando disegnava un oggetto in marmo poneva immediatamente in rapporto l’oggetto stesso con la sua appartenenza al blocco di materiale. Questa sua speciale capacità è riuscita a regalare al settore del lapideo e alla storia del design un capolavoro di pensiero razionale come “Cono Cielo”, una lezione assoluta che dimostra come si possa ottenere il massimo effetto percettivo, statico, tecnologico, con il minimo sforzo tecnico e materico. Una tensione verso l’infinito, con ardita leggerezza.

Oggi molto (o quasi tutto) è ascrivibile al paradigma dell’Ecodesign, o comunque si deve confrontare con il tema della sostenibilità; in questa direzione, già tracciata da maestri del design italiano, si possono individuare almeno due atteggiamenti diversi che racconteremo con altrettante case-history.

Da una parte un’azienda di design - “recycled stones” - che coinvolge un giovane designer per capire come usare e valorizzare gli scarti di produzione edile (residui informi accumulati nella cava di famiglia); dall’altra un designer che re-inventa un materiale mescolando marmo e lana e che cerca di creare, su questa intuizione, una nuova azienda. Due atteggiamenti diversi accomunati dalla medesima ricerca sul tema dello scarto e dello sfrido come valore.

Per “recycled stones” la soluzione appare insita nello sguardo del designer, nella sua capacità di “saper guardare” oltre l’apparenza, in quella sensibilità che gli permette di leggere nel semplice scarto (lavorato il meno possibile) una nuova estetica dell’imperfetto; questo approccio rimanda a un atteggiamento simile a quello di molti artisti, tesi a interpretare il mondo più che a manipolarlo. Marco Guazzini, invece, prende la semplice polvere di marmo (rifiuto delle lavorazioni tradizionali) e la mischia con lana cotta (anch’essa ricavata da scarti) per realizzare un nuovo materiale lavorabile come il marmo o il corian; una lezione tipicamente ascrivibile al mondo della tecnologia e dell’industrial design.

Queste due storie, simili ma diverse, nel saggio diventano occasione per raccontare due metodi, due visioni, e ci consentono di postulare una nuova “Ecologia del pensiero”.

Patricia Urquiola, Lorenza Damiani e Paolo Ulian sono altri affermati designer che operano in questa direzione: reinventano la pietra, la ridisegnano in tessiture tridimensionali, la alleggeriscono rendendola quasi elastica, o la “riciclano” prevedendo una molteplicità di vite funzionali.

Tale scenario, proprio del contemporaneo, sembra perseguire l’abbandono del superfluo e incentivare un utilizzo responsabile di risorse e materiali. “Meno materia, più intelligenza” diventa quindi un’ambizione metodologica, un atteggiamento etico, ma anche un approccio stilistico: è una sostenibilità innanzitutto di pensiero, è una filosofia di lavoro, una sorta di “estetica dell’etica” in cui i due termini non sono antitetici, ma si rincorrono in un dialogo ininterrotto e reciproco.

Pur con diversi obiettivi e in diversi contesti progettuali tutti i casi-studio citati nel saggio perseguono, dunque, visioni anticipatrici, talvolta forse azzardate, certamente con orizzonti di lungo periodo e non di immediata speculazione. Tali sperimentazioni, infatti, sono spesso quelle più interessanti perchè in grado di tracciare nuove direzioni di ricerca e sviluppo.

ABSTRACT

“Less material” could be the principle that guides the archetypal action tending towards the essential form, an action of subtraction of the material in search of a stronger, immediate and convincing idea. For example, the words of Auguste Rodin “I choose a block of marble and chop off whatever I don’t need” or the words of Michelangelo Buonarroti “I saw the angel in the marble and carved until I set him free” go in the same direction.

This paper will investigate the “diverse sensitivity” that has used design as frame to an essential thought, searching in the use of less material an opportunity for an aesthetic, functional research as well as for an innovative technology.

This is a sensitivity that guides us to an ecology of thought. A sensitivity already present in the way of working of master Angelo Mangiarotti (well-known even in Carrara); when designing a marble object, he immediately put in relation the object itself with its belonging to the block of material.

That very special ability of Angelo’s was able to give the stone sector and the history of design a masterpiece of rational thought as is the *Cono Cielo*, a great lesson on how to make the most of a little! A boldly light tension towards the infinite.

Today everything (or almost everything) is Ecodesign, or at least should match the topic of sustainability; in this regard at least two different methods can be identified that can be described with case-histories and have been already used by the masters of Italian design.

On the one hand, a design start-up - “Recycled stones” – involving a designer to understand how to use stone offcuts coming from traditional production (the family quarry); on the other hand, a designer who reinvents a material made of marble and wool trying to create a new company based on this insight. Two different attitudes sharing the same research on the topic of waste and scrap as a value.

For “Recycled stones” the solution comes from “the ability to watch”, to find a new aesthetic of imperfection out of leftover materials (manufactured as little as possible); an old lesson reminding of the attitude of many Italian artists.

On the other hand Marco Guazzini takes the simple marble dust (waste of traditional production) and mixes it with boiled wool (also taken from scrap) to create a new material workable like marble or corian, an approach typical of the world of technology and industrial design.

Two similar yet different stories to describe two methods for a new “ecology of thought”.

KEY WORDS: *material, intelligence, sustainability, lightness, methodology, invention*

INTRODUCTION

One evening in 1953 at café Procope, Louis Pauwels meets one of the last alchemists. [...] Indeed, throughout his search he came to know of the existence, [...] in Paris and in the full wake of

the 20th century of an alchemist. He wasn’t an isolated mad man, but one of the last descendants of a tradition, which is precise and disciplined up to the present day [...]. The two speak till late in the night: “if you don’t have faith, have fire, this is all alchemy. A real fire. A material fire. Everything begins through contact with material, nothing but material, working with material, working with the hand, [...] patience, hope, work”. (ROSA, 2004).

Let us begin this paper with a quote that refers to both material and alchemy at the same time, as we need to start from tradition, from history and from the materiality that calls for a sense of atemporality and eternity to really catch the meaning of our time, so hard to recognise in the very moment you live it, so elusive and unpredictable.

The title of the paper uses an expression that seems unsurprisingly able to grasp the very essence of contemporaneity, both from a style and a methodology perspective: it is an expression that describes today’s approach as compared to that of a “loud”, often branded tradition; a disciplinary approach that is becoming increasingly strong, in a moment in which even the economic crisis requires us to seek new paradigms: “Less material / More intelligence” - could be one of them.

It is an expression that recalls the timeless quote of master Mies Van De Rohe , “Less is More” (MONTANER *et alii*, 2000), connecting the action of “subtracting material”, of simplifying, of searching the essential – to that need for sobriety that the contemporary age is strongly demanding. In fact, we are living in a historical moment in which, often for lack of opportunities and budget, we always need more “intelligence” to achieve the maximum result with the minimum effort.

However, these often practical and temporary limits are now associated to an “ethics of saving”, a design approach of many young designers who prefer to work with the “minimum”, one that we’ll provocatively call *Ecology of thought*.

LESS MATERIAL, MORE INTELLIGENCE: A METHODOLOGICAL AMBITION

In an attempt to split the title into its conceptual segments and investigate the project outcomes, it is possible to identify new scenarios behind the phrase “less material, more intelligence”, a paradigm that may seem old, though unexpectedly revealing new and contemporary options. Indeed, “Less Material” could be the principle that has always guided the archetypal action tending towards the essential form, the action of subtraction looking for a stronger, immediate and convincing idea.

The words of Auguste Rodin, “I choose a block of marble and chop off whatever I don’t need” or the words of Michelangelo Buonarroti “I saw the angel in the marble and carved until I set him free” go in the same direction. (D’ISA & SALIMBENI, 2015).

As it often happens art shows a direction, which is then interpreted by design. Today we can admire (even thanks to the

introduction of increasingly sophisticated CNC machines) a series of innovative studies where design treats marble with a new attitude, sometimes trying to reinterpret the material supporting the concept of “stone weaving”, as if it was an old, hand-made lace, sometimes making it dynamic and even flexible.

In the first case Patricia Urquiola, in her proposals for Budri, offers sophisticated textures that make marble surprisingly look like a light, evanescent material.

All the experiments proposing stone 3D weaves, reinventing stone and - like at the beginnings - bringing it back into a dimension close to sculpture and to the views of Rodin and Michelangelo.

In the second case Lorenzo Damiani - always translating with great delicacy his laid-back and “old-fashioned” approach into fine, often conceptual projects, never too focused on the merely formal aspects and subsequently “timeless” - has recently proposed “Folded Marble/Marmo Pieghevole” for Pusterla Marbles.

He is able to amaze us once again, with the spontaneity of someone showing something simple and maybe banal, even if never seen before: his researches on “elastic” marble stem from the attempt to go beyond the limit of the material, in this case by proceeding to a continuous reduction in the material’s thickness and trying to lower its sections.

The results were incredibly thin slabs, reinforced with fibres allowing their maximum flexibility, overcoming any “fear of breaking down”.

A bookcase, the bench “Foglio” and a series of objects now exhibited at the XXI Triennale are the first demonstrative pieces of furniture, though it is quite clear that the focus of the research mainly lies in his ability to potentially open a new market target, leading the marble design project towards new, daring perspectives. The challenge is launched, but choices never result in gratuitous or self-celebrating signs: “the idea of turning chipboard and of bending marble have a common matrix: using resources and materials with responsibility”, (S.A., 2012) the designer says.

Both these studies try to catch the essence of the material approaching the new technologies now available. This process is not so different from the one carried out a few years ago with the demonstrative sculpture “Cono Cielo” by Angelo Mangiarotti, a designer who more than others was able to enhance this material in projects that were never banal, never gratuitous nor indifferent to their stone essence.

“Cono Cielo” seems to challenge gravity, showing the author’s effort to go beyond any physical and dimensional limit of the material, guiding it through a daring experiment: it is a sequence of CNC cuts that “sculpt” increasingly tapered blocks in an amazing balance; it is a macro-scale cone that seems to link the earthly dimension with the heavenly one, unattainable but never so close.

It is a masterpiece of rational thought, an absolute lesson of know-how, to make the most of a little. A boldly light tension towards the infinite.

The material is the starting point of all these projects employing marble, but also the action of removing identifies a specific necessity of the traditional production of stone, which inevitably acts by subtraction.

From a methodological perspective, this approach takes us back to the experience of two of the greatest Italian masters, Bruno Munari and Achille Castiglioni who, although having never dealt with the stone sector in a systematic way, have many times highlighted the importance of searching the essential in design and of “being able to remove”.

Their teaching is still very contemporary and it is no surprise that the timeless mantra “removing instead of adding” keeps being quoted in universities and fine arts academies. “This rule must be understood in the sense of achieving a simplification, eliminating what is superfluous to achieve the essential object” (FRELLO & MARCATTI, 1994) Bruno Munari used to say.

His methodological thinking draws the line of a series of investigations that in recent years have been exhibited in atypical exhibitions, with a deep meaning concentrated in small objects, almost like microcosms in miniature.

A few years ago, the exhibition “Design in 10 cm” and now “Microfacts”, curated by Tecnificio at Galleria Subalterno during the 2016 Design Week in Milan, selected some objects which express this deliberately low-profile approach, aimed at impressing in just a few glances, that promotes the abandonment of superfluous as a typical trait of the contemporary age.

A NEW ECOLOGY OF THOUGHT: TOWARDS A STYLISTIC APPROACH

Without denying this methodological dimension, but rather stressing it even more, we can try and tell another story connecting the expression “less material” with a clearly identifiable design approach, capable of reflecting on this theme from an innovative, yet often abused perspective on “sustainability”.

It is firstly a sustainability of thought, a work philosophy, a sort of “aesthetic of ethics” where the two terms are not antithetical, but chase each other in a continuous and mutual dialogue.

Again, even in this view of the project, we must quote an undisputed master of Italian design and a frequent visitor of Carrara: Angelo Mangiarotti, the one who donated the office of the Business District to Marina di Carrara.

As a designer, architect and sculptor, in his work Mangiarotti was able to find a design synthesis between the artistic sensitivity of Michelangelo - interpreting the material as “the DNA of the form” (CARMEL, 1999) - and the rationality typical of an



Fig. 1 - "Satelliti" collection. Ghigos studio for "Recycled stones", 2014

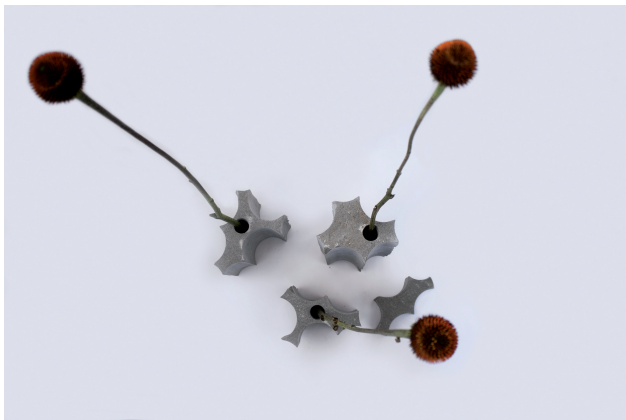


Fig. 2 - "Variazioni 2.0" collection. Ghigos studio for "Recycled stones", 2014

engineer - pursuing the most linear and cheap result possible, studying the production process with the minimum impact in terms of times and costs, as well as environmental effects.

When designing a marble object, Angelo Mangiarotti would immediately put the object itself in relation with its own source material - a block of stone - already imagining the design inscribed inside the block to rationalise the scrap.

"Form, Function, Material" (MANGIAROTTI, 1991), but also "pensiero e materia" ("Thought and matter", MANGIAROTTI, 1996), "mettere l'anima nella materia" ("Putting the soul into the matter", GOLDSCHMIEDT, 1987) or "ricercando il materiale" ("Looking for the material", FONIO, 1990); "La seduzione della materia" ("The seduction of matter", CAMPIOLI, 1992), "L'essenza costruttiva dei materiali lapidei" ("The architectural essence of stone materials", YOKOTA, 1994), "granito struttura" ("Structure granite", CAMPIOLI, 1995); and also "acciaio come obbedienza e trasgressione" ("Steel as obedience and transgression", DE GIOVANNI, 1989), "il linguaggio della materia" ("The language of

matter", CAMPIOLI, 1990), "in omaggio al marmo" ("A homage to marble", MAGGI, 1989), "disegnare il cristallo" ("Designing crystal", VERCELLONI, 1991). This is Angelo Mangiarotti in brief: eleven titles for an author. Eleven titles and eleven ways to talk about respect of matter, sensitivity and (rigorous) design.

Going beyond these emblematic, fascinating yet cryptic titles to describe with a few strokes the complex research of the author, you probably remember one of his undisputed masterpieces: the series of tables "Eros". These tables, in different shapes and sizes, share the same design choice, a choice aiming to achieve simplicity - but even the methodological "intransigence", we could say - to give an aesthetic look to a key feature of the material used, once again marble.

Indeed, in that case the weight of the material becomes an occasion for the project: gravity is what will determine the structure of the table, guaranteeing its inherent stability and the ability to get rid of any "frill" of hardware for the management of joints and slots, as well as the formal purity, cheapness and ease of assembly.

Again, the intelligence to use at your own convenience some specific features that nature gives us for free seems at the same time a methodological choice and a design philosophy.

The sensitivity of Mangiarotti leads us to an *ecology of thought* that other younger designers are currently putting in practice, although in different ways and using their own expressive approach.

Paolo Ulian amazes with his projects, that consider the stone surface as a decorative covering and above all reveal his interest - both ethical and aesthetical - in offcuts and recycling.

The search for a second chance to systematically give to waste, using the very issue of recycling as a founding element of his poetics, probably finds its best expression in the explorations around stone, being the marble processing characterised by huge amounts of waste.

That is how vases are created (the unforgettable "Vago Vase" made of concentric loops with irregular profiles), but also tables, table accessories, bookcases, all chances to guarantee a second life to stone elements otherwise forgotten or unused.

This desire to give things a future is a design approach that in Ulian's work transversely crosses materials, shapes and styles, as the terracotta pot with an emblematic title - "A second life" - clearly anticipated in 2006. In this case the "dashed" decorations, that may drive the break according to a predetermined design, are able to give an additional functionality to "shards that are not shards anymore".

In a totally different way the designers of Ghigos studio, together with the start-up "Recycled stones" launched a further experience, as much visionary as the previous one, explicitly thinking of waste as a resource. That is how an all-female start-up was born, like a personal as well as professional challenge, an

activity that started from the family quarry to recover its smallest pieces, the waste coming from the construction productions, simply trying to “read” it again from a different view. Each piece seems to talk, hiding in the folds of the material new stories that only need to be grasped and brought out again.

The choice will then be to intervene on waste as little as possible, at most with small cores to give a sometimes only virtual functionality to the pieces; in this way their cost remains low and valuable, as their precious (and unique) imperfections are not “contaminated” (see Figg. 1, 2 and 3).

Finally, the experience of designer Marco Guazzini is also very interesting, as he invented a new material made of marble and wool, trying to establish a new company based on this insight: it is simple marble dust (waste in traditional manufacturing processes) mixed with boiled wool (also taken from scrap) that creates an easily workable material that recall its stone origins, yet looking definitely more sustainable from an environmental and economic perspective.

All these stories are characterised by the same research on waste and scrap regarded as valuable elements, but also becoming aesthetic occasions based on stylistic principles attributed to the same “ecology of thought”.

CONCLUSIONS

In this paper the theoretical and qualitative approach has a clear pre-eminence over the quantitative one: the work tried to describe some key phases of the contemporary research on design projects for stone applications.

A few authors were selected who are pursuing precursory, sometimes hasty yet definitely long-term approaches, not suitable for short-term speculation, that are often the most interesting ones, as capable of showing new paths to research and development.

The paper mapped the most important experiments for the progress of the discipline; although being still isolated cases, these can already be framed into a broader critical perspective. In such a view, the paradigm of *ecology of thought* appears useful to a methodological as well as stylistic interpretation, a conceptual yet already practical one.

The expression deliberately allows for interdisciplinary interpretations: it is a form of philosophy that may represent “a brilliant method to be happy” (SARACENI, 2017); it is a direct reference to ecology, i.e. to that branch of natural sciences focusing on men’s *habitat*, on their way of living and the conditions of the environment they live in; however, it is also a category of thought: “our thought becomes ecological when it manages to harmonise the moral, professional and ethical aspects in a simple way, creating a balanced dialogue with mind and nature” (QUARTIERI, 2014).

In this paper these very interpretive categories (happiness, environment, harmony and balance, mind and nature) have been



Fig. 3 - “Variazioni 2.0” collection. Ghigos studio for “Recycled stones”, 2014

developed – sometimes in an explicit way, sometimes more indirectly – throughout the whole dissertation, considering the project as the privileged tool to consciously drive a sensitive and sustainable use of natural goods, along with some formal, stylistic, technical and conceptual explorations.

The balance probably lies in what many years ago Ernst Friedrich Schumacher (German economist, philosopher and writer) had already defined “Small is beautiful” (SCHUMACHER, 1973); today we could still make his insights our own, meaning by “small” a whole series of extremely contemporary concepts that the paper tried to highlight: waste, scrap, materials’ fragility represent opportunities for a theoretical, technical and formal research, but especially show the use of “small”, human-scale systems as the best path to sustainable development (which doesn’t mean limited, nor limiting). A dimension where subtraction may become a value and imperfection an opportunity for self-vindication.

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