Design has been recognized as a discipline of doing. Its practical dimension has always exceeded the theoretical one, and the second has always placed the first at the centre. If this assumed a connotation of certainty in the context of the 20th century, today, in the contemporary world, is the Design dimension of
doing still valid? How the applied dimension of this knowledge has to be expressed? Can the "profession" of the designer specialized in product categories still valid? What space will it occupy between the professions of the future? What should be its relationship with production and consumption systems?
The issue 72 of **diid** opens up to those applied experiments where Design, within the laboratories and in the places of production, is outlining a different nature and prefigures a new role in and for society.

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Index

New places of design: nomadic workshops

This contribution presents reflections on design intended as training, research and work together with the theorization of new practices and new places that define the designer's nature in relation to the demands of design and materials and to the relationships between universities, research and small enterprises. In particular, we intend to think about the designer's possibilities of intervention in specific local realities, enriched by their knowledge, while putting in place a virtuous circle made up of relationships and active exchanges of skills.
The figure of the "priest of materials" therefore emerges within a "materiolab", a new type of place of knowledge, that is not necessarily a physical place, but rather a research standard. A nomadic workshop, since the designer-researcher is the bearer of his knowledge, tools and ability to explore and create. The aim of this "place of thought" is to critically highlight the processes that derive from the sedimentation of a specific know-how linked to the territories and experiences that have been able to follow one another over time, increasingly enriching our knowledge. The target is to basically offer a reflection on the need for pre-design in the new design and methodological scenarios and on common sense in the design with materials and of materials; it is an invitation to the contemporary designer to bring his specific contribution on the methodological dimension of the project activity in which the experimentation with materials becomes an experimentation of the space of possibilities intrinsic to their very nature.

[materiolab, material design, designer-researcher, laboratory, know-how]

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Design in the contemporary world

The increasingly globalized competitive context in which we are witnessing a rapid evolution of the market and the high variability in the ways of using products and services requires companies to have a renewed capacity for vision. Within this evolutionary framework, design increasingly plays a main role as an essential value of the product-system. In its contemporary form, design has definitively overcome the *status* of "applied art" or "artistic-creative" discipline, thanks to its multidisciplinary line evolved in relation to society, imposing itself as a possible, if not unique, line of renewal of the system consisting of small and medium-sized enterprises. It is precisely this multidimensional approach that contemplates the theoretical, historical, economic, social contexts that are essential to understand and analyse the methodological and ontological problems of design in order to fuel the contemporary debate about the transformations taking place on the essence of doing and thinking. In other words, there is a dimension of co-responsibility among the society that makes it essential to be able to recognize problems in relation to other fields of knowledge, such as philosophy, psychology, but also certain instances of the history and criticism of art, in order to be able to reach to the definition of possible application areas of the project in this social reality, in its complexity. A reality in which the economic, socio-technical and cultural conditions require a rethinking of the contents and methods of design, together with an investigation of contexts and conditions, addressing the need for reflection and critical action as the foundation of doing design.
Different "histories" of design coexist and the one of design as a problem solver, together with that of design as a creator of meanings, interact, influence each other, but without one reading is a function of the other: design is a culture and a practice regarding how things should be to achieve the desired functions and meanings (Manzini, 2015). Specifically, this contribution[1] aims to describe a new practice of training, research and work for the designer as a sense maker - specifically compared to the reflections on design with and with materials - that is «openness to unprecedented possibilities able to contribute to imagining solutions that do not yet exist and to find new ideas around existing ones through a necessary path of exploration of other expressive, cultural, philosophical, social and technical worlds» (Bassi, 2017).

A renewed capacity for vision

Therefore, the two strategies according to which one can act concern the relationship between research and enterprise. On the one hand, there is the possibility of offering the consulting service in research and development for small and medium-sized enterprises, which in most cases do not have research laboratories and must make use of university collaborations in order to implement innovation and allow to explore a mediation of different mentalities between entrepreneurs and university experts.
On the other hand, there is a possibility of setting up joint laboratories to carry out basic research without providing for specific possible applications, but rather showing a more open and capable of "doing to know" mindset. In the current context of

globalization and liberalization, it is certainly a challenge to be able to understand how universities and the world of research can interact by offering their own specific dimension with the aim of enhancing the project on the one hand and enterprises with their local knowledge on the other, setting in motion a virtuous circle made up of connecting networks and exchanges of skills. «Only through the dialogue between academia, designers and the business world, it is possible to innovate in a sustainable and coherent way» (Russo & Tamborrini, 2019).
The phenomenon of globalization sees a real strength in the standard and in the economic, social and cultural integration, standardizing strategies to the detriment of certain diversities and varieties of the countries involved. The result is the change in production and consumption models, which are increasingly uniform and converging, which also force small local enterprises to adapt to market demands. The major changes in the social and environmental level make the debate widely open (Russo & Tamborrini, 2019), therefore it is necessary to rethink the ways and means by which the designer will interface with today's challenges.
The intention is to bring out how the know-how of tradition is combined with innovation themes: traditional material cultures become an opportunity to study and rediscover hybridized and intertwined ways of doing in a new way – by relating one's own local cultural identity with a globalized context – and therefore how the processes deriving from the sedimentation of specific know-how linked to the territories increasingly enrich knowledge, taking shape in the "sensitive" surface of the artefact in which materiality manifests itself «in its double sense of haptic mediation and emotional connection» (Bruno, 2016). In order to pursue a new "materialism", it suggests to carry out critical acts of investigation on the surface that reveal its wide potential for material expression with the aim of communicating the sense of the transformation of these relationships. At the base is the idea that materiality involves remodelling of our perception of space and contact with the environment; rethinking materiality, therefore, means adopting new forms of connection and relationality.

Design matter

The experimentation with materials which can ignore the shapes of objects has been examined and it is based on the transversality of surfaces when the design action concerns the relationship between different materials, or different material densities, or different chromatic nuances, as the core of the reflection on the material that in changing brings out its true nature (Bruno, 2016; Carullo, 2017). This method, developed in the INMATEX laboratory[2] at the Polytechnic of Bari, coordinated by Rossana Carullo based on the twentieth-century reflections on the principle of coating, the Bauhaus experiences, the ideal of total internality and, finally, the lectures on Klee's chiaroscuro scales, classifies materials through scales of sensory gradients, evaluating their perceptual-sensory characteristics based on processes of interaction between surfaces to define taxonomies of relationships between materials as an enhancement of the conceptual instances of the material experience (Rognoli & Levi, 2011; Carullo, 2017; Carullo & Pagliarulo, 2018). So the study continues to try to highlight how the material is no longer just the result of a research aimed at improving its technical and functional performance but is itself a "matter of invention" (Manzini, 1986), a conscious design ground to discover how it can interact more and more with the sphere of emotions and senses. Crucial is the theme of the selection of materials, therefore a critical reading of the relationship between design, university, enterprise and territory, raising questions on design practices in the contemporary context that aim to «defend the know-how to defend the know-how to design» (Arquilla *et al.*, 2005) and which see the need for a renewed dialogue between designer and business. By understanding what contemporary daily needs are, the designer can connect the science of materials with social and cultural reflections by actively placing himself within the process of creating scientific knowledge and, at the same time, in the research process itself: this is revealed to be a great opportunity for the design discipline as it can investigate and exploit the relationship between production processes and the coordination of the performative nature together with the expressive-sensorial one of the materials.
The "Hydros Phobia" project, developed by the author, is the result of experiments with prototyped surfaces with variable gradients to verify the perceptual-sensorial qualities of native Apulian materials. For the development of the project, we turned to the start-up Pecore Attive which, in Puglia, carries out a work to enhance the wool of Gentile sheep and to reconstruct the links between territory, production and society. Thus the university-research-business relationship has made it possible to explore in detail the limits, but also the potential and the expressive-sensorial properties of these traditional as well as unusual wools, to understand how they can be inserted in a mechanized production process.
Aimed at research on the polysensory nature of materials, the project starts from the elaboration of a tactile scale in which different layers of materials activate mutual relationships to compose a surface with different softnesses with a last white layer of fabric that hides the layering from view, forcing to a purely tactile experience by points. The challenge was to transform it into a surface that can be used as a covering on both horizontal and vertical planes, as well as a concept of soft skin. Where the wool felt is present, the colour is not absorbed, it retains its vividness and spreads horizontally on the surface. Where there are layers of carded wool with a capacity to absorb the colour, penetrating into the depth of the layers, it loses its vividness in relation to the depth of the same. Therefore, colour has become a detector of tactile materiality and, as an optical sensorial parameter par excellence, it becomes capable of retaining the materiality of the surface, it is itself a corporeal entity. The experience recalls the construction of chromatic-material palettes in the research conducted by Hella Jongerius (2016) for Vitra on the material aspect of colour as a constantly changing reacting entity. On the international scene, then, the rich tradition of Dutch weaving has also led the visual artist Sigrid Calon to intertwine her research with the operation of "widespread innovation" carried out in Calabria

by Emilio Leo of a Fablab *ante litteram* with a process of productive and cultural reactivation and consequent conservation of the tangible and intangible heritage of the family business, Lanificio Leo, founded in 1873: even this reality of "project laboratory" confirms the fertile ground for new practices and new places of design.
If the daily life, pervaded by science and technology, requires an interpreter-translator-connector who takes into account the progress and results obtained, making society participant, then it is up to the designer to reformulate his own attitudes and skills by assuming the role of the one who Verganti (2009) would define "radical researcher". Verganti refers to the case of the designer who, with his ability to investigate and imagine the meaning of new artefacts, is able to implement a cultural reading – which is also a social, economic and technological reading – of the same artefacts. We are therefore faced with new professional figures of designers defined by the tools with which design works in the project "of" and "with" materials, determined by the establishment of a new paradigm of multidisciplinary collaborations. Research on materials, today, induces a type of design that is not based only on functional and performance needs, or on the economic needs of society as a whole, as well as cannot be based solely on the often abused instances of ecology and sustainability: «New scenario is governed by new design and methodological phenomena. Interdisciplinarity, hybridization, new tools and new places that take over from the outdated material libraries» (Migliore, 2016).

Project laboratory

The "materiolab" is then a new type of place of knowledge, not necessarily a physical place, but rather a research standard. It is intended to mean a type of methodological approach towards materials, based on their sectorized collection which, specifically, is offered to us by the innovative experience conducted in the INMATEX laboratory: not just a service to companies or designers or students, nor a database, but a generative device in which surfaces/materials are organized according to serial principles. The "materiolab" contains a way of thinking, an attitude, a research and project service that sees the designer-researcher working closely with the company. A nomadic workshop, therefore, because it does not need a physical and fixed place, because the designer-researcher becomes the bearer of his knowledge, tools and his ability of "space-visual" explorations and material creations (Bruno, 2016). The intention of this "place of thought" is to critically highlight a new way of categorizing materials, which responds in an innovative way to the need to create knowledge about the binding theme of their selection, and therefore an opening towards new possible design practices.
This method classifies the materials assessing the perceptual-sensory characteristics based on the processes of interaction between surfaces with the aim of defining taxonomies of relations between materials and shift the focus in the choice of materials, from a technical cataloguing to a conceptual categorization.
A display case intended not only and not so much as a library of materials, but as an archive of manufacturing processes aimed at enhancing the sensory values of surfaces that can be produced with those materials. Surfaces then also become the place of communication of a specific identity of the material culture of places «within a perspective of international comparison that does not want to be global as the existing material libraries are, but rather transcultural» (Carullo & Pagliarulo, 2016). Therefore the proposed research site, a metaphysical place, does not ignore the knowledge on materials from traditional material libraries, but it enriches it and is substantiated by the designer's cultural background and knowledge of the manufacturing processes in order to be able to act rationally on them: the relationships between the material connections in favour of the individual samples, the humanistic-sensitive logic that integrates with the performative one. In this way, we imagine how the critical dimension of the research would lead to the critical dimension of the project with and of materials: the role of the designer that takes concrete form in the theorization of identity tools for the company in which he operates and whose production processes he knows, up to the creation of an *ad hoc* cataloguing system, as a contemporary product-service and design mediation tool. The experiments on compositions of sensory gradients become those «prostheses of concreteness» (Dal Bò, 2016) which offer the possibility of broadening abstraction and contrasting engineering and virtual environments, becoming a tool for reflection on the design of the meaning of things. Design must come into close contact with the concrete dimension of the territorial context, therefore the designers become enabled "antennas" at the local level through which design – in its strategic dimension – operates in the processes of competitive enhancement in the first instance of the individual company, to a higher level of the local systems of enterprises, and finally of the different local systems of resources of the country. The disciplinary contribution that design can bring into play concerns, above all, the possibility of making the manifest identity of the local production system as a whole, an identity that emerges from the knowledge of the local tissue and that is made explicit not only to the system of external actors, but also and above all internally. Finally, the design consultancy can be configured as a "project laboratory" where research and innovation are the results of a continuous relationship between the local system and the complex system of skills that design puts in place. The typological invention of a design-oriented research center is one of the experiences of enhancing heritage know-how, a place where reason with materials in their experimental potential, with a metadesign perspective.
To describe this figure of designer-researcher, who here we shall call a "priest of materials", the words of Pareyson (1991) seem fitting: «[He] lovingly studies his subject, scrutinizes it thoroughly, spies on their behaviour and reactions; he questions it in order to be able to command it, he interprets it in order to be able to tame it, he obeys it in order to be able to bend it; he deepens it so that it reveals the latent possibilities suited to his intentions; he digs it up because it suggests new and unprecedented possibilities to try». Knowledge of materials and related production processes often suggests many design paths, some of which tend to bring together design skills and technical skills in a single figure. However, in some cases, being too involved on a

technical level prevents you from having the right distance so that you can also have the freedom to dare. For this reason, teamwork remains of primary importance; teamwork in which the designer has sufficient technical skills to avoid thinking about unattainable things, just as the technicians should have sufficient open-mindedness to be able to solve the creative direction without constituting an element of obstacle to the experimentation. The designer-researcher intended in this way is responsible for a reflection on the use of materials, on the design of surfaces through reflections on the combination of materials and on the synergies that are created in them, therefore a figure that places itself in a close relationship with the small enterprise – especially artisanal – with whom it operates by introducing innovation, not through new forms (styling), but through critical reasoning on the production processes and therefore on the materials it already uses, based on specific cataloguing of the latter that is built on the juxtaposition or of different materials or different material outcomes deriving from the various process options of that company. The example of the collaboration with the startup Pecore Attive is a demonstration of this.

Thus, the figure of the "priest of materials" for design emerges, equipped with an articulated baggage of tacit and non-explicit knowledge, as the result of curiosity, attempts, experiments, skills, previous elements of a cultural, experiential and professional nature, but also of unexpected epiphanies. The objective is, in conclusion, to offer a reflection on the need, even more than in the past, of the pre-design in the new design and methodological scenarios, on common sense in the design with materials and of materials, focusing on the expressive-sensorial qualities capable to transform the intangible into tangible; an invitation to the contemporary designer to bring his own contribution on the methodological dimension of the project activity in which the experimentation with materials becomes an experimentation of the possibilities inherent in their nature.

[1] This contribution is the result of the research conducted by the author jointly in the training course carried out at the Polytechnic of Bari and the Iuav University of Venice. Specifically, it refers to the research thesis works *Hydros Phobia* of the 2015/2016 academic year with supervisor Prof. R. Carullo (Polytechnic of Bari) and *Sense Making Material* of the academic year 2018/2019 with supervisor prof. A. Bassi and co-supervisor Prof. R. Carullo (Iuav).

[2] For more information, consult the website www.inmatex.it

References

> Arquilla, V., Simonelli, G., & Vignati, A. (Eds.). (2005). *Design, imprese, distretti. Un approccio all'innovazione.* Milano: Edizioni POLI.design.

> Bassi, A. (2017). *Design contemporaneo*. Bologna: il Mulino.

> Bruno, G. (2016). *Superfici.* Monza: Johan and Levi.

> Carullo, R., & Pagliarulo, R. (2016). Tassonomie a fior di pelle. *MD Journal, 1*(1), 32-41.

> Carullo, R. (2017). Design delle superfici: gradienti sensoriali tra peso e misura. In M. Bisson (Ed.), *Environmental Design: II International Conference* (pp. 217-228). Milano: De Lettera.

> Carullo, R., & Pagliarulo, R. (2018). *InteriorlDesign. Action on surfaces. International Exhibition*. Soveria Mannelli: Rubbettino.

> Dal Bò, M.T. (2016). Tra prefigurazione e configurazione. Modalità e strumenti per l'inizio del progetto. In R. Riccini (Ed.), *Frid: Forum nazionale dei dottorati di ricerca in design* (pp. 50-56). Padova: Il Poligrafo.

> Manzini, E. (1986). *La materia dell'invenzione.* Milano: Arcadia.

> Manzini, E. (2015). *Design, When Everybody Designs*. Cambridge (MA): MITPress.

> Migliore, E. (2016). Porositivity, il design della porosità. In R. Riccini (Ed.), *Frid: Forum nazionale dei dottorati di ricerca in design* (pp. 30-36). Padova: Il Poligrafo.

> Pareyson, L. (1991). *Estetica.* Milano: Bompiani.

> Rognoli, V., & Levi, M. (2011). *Il senso dei materiali per il design.* Milano: Franco Angeli.

> Russo, D., & Tamborrini, P. (Eds.). (2019). *Design & Territori. Università e aziende tra sperimentazione e innovazione*. Palermo: New Digital Frontiers.

> Verganti, R. (2009). *Design-driven innovation: Changing the rules of competition by radically innovating what things mean.* Brighton: Harvard Business Press.

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