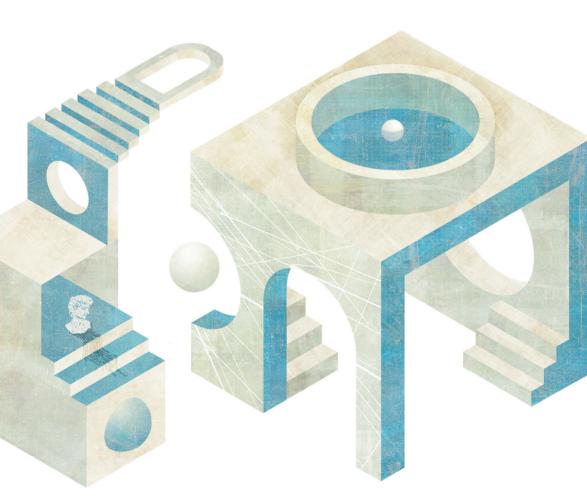
DESIGN CULTURE MATTERS

Embracing cultures and cross-cultures through design perspective and matters

edited by Giampiero Bosoni, Marta Elisa Cecchi





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1. The atmospheric culture and matter of Interiors

Giampiero Bosoni, Department of Design, Politecnico di Milano Marta Elisa Cecchi, Department of Design, Politecnico di Milano

Matter as "Invironment Atmosphere"

The notion that the human being is not only what he/she consumes but also what he/she breathes and everything in which he/she is immersed on a daily basis has expanded through time due to cultural evolution and, more significantly, scientific evolution. In this sense, it has become evident that both environment and space are fundamental fields to be investigated and understood from a renewed and sensitive perspective.

In the cultural debates that began in Italy in the 1970s and had significant influence around the world, Tomás Maldonado's bookmanifesto, *La speranza progettuale* (subtitled *Ambiente e Società* – Environment and Society), called for a sort of "desperate hope", or constructive pessimism, in the design world in which environmental issues are proposed as the objective toward which the project should be aimed for the necessary survival of humanity. The core of this theory, which envisages a systemic vision of the environment, is represented by the notion of environmental design, which Maldonado elaborated on during the 1960s, between the conclusion of his Ulmian experience and his teaching period at Princeton University.

Based on these reflections, which have been developed by other relevant thinkers and researchers over time, it is becoming more common to see how various disciplinary fields are focusing on and being largely influenced and susceptible to environmental issues, especially the most recent global changes. An increasing number of studies and research are developing in this direction aimed at raising aware-

ness of environmental issues, including the connection between the environment and how living beings are perceived emotionally and perceptually, thus developing a renewed contemporary aesthetic and a deeper ecological consciousness. Therefore, never before have the fields of academic research and environmental sustainability been interconnected. Indeed, we can no longer speak of 'nature' and 'culture' as two separate spheres but as intrinsically connected and mutually dependent; where 'materiality', interpreted in this context as the totality and relationship of perceivable qualities in space, represents the common ground.

In this perspective, the ever-present relationship of interconnection and osmosis between inside and outside, can be explored both in terms of space as well as in a philosophical and biological sense, and the atmospheric matter that characterises the spaces in which we live is progressively becoming the critical concept and phenomenon through which this can be achieved. Due to its apparent lack of 'substance', atmospheric matter, or the dimension of incorporeal, intangible, emotional, and sensory, is often associated with negative, ambiguous, and ephemeral concepts. It offers a theoretical as well as procedural option to attempt the investigation of the environment interaction fundamentals that sustain the main activity of interior design. Although the atmospheric matter is considered a topic that has already been investigated extensively in the history of design culture, there is still insufficient knowledge of its scope and effects in contemporary design culture. This renewed atmospheric sensibility, enriched by the most recent discussions in the philosophical and aesthetic spheres, has the ability to trigger an alternative way of approaching the spatial matter in perceptual terms rather than procedural and design terms. Hence, atmospheric 'matter' resides in the spatial disciplines as a reality that has always existed but has not yet been decoded and sufficiently deepened in contemporary theory and practice. Its potential has not yet been adequately explored in design, particularly in interior design.

In this regard, the branch of Aesthetics, also referred to as New Phenomenology or Neo-phenomenology, has a strong connection to contemporary design culture, stimulating research and theoretical reflection across and within design disciplines more than ever. Indeed, this philosophical thinking has provided an effective method for

charting a new philosophy of perception to investigate the more elusive and enigmatic aspects of the human experience (Oliva, 2015; Griffero, 2018). Aesthetics was first coined and developed by Hermann Schmitz to reclaim a sensitivity to the nuanced realities of lived experience (Schmitz *et al.*, 2011, p. 241, cited as Julmi, 2017, p. 134). Gradually over time, particularly in the last two decades, a specific conceptual thread has been delineated as the *Aesthetics of Atmospheres*, refering to the original meaning of aesthetics, namely 'aisthesis', i.e. the doctrine not of what is considered beautiful but of all that is perceptible through the senses. This new 'atmospherereological' strand contains a large number of 'activities', disciplinary fields and 'productions' that, in traditional aesthetics, occupied a marginal, secondary place or were considered as minor declinations of 'applied art' (a typical label given to the world of design).

In today's society, where everything is designed, culture is extended to different fields. Aesthetic works range from architecture to stage design, from design to communication, and as a result, each action has a clearly controlled 'aesthetic' value that is implemented through the search for a 'method' (Böhme, 2008). The scene, the environment, the living and inhabitable space and the character of the place are the main considerations in interior design and exhibition design. In these fields, the atmosphere serves as the primary implicit 'material' and the explicit target of any aesthetic action aimed at revealing (or liberating) it.

Hence, the evolution of our understanding and sensitivity to the atmospheric matter could help us implement our aesthetic capacities, through which we 'breathe' the places we encounter in new or revised ways (Alison, 2020). This consequently aligns with a greater environmental and ecological sensitivity. Moreover, it should be emphasised that the present atmospheric issue related to interiors is not intended as the mere use of recyclable, eco-sustainable and renewable materials. It is more of a tendency to think of and perceive space as a living environment where one might engage into a symbiotic relationship, or in other words, through 'breathing'. In fact, focusing just on recyclable or sustainable materials would pose a risk of pursuing a stereotyped approach or acting as a publicity stunt, or *greenwashing*, which would confine the project in almost exclusively normative and technocratic terms. On the other hand, the progressive explication of

atmospheric matter, despite how broad and pervasive it is, compels us to focus in particular on the breathability of air, first in the literal sense of 'breathing' and then, increasingly, in the metaphorical aspects of 'breathing' in cultural settings.

Hence, the question that arises is how to develop a 'real' atmospheric approach for the understanding and definition of designed space?

In the current interpretative paradigm defined by some as the Anthropocene (Crutzen, 2002), there is no distinction between an 'inside' and an 'outside'; there is no longer an external nature with which the living being is confronted and in which the inside is solely that of the subject. In this perspective, it is possible to introduce a notion of environment, alternating and transforming it semantically, into that of 'invironment', i.e. a space conceived as an 'interior' with which human beings are substantially intertwined and interconnected, thus overcoming the binary division between what is inside and what is outside and between interiority and environment. The concept of 'invironment' is further explored in the recent volume *Breathe* (2021) by considering how the process of breathing allows for the nullification of the inner/outer division and that it represents the embedded flowing medium through which we recontextualise our spatial presence (situation) within the aerial realm. As suggested in various experimental and cutting-edge scientific publications, the cultivation of breathing represents the cultural and physical future means of exploring and understanding the environment and space in which we live and inhabit, but above all, the 'invisible' atmospheric matter. Thus, our breath can be interpreted as a "seismograph of our emotional states" (Life, 2022, p. 129). By observing ourselves as we breathe, we may become aware of how our breathing patterns often mirror our state of mind and often indicate how it reacts to or connects with the environment.

The cultivation of breathing (Irigaray, 1999) appears as an alternative to the conventional method of understanding, especially in the field of design, which deviates from Western norms and calls for acute context-sensitive participation. Alongside this reasoning, it is also true that the air we are constantly immersed in is an element we can never entirely appropriate. We can exist within it, use it to support our bodies and share it with others. For this reason, breathing connects us to others and lived space, generating and emphasising our individuality and estrangement at the same time. The immersive property of

aerial matter stands in contrast to modern inclinations to limit agency to a small number of 'visible', tangible actors, and it supports ideas that transcend beyond this rigid division and antagonism.

How can the atmospheric 'invironment' thus be understood in interior design? This question is raised by the concept of atmosphere, which is intense as the temporary spatial condition between resonance and interpenetration – physical, cognitive, and emotional – involving the perceiving subject and the environment (natural or built).

The premise is as follows: since no one can be systematically separated from the surrounding environment within the global atmosphere, the human sphere is the atmosphere of the world. The human sphere is clearly what it creates, breathes and is collectively interwoven with. With this ontological shift, reality is conceived from an environment 'out there' to an atmospheric reality in which we live, therefore a concrete, environmental matter, which is real and tangible since it is perceived and not a purely abstract concept. The designed atmospheric matter and the air around us are increasingly seen as essential aspects of a wide and unique interior in which everyone lives. Indeed, in regard to a unique interior, it is essential to focus on understanding the renewed notion of the environment in an 'invironment'. The impact of the preposition 'in-' within the notion of 'invironment' is itself an inclusive and connective element. In this way, the conjunction of the atmospheric realities of aerial matter opens up the imagery of a unique planetary interior, densely inhabited and worth sharing. By rejecting the epistemology of the traditional environment, one can thus understand the contemporary environment, made up of designed spaces and defined or undefined places, as an extended interiority. The notion of atmospheric invironment, if incorporated into the design culture, would allow a different approach to the environmental issue through changed design thinking.

It is important to emphasise once again how the relationship between interior and exterior has been and still is widely discussed in the discipline of interior design, often with the result of highlighting their differences rather than their connections. This is especially true in the field of exhibition design, which deserves to be explored in depth for its intrinsic qualities in relation with atmospheric matter and its relationship with the environment. In this field, the ambiguous oscillation between interior and exterior, fiction and reality is even more evident has the designing

expressions (from the architectural box to the exhibition itself) are layered. The ultimate aim of each exhibition design is to build particular airs and auras – the exhibition's atmosphere – within existing ambient containers. In other words, the museum's cultural context, Hence, this hybrid and atmospheric in-between perspective is inherent in the design culture of temporary exhibitions that 'work' with the atmospheric matter by shaping space to perceive and interact with the displayed pieces. It has already been dealt with on other occasions "the coherent or estranged relationship that is produced between the interior and the exterior of a designed exhibition space, which relationship is particularly heightened, if not distorted, by the speed and variety with which the different arrangements produced in the same place continually modify the perception of its interior space, compared to the constant non-modification of its exterior" (Bosoni, 2019). Franco Albini grasped the most essential sense of this relationship in his famous academic lecture of 1954 when he evoked with great sensitivity and clarity the substantial values of "atmosphere" and "emptiness" and "air" as founding elements of inhabited and narrative space: "It is sometimes fundamental for the success and interest of the exhibition to detach the visitor from the external reality and introduce him/her into an environment of a particular atmosphere, which helps him/her to focus attention on the works on display and sharpens his/her sensitivity without causing him/her fatigue (...) To achieve this result, I think it is necessary," Albini states, "to seek spatial solutions rather than plastic ones (...) I believe the voids need to be constructed. air and light being the building materials"1.

Architect and design theorist, Andrea Branzi, made the following statement a few years ago in reference to the subject of interior design and, more specifically, the area of temporary and installation space design: "This new dimension of design [interior design] thus plays a major role in the functioning of contemporary cities, of continuous retirements, changing functions and the new structural role of microscale economies. In other words, interior design and exhibition design, specifically because they are provisional and interstitial, today constitute one of the most important activities in the phenomenology of the liquefaction of the solid bodies of the contemporary city" (Branzi,

^{1.} Prolusion given by Franco Albini at the inauguration of the 1954-1955 academic year at the Istituto Universitario di Architettura di Venezia. Typescript kept at the Fondazione Franco Albini, fully published in "Casabella", 370, February 2005, pp. 9-12.

2002, p. 100). Branzi employs the word "liquefaction" in the same article and several other works, clearly alluding to the well-known book *Liquid Modernity* by sociologist Zygmunt Bauman, which interprets and unfolds postmodernity using the metaphors of the liquid and the solid as two extreme and opposite poles. However, in this aerial approach, it is possible to accelerate the discussion and introduce an alternative spatial paradigm related to our time, hence moving from the concept of liquid modernity to an "aeriform contemporaneity" (Cecchi, 2020, p. 75) as a natural evolution of the state of matter and cultural approach. Thus, alluding to a de facto hybrid nature, somewhere between the two poles. The aeriform state is even more challenging to contain and define in its limits and characteristics, changeable, contaminated and contaminable from countless points of view and scenarios.

The contemporary atmospheric turn in different fields of knowledge can hence be introduced and explored, especially in terms of design and aesthetic perception in an attempt to renew our relationship with the environment.

However, the atmospheric paradigm seems to have only just entered the design culture. Indeed, one of the central questions in many discussions of the atmospheric matter is whether design practices are catching up with the current thinking that has been developing over the past few years. This also includes questioning whether today's practices pursue Gernot Bohme's (2017) initial call for a new atmospheric aesthetic that is grounded in design culture within the different fields of design practice.

As Loenhart points out, it is noteworthy that the design disciplines themselves have not yet explicitly and openly applied this comprehensive operational framework, even though they present themselves as ideal fields of experimentation. Therefore, it is indisputable that, "When we design spaces, we also design, whether we want to or not, atmospheres" (Hauskeller and Rice, 2019, p. 147).

It is only by placing atmospheric matter at the centre of the cultural discussion that it is possible to reconceive the agency of the human being within it and its relationship with the surrounding environment. As a result, if design culture is able to interact with alternative approaches, it may serve as a 'creative' solution to the current social, economic, and ecological crises. Ultimately, leveraging our sensory perception to approach the aerial medium in an aesthetic-aisthetic sense would be one of the potential ways to discover more than human-

environmental reality. "A fundamental element of this process is the different way visual perception is solicited, which, from being static and Euclidean – with classical, rational, uniform, static and permanent properties- becomes increasingly dynamic and somehow non-Euclidean in the sense of multiverse, merging empathically. As Marshal McLuhan observed in 1973, the more uncertain and extended spatial dimensions related to or emanating from the sensory properties of touch, taste and hearing. McLuhan observed that visual space is a figure without background because it is abstracted from the context of the other senses. Acoustic space, for example, has completely different properties from visual space. The acoustic sphere is discontinuous, not uniformly dynamic. Tactile space, on the other hand, is the world of the intermission or gap of experience, and one can ensure it as the relationship between the wheel and the axle, in which the interplay between the two elements is the crucial structural factor, without which there would be neither wheel nor axle" (Bosoni, 2012). However, the conception/ perception of atmospheric matter should not be limited phenomenologically to the detection of the human senses exclusively (for example, through the mere dramatisation of spaces or the hypersensitivity of certain technological devices), but expanded by refining our perceptual faculties through design practice. To develop a framework of atmospheric matter, the surrounding reality must be recognized, not only as an objective fact and its sensual perception not as a marginal condition of design disciplines, but as an inescapable groundwork.

Therefore, the role of cultural sciences and design disciplines at large as well as interior and exhibition design today are to make the conditions and states of the air and atmospheric phenomena explicit from perceptive, meteorological, physical aspects, but also metaphorical, poetic and aesthetic perspectives.

The relevance of atmospheric issues in the design culture

History is composed of documents because the document is what remains.

Jacques Le Goff (1992)

Exhibition design is still considered a minor part of spatial design culture. This is particularly evident from the number of publications dedicated to this specific field and the quality and quantity of sources available in public and private archives. As seen in design publications, journals², and online sites, many designers do not seem to consider this practice as essential as traditional architectural design, both in interiors and on a wider urban scale.

It is also true that the exhibition project is a complex system determined by an articulated and concatenated process of activities and actions, often changing significantly during production and in progress. In addition, the exhibition project is usually structured in an intensive process of preparation and coordination activities covered by as many other professional figures and experts.

However, this valuable part of design culture risks being lost over time as attention is often focused solely on the result and the exhibited content of an exhibition design and not on the spatial conformation and the communication and engagement methods employed in it. Indeed, this is the 'atmospheric substance' used in exhibition design.

The exhibition experience, moreover, does not end once the exhibition set-up realised, i.e. the physical construction of a temporary 'place', but continues to solidify both in the minds and souls of visitors long after the event. This includes the imaginations of the many scholars and enthusiasts who for various reasons (chronological and geographical) were not able to pass through these temporary spaces with their 'eyes'. Therefore, there are two aspects to be taken into consideration, namely: the importance of documenting exhibition projects in terms of their content and, most importantly, their design; secondly, the importance of enhancing this documentation through theoretical and conceptual perspectives that are alternative to the traditional ones and are capable of reinterpreting these materials in a contemporary way, thus discerning further and new semantic and formal nuances.

As a matter of fact, the value of documents and historical research in archives and study institutions is still fundamental for contemporary

^{2.} Some architecture and design magazines occasionally have dedicated sections or even monographic issues on exhibitions. In any case, it seems appropriate to recall that there have also been interesting attempts to create magazines specifically dedicated to the theme of exhibitions and displays. Among these, the magazine *Progex – design & exhibition architecture*, edited by Giampiero Bosoni with Italo Lupi as art director, deserves special consideration for the quantity and quality of the historical design material, having produced ten issues from 1988 to 1994.

(design and curatorial) exhibition practices as they represent the cultural substratum behind them.

In the specific field of the temporary exhibition project, the temporal limitation can be at times a limitation, and on the other hand, can be the authentic potential of such actions.

Indeed, the exhibition and its setting can create images of extraordinary revelation of an era and its culture through the display of iconic, fleeting and unrepeatable visual forms. The exciting power of persuasion of the temporary exhibition takes place in the authentic experience of the 'here and now'. The haloed uniqueness of the space, traversed in the 'here and now' determines the 'quid', the atmospheric matter and the element of 'difference' that also resides in this substantial impermanence.

Although atmospheres are always and everywhere present, they are often not perceived as such, except when these particular airs determine a strong and different emotional and sensory effect in the person who encounters them. Every installation and exhibition has its own unique, sometimes profound, and lasting atmosphere of its own. This encounter determines a sense of wonder, amazement and curiosity that enables the *quod* (the content on display) which, in turn, determines the specific *quid* of that space. This also includes the visitor's involvement and aesthetic appreciation. Thus, the atmosphere of the 'here and now' suddenly emerges from the 'nothingness' of the environment and is 'transformed' into a place charged with emotion and meaning, distinct from the rest. Similar to the temporary exhibitions that inhabit the present place and time, the atmospheric matter of a space emerges and creates a divergence in the general architectural environment and towards the subject that perceives and experiences it.

Within this perspective, it is evident how the documentation of exhibitions and exhibition culture in general needs to be implemented, especially through new theoretical and practical perspectives that can enhance a disciplinary field too often considered peripheral and collateral. Unfortunately, as has been repeatedly stressed, there is no coherent and structured historical documentation of many past and present exhibitions, of greater or lesser recognition among the general audience. This is often due to their perception as cultural settings whose conformation is deemed subordinate to the narrative and content arranged and selected therein.

New perspectives closer to modern concepts of space and environment can shed new light on past events and diversify the critical apparatus on (almost) completely forgotten historical exhibitions, revealing their distinctive features and design qualities.

The main concern is losing information and knowledge about disciplinary fields that are not sufficiently investigated by the academic, design community, and the public at large.

The aim is, therefore, to encourage methodical dissemination and archiving of the documentation of exhibitions and exhibition spaces and thus preserves the diverse and varied 'atmostories' (Loenhart, 2021) they embody. It is possible to imagine an 'atmospheric legacy' of exhibitions and exhibition culture and practices to be passed on to future researchers, students, enthusiasts, and practitioners. In this way, these ephemeral and lightweight creations and productions of design culture could be preserved and made 'tangible' through a broader range of documents such as images, sketches, technical drawings, interviews, articles, and project reports. As has already been attempted in the embryonic project of a Virtual Museum of 20th Century Italian Exhibitions collected in the unique web portal open access Exposizioni.com³, where one can delve into the history of some of the most significant projects of the great Italian masters in the field of exhibition design, through the online consultation of all existing documentation (photographs, drawings, letters and various records) found in the several archives in which they are stored.

In this sense, the challenge is to elevate exhibition culture to an equal value with other spatial and design disciplines.

Therefore, it is required to recover historical documentation and to establish an alternative and innovative approach that leads to a sensitivity in research that is capable of preserving and narrating the ephemeral and poetic atmospheric matter of these environments.

^{3.} Exposizioni.com was founded in 2013 under the patronage of the Fondazione Franco Albini and the association of exhibitors ASAL. Giampiero Bosoni, full professor at the Politecnico di Milano, has been the scientific head of Fondazione Franco Albini since its foundation.

References

- Alison, A. (2020), "Atmospheres and Environments: Prolegomena to Inhabiting Sensitively", *Aesthetica Preprint (Mimesis)*, *15*, 97-121.
- Bohme, G. (2017), Atmospheric Architectures, Bloomsbury Academic.
- Bosoni, G. (2012), Sfondo e figura dopo il Poeme Electronique. Tempo scenico, spazi narrativi e percezioni sensoriali nell'exhibit design contemporaneo, in Colombo, C.F., Lecce, C., eds, Mostrare, esporre, comunicare, Maggioli, Rimini.
- Bosoni, G. (2009), Architettura, allestimento, opera d'arte. L'invenzione espositiva come mediazione, in Borsotti, M., Sartori, G., eds, Il progetto di allestimento e la sua officina, Skira, Milan.
- Branzi, A. (2002), "Exhibition Design as Metaphor of a New Modernity", *Lotus International*, *115*, 96-101.
- Cecchi, M.E. (2020), Abitare contemporaneo / abitare precario, in Cafiero, G., Flora, N., and Giardiello, P., eds, Convegno Nazionale di Architettura degli Interni: COSTRUIRE L'ABITARE CONTEMPORANEO Nuovi temi e metodi del progetto, Il Poligrafo, Padua.
- Griffero, T. (2017), Atmosferologia. Estetica degli spazi emozionali, Mimesis, Milan.
- Griffero, T., and Moretti, G., eds (2018), *Atmosphere/Atmospheres. Testing a new paradigm*, Mimesis, Milan.
- Hauskeller, M., and Rice, T. (2019), *Jungly Feeling: The Atmospheric Design of Zoos*, in Griffero T., and Tedeschini, M., eds, *Atmosphere and Aesthetics*, 147-158, Palgrave Macmillan, New York.
- Irigaray, L. (1999), *The Forgetting of Air in Martin Heidegger*, University of Texas Press, Austin, TX.
- Julmi, C. (2017), "Organisational atmospheres: the missing link between organisational culture and climate", *International Journal of Work and Emotion*, 8(2), 131.
- Le Goff, J. (1992), *History and Memory* (R. Steven & E. Claman eds, 1996 ed.), Columbia University Press, New York.
- Life, D. (2022), A Cultivation of Breathing, in Loenhart, K.K., edited by, Breathe. Investigations into Our Atmospherically Entangled Future, 127-133, Birkhauser Verlag GmbH, Basel.
- Loenhart, K.K., edited by (2021), *BREATHE*. *Investigations into Our Atmospherically Entangled Future* (1st ed.), Birkhauser Verlag GmbH, Basel.
- Oliva, S. (2015), "Il sentimento e un'atmosfera? Il paradigma musicale del "terzo" Wittgenstein", *De Musica*, *XIX*, 227-246.
- Schmitz, H. (1980), *New Phenomenology. A brief introduction*, in Griffero, T., edited by, Vol. 6, Issue Atmospheric Spaces, Mimesis International.

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We live in an uncertain, changing, hard-to-focus era in which traditional design approaches and methods can no longer respond to today's challenges that surface in varying degrees and intensity. Moreover, we are developing a different perception of 'materiality' and the mediums employed. Hence in this 'liquid' and blurry landscape, the question emerges: What is the importance of understanding the value of design culture, more precisely, the "matters" through which this culture is manifested and expressed today? Moreover, how design culture aligns with the changed reality by responding "creatively" to today's emergencies?

The volume investigates a wide sphere of issues referring to an extended concept of "matter" – the word matter intended not only as materials as such but also of content and relationships – through design actions, approaches, processes, tools and methodologies employed in different areas and with different objectives, yet united by the desire to intercept the current shift, sometimes reinventing and sometimes evolving programmatically over time to embrace the changed framework.

The matter is thus interpreted in its range of potential declinations, bouncing from concept to object, material to immaterial, process to solution, and traditionally defined medium to a dynamic virtual tool.

This collection of essays is dedicated to all those who wish to explore the value and "matter" of design culture between past inheritance, present time and foreseeable future mutations through the deepening and inspiration of new and alternative tools, approaches and design methods.

