Publishing Series in PROJECT | Essays and Researches
Possible and Preferable Scenarios of a Sustainable Future
Towards 2030 and Beyond
vol. 05 | 2021 | paper 13 | pp. 204-217

ISSN (print): 2704-6087
ISSN (online): 2704-615X
ISBN (print): 978-88-5509-209-8
ISBN (online): 978-88-5509-232-6

DESIGNING THE FUTURE
Open discussion on design ethics

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section
DESIGN

typology
ESSAYS & VIEWPOINT

DOI
doi.org/10.19229/978-88-5509-232-6/5132021

ABSTRACT
The contribution aims to focus attention to the system of responsibilities that revolve around man's ability to alter and significantly modify the landscape that surrounds him. Confronting the field of design in the broadest possible sense by bringing out the relationships between ethics and design. Offer food for thought for a change of vision that allows to identify new approaches to the design process having the attention and ethical responsibility of those called upon to plan the future in which they will live. An open debate, free from the rigid logic of the academic world in the perspective of a scientific thought that does not evolve linearly but proceeds by rhizomes of thought. The aim of the discussion is therefore not to validate a theory in demonstrating assumptions but to outline a generative matrix of thought that can provide useful elements for an interpretative exploration of transversalities related to the taxonomy of design. The purpose of the discourse is the discourse itself.

KEYWORDS
design process, ethics, meta-design, aesthetic, ontology

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Design changes the shape of time by altering human cultures, consciousnesses, habits and customs. It is as if nature reappropriates itself within the artificial dimension, making it natural in its final appearance, in its temporal and spatial mutations. Mutations that man is unable to predict or avoid, by virtue of the fact that recursion is not controllable. Man cannot interact on the natural events of changing the existing, but he can use the knowledge to act in the best way, in harmony with nature. It can therefore distinguish between a right and a wrong action, a project with acceptable consequences from one with disastrous consequences. Attention because right and wrong, good and bad are judgement values easily misunderstood by feelings of approval and disapproval which are part of an emotional, i.e. subjective, plane. It is, therefore, necessary to dwell on the concept of ethics as an 'aesthetic-design code', deepening the Greek idea of 'right' and 'good' as synonyms of 'beauty', not only in terms of formal proportions but especially in terms of action-cause and effect.

The aim here is not to open a debate on ethical design or on the ethics of the project, but to discuss ethics as a function of a possible choice in the process of transforming reality, remaining within a specific framework that investigates in terms of 'soft ontology' (Borgo and Vieu, 2006). Dealing with ethics in its modern and contemporary sense, in its being a 'system of laws in which the legislator is absent', a system of obligations in which the insistence on the imperative character is rooted in divine commands (Fonnesu, 2004, p. 40).

Design: a systemic vision | The designer, first of all, is the 'manufacturer' of an artificial world characterised by events and phenomena that define social, cultural, anthropological and psychological components. Designer of a reality first of all phenomenal, man carries within himself the responsibility of having succeeded in modifying the environment in which he lives adapting it to his own needs. The objective, if it can be defined as such, is to identify the possible links between the act of designing and the ethical approach as a design parameter by imagining a systemic constraint (Norman, 1988) configuring – aesthetic code – capable of lowering the level of human-productive entropy to the detriment of a global activity with destructive consequences towards nature understood as existence (Fig. 1).

In modern times a moment in culture in which the very idea of nature presents itself as entirely invested by the human can be identified (Levinas and Peperzak, 1989). In this sense, it is difficult to separate man's responsibility from the contemporary configuration of the existing, so it is necessary to look at design as a 'configuring action' of nature in which man – the designer – intervenes and operates, becoming an instrument of transformation. This problem of human interventions on nature, not previously considered of ethical importance, has shown, in extreme concentration, what primary and secondary consequences – possibly irreversible – are connected with the collective activities, produced by the development, mainly self-regulating, of the social systems of economics, science and technology, and with the intensification of their reciprocal relationships (Apel, 1992).

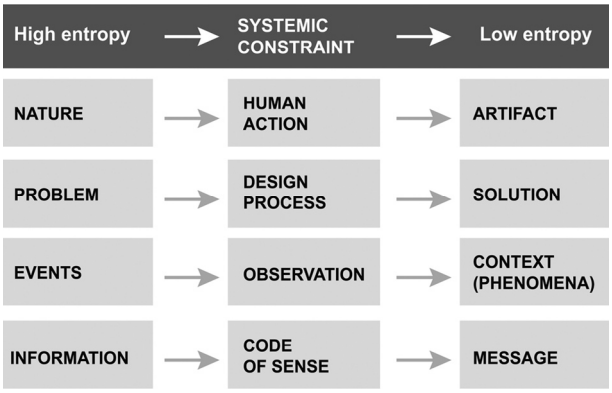


Fig. 1 | A comparative example of systemic constraints on entropy reduction in nature; different processes identify different interpretative planes of configuration of reality.

What is considered important is to analyse the design process – and therefore the system – in its components and to consider the designer as the author of an artificial world whose events and phenomena he can modify. The same ones that define and outline the 'spirit of the times'. Project activity is currently divided according to the outcome of the design process. This means that the final product defines the boundaries of the designers' competence. It is important to consider, on a theoretical level, the design as a multidisciplinary set of the 'visual', where it is true that there is a categorization and diversification of the disciplinary fields but it is equally true the fact that essentially the final result of this process is always something that – cognitively – it has its own visual identity.

Here it is the visual itself, what is seen, articulated with the help of the same tools of narration, becoming the project's subject (Chia and Piscitelli, 2009). The 'space of the problem' cannot be reduced to the mere design of artefacts, but it is necessary to go beyond the cognitive artefact and consider 'as artefacts' also the events and phenomena deriving from the inclusion in nature of a new project (Lamendola and Krysik, 2011). Artefacts without materiality but conceptually tangible as real events within a given reference system. For example, it can be considered an event that from 2009 to 2015 the percentage of American adolescents aged 12-13 years who use social media on a daily basis increased from 58% to 87%.

A San Diego University research relates this event to the growing phenomenon of youth suicide, which seems to involve mainly girls aged 13-18 (Twenge, 2017). It should be made clear that events and phenomena are interchangeable variables, meaning that an event belonging to a given system may be a phenomenon within different systems. This means that events and phenomena can be cause and effect simultaneously in the same system and in systems that are totally unrelated to each other; what determines belonging to one or the other category is the external observer, the one who makes a measurement and decides on the reference parameters, in a defined time. Dealing with events and phenomena in nature means entering the field of the phenomenolo-

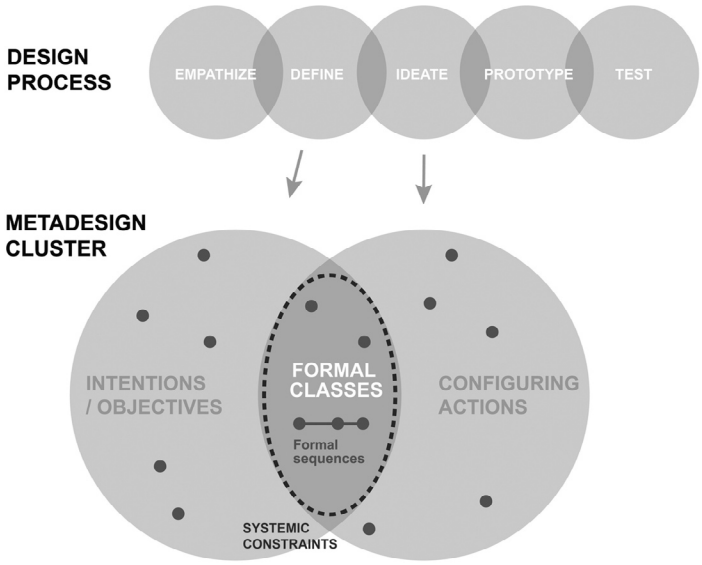


Fig. 2 | Representation of the system that identifies the formal class generated by the design phase defined as 'meta-design cluster'; design intentions and configuring actions, organised in sequence, define the formal class of configuring agents.

gy of perception and it is appropriate to clarify that dealing with design on a theoretical and phenomenal level means considering design a configuring act of nature itself.

Most configurations possess specific properties, which cannot be traced in the constituent elements but can only be grasped and investigated by considering the object as a whole, as it appears (Parovel, 2004, p. 34), thus investigating it within a phenomenal system closely connected to perceptual interactions, where organisation, configuration and perception constitute a set of relations. Sensation and perception allow and generate awareness of an event, of a presence, of a thing; awareness that is built through a reaction of the senses to stimuli when they appear, returning a meaningful thought a construct that forms the experience (Calabi, 2010, p. 16). Circumscribing the 'space of the problem' to the design process as a system of relationships allows to identify in the designer's action the pivotal element on which to address a discussion of ethical responsibility applied to design since man with his actions designs nature making it artificial.

Formal classes and configuring actions | According to Donald Norman's model, with reference to the 'seven stages of action', between the execution sequences of an action and the evaluative-perceptual sequences of the world there is an intermediate stage which follows the 'evaluation of interpretations' and precedes the 'intention to act': the 'purposes' (understood as what we want to happen). The purpose – the aim – is something that precedes the intention because this is its translation in terms of functional sequences. In other words, intention identifies the 'formal sequence' useful for achieving the aim (Kubler, 1989). Even if, as Norman states, the stages are not separate and distinct entities, we can say, in relation to the discourse, to be within the metadesign (Fig. 2). The purposes, the aims of a specific action define the visual form of the action itself, configuring its intentions where design is understood as a solution – an answer – to a problem. In this sense, the design process consists of a specific sequence of actions aimed at configuring a result – in the case of industrial design, the result is the 'product'.

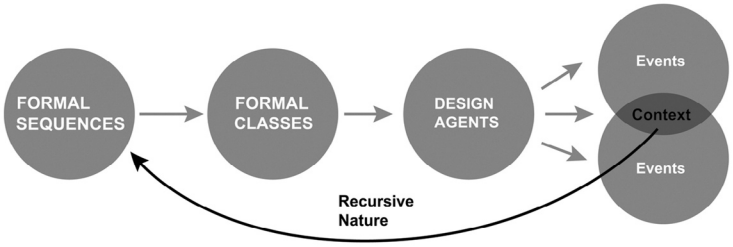


Fig. 3 | Interpretative representation of a 'field of form' as a system of interactions influenced by the recursiveness of nature as a generating force capable of (re)organising information through derived events and phenomena.

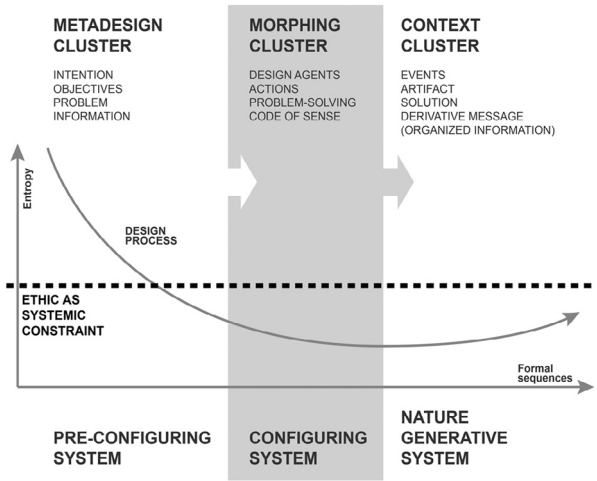


Fig. 4 | Relationship curve between 'entropy' and 'formal sequences' with reference to the design process and the use of the 'ethics' component as a design parameter (systemic constraint).

The problem and its solutions constitute an entity called a formal class. From a historical point of view, only those solutions that are connected by links of tradition and influence form a chained sequence. They open up a limited yet unknown domain of mental forms, most of which are still susceptible to further elaboration by means of new solutions. A sequence suggests a succession that is open and susceptible to extension (Kubler, 1989, p. 44). Intervening on the meta-design, on the purposes – and therefore on the sequence of intentions – means acting on the configuration of formal classes which, in a concatenated way, will influence the whole system of context related to them (Fig. 3). The definition of this system is useful to understand the fact that the context – the 'space of the problem' – besides being a force field (Patella, 2005), is also a morphic entity identifiable with the concept of 'form field' in which configuring agents define events and phenomena. A physical but also conceptual place where matter is organised and configures reality on a phenomenal level. According to astrophysicist Massimo Teodorani (2015), this field has a purely informative value and is defined as a field of form because only the form – or the meaning – acts as a link between the various entities. Formal classes, in this sense, reflect the formal sequences deriving from design intentions by determining one or more systems of configuring agents.

Consequently, the ethical component, understood as a reflection of meaning and design constraint, should concern the aspects of the meta-design inherent in the purposes and intentions innate in the artefact because it is these that will determine the information emitted by the generated morphic entity (Fig. 4). Such information is indispensable for defining the formal classes constituting the derived systems in terms of events and phenomena. It is important to emphasise the importance of the meta-design as a pre-configuring phase that determines the passage from a state of power to the effective transformation of the existing (Mondello, 2004), since the project, before becoming such, is a mental prefiguration, an idea, a set of neuronal synapses that produce an immaterial image. To intervene, therefore, on that image, on that still unfinished transformation of information, means acting on the component that will determine the entire resulting system, that of the visual, of the perceptible.

This involves making assessments and considerations in order to place ethical constraints on the configuration of information derived from the reality design process. Intervening, then, on the language code, where the designer is the issuer, reality is the receiver and the artefact is the message, container of meaning and informative signals. Working on the consequences deriving from bad design, with a view to restructuring the result of natural self-organisation that it has generated, requires much more energy than working at the root of the design process. Moreover, the correspondence between design intentionality and the finished object depends on the coherence of perceptible parts, also from the point of view of expressive and communicative ability (Calabi, 2010, p. 14). When an artefact is configured it will start to output information closely related to its design. All procedural actions that are implemented during the design process generate a genetic map of the artefact, which can be traced back to its properties (implicit and explicit), allowing us to know its essence (Bloom, 2004). The genetic characteristics of an artefact allow us to read its design sense, its history, the reason for its existence, as well as making visible the aims and intentions of the person who designed it (Figg. 5, 6).

A new paradigm | Designing the future through an ethical filter means making ethics a lens through which to observe reality and consequently the entire design process. Ethics must be perceptible on all contextual levels of a project, phenomenally spreading in the formal classes that are self-configuring in a natural way. To be ethically correct, a project must be genetically correct at the root. An artefact can be defined as ethical when the ethical values on the basis of which it was designed are perceptible in its structure, its use, its history and the intentions of the designer. If this occurs, if the designer has transferred that information into the artefact, making the ethical values of the design constraints, then the artefact will most likely communicate those values, will emit information-ethical signals. Artefacts built with industrial waste, assembling reuse elements, materials obtained alternatively with the use of oil, machines with sustainable environmental impact, possess an aesthetic appeal dictated by their ethical na-

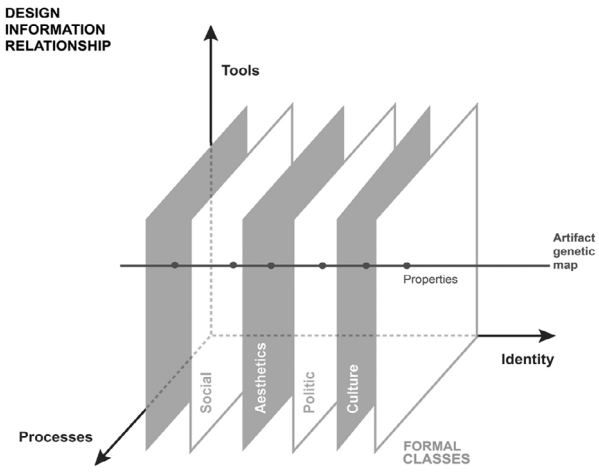
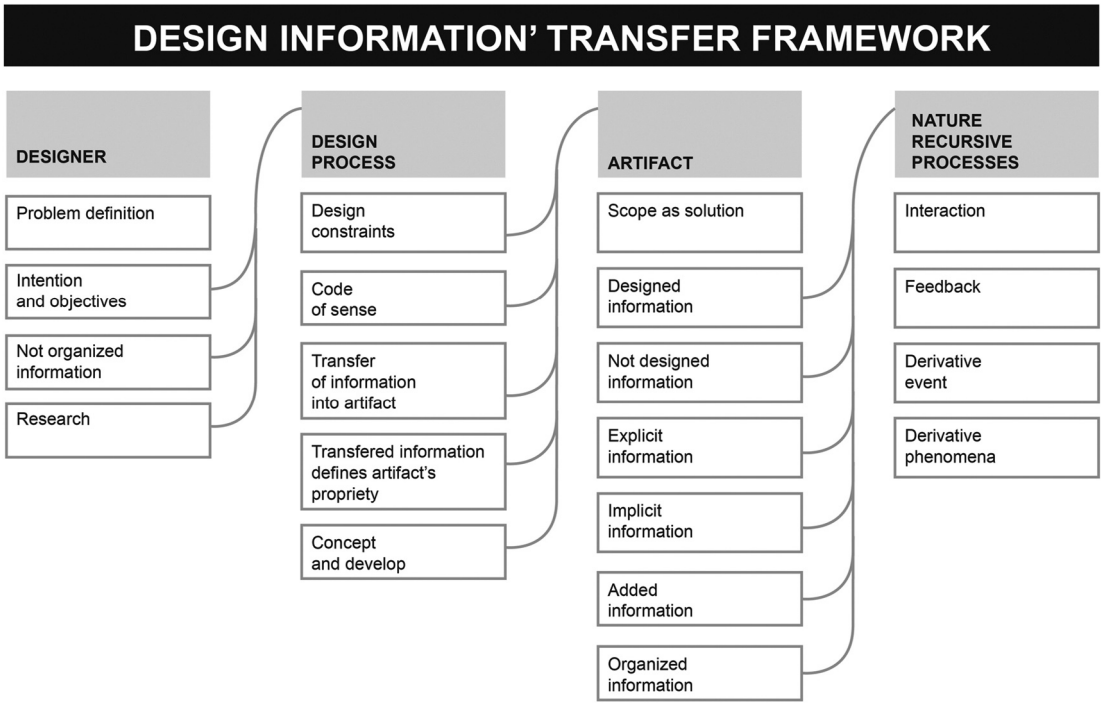


Fig. 5 | Experimental visual elaboration of coordinates useful to carry out a 'genetic mapping' of artefacts: the graph shows a hypothetical system of relationships between specific properties, contextual planes, formal classes and derived sequences.

Fig. 6 | Representation of design as 'information transfer' elaborated on the basis of the founding theories of 'brand design'.



ture, by the designer's thought transferred to the product that reflects his attention for existence. Enjoying the aesthetics of an ethical artefact means sharing its 'nature', means entering into an empathetic relationship with the artefact that somehow manifested and communicated its ethical intentions (Figg. 7-9).

In the idea of a project that is beautiful because it's right, is not an aesthetic of ethics conceivable? If the project were rethought according to a new paradigm, aimed

at an ethical configuration of what exists, would it be possible to give shape to a new formal – and cultural – class that promotes a new attitude towards human activity? Is a new taste for 'ethical doing' conceivable?

The inclusion of systemic constraints as an 'ethical filter' in design processes is conceivable regardless of the design approach used (Figg. 10, 11), but it is essential to create a new language that offers an alternative and develops a new design culture on the part of the designer and those who benefit from it (Kercher, 2003). This seems possible only by virtue of the fact that conceiving a new position – social, cultural, operational – implies the non-acceptance of previous positions (Kubler, 1989, p. 79). But a change can depend, by recursiveness, also on multiple minor configuring actions, without losing its radicality matrix. The paradox we face when discussing the ethical value of human activity such as design derives from the fact that the consumer society, with its current logic of business and profit, seems incompatible with ethical action.

Ethics is not a trend: every moral consideration is neglected, forgotten. In the rare cases where it is mentioned, it is regarded with contempt as 'moralism' – or it results in an empty ceremonial of appearances. One of the phenomena of involution and decadence of the society in which we live is the loss of ethical values. Profit – and in particular short-term profit – is thought to be the only measure of value. If profit is at the expense of the general good, and in violation of the fundamental principles of ethics and fairness, the 'success' thus achieved is admired and revered, becomes 'sanctifying' and makes any other considerations irrelevant (Livraghi, 2003). A gap that increasingly seems to be rooted in the collective imagination and is found mainly in advertising, where a project is defined as ethical when it is associated with visual communication for non-commercial purposes or with the aim of educating and/or raising awareness among the general public on issues of general interest. This limits the scope of interest to social communication only of which are protagonists non-profit entities and associations, which by statute set themselves noble objectives and base their work on an ethical code. But does this overlap that often occurs between the idea of an ethical project and socially useful communication always reflect an ontological coherence?

The idea that a social project is always ethical has developed culturally and autonomously through free cognitive associations according to which an action is ethical when it benefits a given system. It is no longer sufficient to act in favour of an isolated system, but it is necessary to benefit the global system – that of nature – in its entirety, in harmony with existence. Reducing the idea of ethical design by superimposing it on social design – or social communication – is highly limiting and seems to be a way of escaping more challenging discussions on ethical design, for which, even among professionals, there seems to be a kind of 'glossophobia'. To confuse communication of social utility with the idea of ethical project circumscribes the problem to a purely ethical meaning. Having an ethical approach to design by establishing systemic constraints means creating a new design code that allows the transfer of ethical values from the designer to the artefact in such a way that the latter can emit information sig-

Fig. 7 | Stuart Hydegarth, Tide 200, 2018. Commissioned by the Museum für Kunst und Gewerbe Hamburg, permanently installed and suspended in the main entrance hall, it consists entirely of plastic found on the beach (source: www.stuarthaygarth-200-2018).

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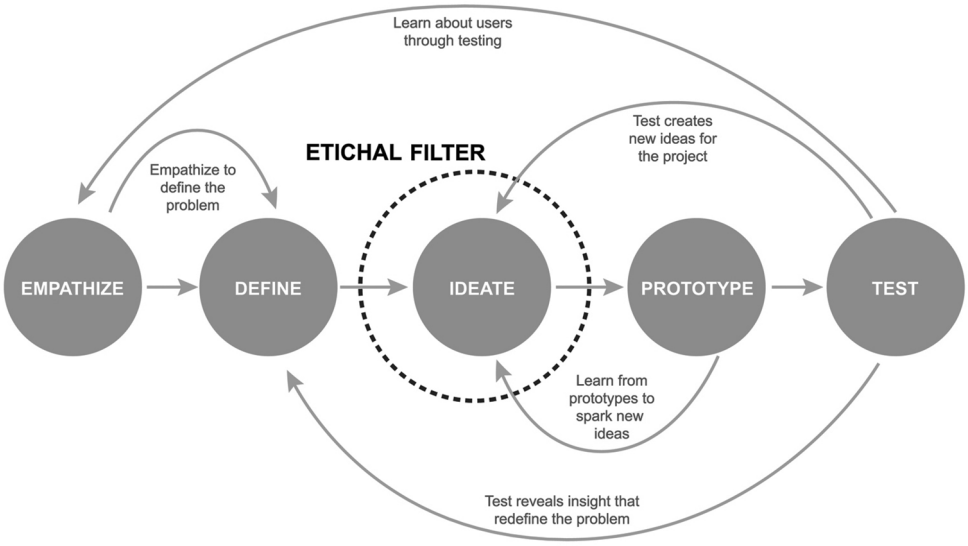
Fig. 8 | Tord Boontje and Emma Woffenden, Transglass Glassware, 1997: furniture objects developed with the use of recycled bottles (source: tordbontje.com/transglass).

Fig. 9 | Example of design with high ethical impact: during the 2020 pandemic emergency, a well-known snorkelling mask was modified to be used to support intensive care units. The conversion fitting was designed to be 3D printed and the production file freely shared via the internet (credit: www.isinnova.it/easy-covid19/).



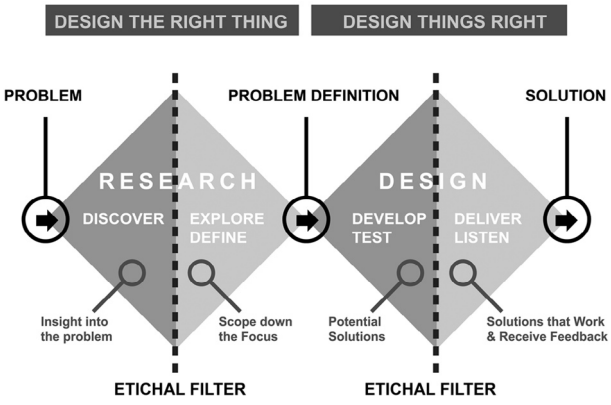


Fig. 10 | Visual re-elaboration of the Design Thinking process assuming the inclusion of an 'ethical filter' as a design parameter.

Fig. 11 | Hypothesis of visual application of the 'ethical filter' on the 'double diamond' design process.

nals consistent with its ethical nature without the need to build a communicative superstructure – brand design – to make them perceptible, visible or tangible.

Responsibility and information transfer | Brand design is a project discipline that has the ability to transfer values into an artefact and manages to transmit the most disparate information through its communicative potential, even managing to force the perception of a product (Bassani and Sbalchiero, 2002). But transparency, correctness and coherence on the part of those who configure reality are necessary components so that an added information signal – as in the brand identity – is consistent with the essence of the project, that explicit communication is consistent with implicit communication (Kubler, 1989). For example, it would be inconsistent to communicate the in-

tention to save animals from oil spilled into the sea using a petrol engine boat, the information signals connected to the explicit communication are not consistent with those emitted implicitly.

The designer's responsibility lies precisely in the ability to bind the meta-design to the ethical values that it intends to transfer in the artefact, with the awareness of the risk that involves a position also – and above all – professional (Erdönmez and Gunes, 2016; Devon and Poel, 2004). The challenge that designers are called to face is, therefore, inexorably invested in the need for research, within this polycentric and centrifugal system, a balance between emotion and artificiality of the human environment, so as to guarantee and increase its quality. There are three ethical cornerstones around which this responsibility takes shape: the environment, the relationship that man establishes with it and, a highly topical issue today, the culture of peace, based on the principles of respect and tolerance. The designer must represent, then, the point of balance between humanistic values and technical conscience to be used both in a careful and conscious process of criticism aimed at improving social and environmental living conditions (Bollini, 2003, p. 54).

Giovanni Lussu focuses his attention precisely on the subject of the profession: 'Doing your job well', as it was in the spirit of medieval guilds, is no longer enough. The tragedies of the twentieth century – tragedies that the advent of the third millennium does not seem to have put an end to – seem to have brought a more widespread awareness of moral responsibilities that go beyond this definition. The zealous railwayman who with efficient competence routed the death convoys to the death camps, for example, was certainly doing his job well, but was he not in some way an accomplice of the exterminators? There are many other forces shaping the world and if you want to improve it, you have to do it from a perspective that is definitely not only professional (Lussu, 2003, p. 96).

Conclusions | Adopting an ethical attitude towards life, work and human activities can be a challenge (Kercher, 2003) but also an opportunity, to create a common territory – cultural 'handshaking' (Norman, 2007) – capable of providing the conditions for developing a reality configuration based on ethical principles. The thought of an ethical-behavioural code in relation to the configuration of the existing, not only involves planners, designers or managers of a company. The issue affects institutions and politics on a large scale. We need to return to a reality in which we can choose the ethical alternative, but in order to do so, it must be there, it must be offered as a possibility, and more, we must be educated to perceive it. To participate, the public must be technologically and aesthetically literate, and also care about the moral implications of their role as human beings as creators (Hughes, 2006, p. 173).

Ethical responsibility is an aspect of civil, social and political interest (Sassaro, 2003) and should be a key issue in any field of human activity. Teaching ethics in schools, universities and professional training courses would mean directing humanity

towards a culture of ethics. Not utopian intentions, but concretely achievable in the exercise of the profession, with privileging the needs and interests of society: an affirmation of values that must return to having the highest place in the hierarchy of professional and cultural priorities (Bollini, 2003, p. 53).

Communicating ethics does not mean – as is often the case – to mystify in a rhetorical way an informative message but, on the contrary, to make visible the invisible by transmitting information through a 'state of facts'. Information should not be manipulated, but designed according to high values. New ways of approaching the design of the existing imply a revision of all human decisions. Instead of continuing to consider the past as a microscopic dependency of a future of astronomical dimensions, we should think of a future in which the few changes still possible will be of a kind that the past already holds the key. It is the task of our generation to construct a history of things that does justice to the meaning and being of things, to the plane of existence and its fullness (Kubler, 1989, p. 148).

In the contemporary landscape, pervaded by awareness of sustainability impact, an informed consumer pays more attention to the product: whether it is harmful to the environment, to health, whether it contains hazardous substances, whether and how ecologically sustainable it is. Communicating this information with ontological consistency builds user loyalty and invests the product with an ethical aura of responsibility. To place at the center of existence an ethical relationship than 'everything' means to do it in an omnidirectional way on the level of reality, involving all the formal sequences and the configuring agents. It is necessary to have ethical teachers as well as managers, executives, workers, in the idea of giving space to a community in which every man becomes an ethical designer of the future.

Acknowledgements

The contribution was translated from Italian to English by Debora Fagone.

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