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Francesca Zanella · Giampiero Bosoni · Elisabetta Di Stefano · Gioia Laura Iannilli · Giovanni Matteucci · Rita Messori · Raffaella Trocchianesi *Editors*

Multidisciplinary Aspects of Design

Objects, Processes, Experiences and Narratives





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Francesca Zanella · Giampiero Bosoni · Elisabetta Di Stefano · Gioia Laura Iannilli · Giovanni Matteucci · Rita Messori · Raffaella Trocchianesi Editors

Multidisciplinary Aspects of Design

Objects, Processes, Experiences and Narratives



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Introduction

This book is the result of a long research process. The work started in 2020 with an exhibition held in Parma (*Design! Oggetti processi esperienze*, CSAC Università degli Studi di Parma), and a book of the same title, edited by F. Zanella (with essays by G. Bosoni, E. Di Stefano, G.L. Iannilli, G. Matteucci and R. Trocchianesi) and published in 2023 (Electa Milano) centered on the role of archives as memory repositories and agents for contemporary design. This first period of reflection was followed by an international conference: *Design! O.P.E.N.* (https://www.designopen.it) held in Parma on May 5–6, 2022. The present volume contains most of the papers presented at the conference.

Starting from the first volume (*Design! Oggetti processi esperienze*), the research was always characterized by a multidisciplinary approach, which became even more multidisciplinary at the international conference held in 2022.

In fact, the conference was organized by a network of scholars from the world of design, philosophy and history of art, whose aim was to intertwine several types of knowledge. Consequently, multidisciplinarity is also the main feature of this second volume whose objective is to reflect, in an integrated manner, on the different dimensions of design, using competencies from the field of design and from that of humanities.

The aim of this project is to create a repertoire of opportunities of exchange and of relation among the culture of designers and the applied marketability of humanists in the project and in the innovation processes, in particular those design processes characterized by an important social and cultural impact.

In this context of exploration and experimentation in the territory of bordering subjects, stands the interpretative model in Fig. 1. It represents the potentialities in the interdisciplinary relations which verify the logics and dynamics in the "behavior" of a designer dealing with some project variables. On the vertical axis, humanities and techniques can be found, and on horizontal one, research and project.

Where these variables intersect, there can be four types of intervention:

- The intersection of techniques and research generates technological experimentation considering techniques and technology fields in continuous and fast evolution.
- Where research and humanities intersect, we are in the field of a historical/social/philosophical approach in which the analytical and critical dimensions of the research itself are developed.
- Between humanities and project, we are in the area on which our project focuses: here the meta-project approach becomes the synthetic expression of the relation among the two poles.
- Finally, between project and technique, we are in the area where the executive component of the project itself emerges.

There have already been significant studies which have stressed the importance of humanities for design and have shown that design can be a stimulus for humanities; this

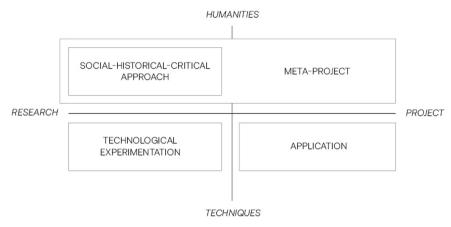


Fig. 1. Potential synergies between design and humanities [1]

is why the conference *Design! O.P.E.N.* intended to be an opportunity for research and debate with the objective of continuing this fundamental line of work.

Some crucial issues which interdisciplinary research must tackle are:

- The research of "new problems for design", that is, the collective need, as a scientific community, to find new directions toward which work must be periodically re-oriented, and this can be done only through a process of joint reflection.
- Research investigating the "meanings" that the product can have for design.
- Research that investigating the "value" that the design product shows.

As far as meanings are concerned, design and humanities integrated research can challenge, in a theoretically sounder way, "sustainability" by enhancing those concepts that are on the boundary between ethics and esthetics. Today, design cannot afford to dismiss ethical reflection, and, in this direction, humanistic culture can help to reinterpret the reflection on the mere functionality, in the more philosophically complex terms of the concept of "suitability for the purpose".

With regards to the analysis of the value generated by the action of design, it may be interesting to speak of "technology of value", which only humanistic investigation can help to process and fill with tools useful to produce not only ex-post critical knowledge, but first and foremost, oriented toward experimentation and to showing new corridors for contemporary design [1].

The volume follows the paths of reflection which structured the conference *Design! O.P.E.N.*, focusing on current themes and issues that are still at the center of the multidisciplinary debate on design, investigated through four keywords: objects, processes, experiences and narratives, which correspond to the book chapters.

The first chapter focuses on object-oriented design, enhancing its functional narrative and experiential values. In fact, objects, beyond their value in use, bear symbolic, anthropological, political and social meanings and worldviews. This section also develops a theoretical reflection on the esthetic categories used to interpret the design object in relation to the classic dichotomy useful-beautiful, to the category of game, to artistic values and the relation between ethics and esthetics.

The second chapter is on the designer's self-reflective moment which is focused on the analysis and on the definition of processes in various contexts, spanning innovation, social engagement, reflection on emergencies or forecasting. This section investigates how designers develop and test their models, both at production, implementation and research levels. The areas of investigation are those addressing innovation, social engagement and pursuing a reflection on emergencies or forecasting. The section is intended as an arena for discussion on topics revolving around both the different moments in the history of design and the contemporary condition. The contributions collected in the Processes Section reflect the current condition of the disciplinary debate, which is strongly characterized by a profound transformation of design processes due to the comparison with scientific research methods, with a prevailing interest for methodologies and contemporary priorities as the environmental one, or to the dematerialization of processes.

The third chapter focuses on as a theoretical and practical strategy aimed at facilitating and fostering experiential interactions among people, between people and objects or environments. This section aims at investigating the foundations and the implications of a specifically experiential turn in design from various perspectives and in various disciplines. Due to the multifaceted nature of this turn, both theoretical and practice-based research are testified by contributors.

Finally, the last chapter is on narrative. The narrative vocation of design represents a crucial key of interpretation in contemporary cultural expressions such as making history, representing through different media, archiving and exhibiting. This section explores narratives in three different "dimensions": narrative as a scenario (envisioning new contexts, behaviors, uses, spaces); narrative as a tool (creating new ways to trigger innovation); and narrative as a process (framing new methodologies to face complex issues).

Each chapter reflects the results of the conference held in Parma and is constituted by the analysis of concrete case studies and theoretical and methodological proposals aimed at highlighting the "multiverse" character of design. It is organized in the thematic subsection defined for the conference program, just to emphasize the prevailing interpretative trajectories.

A special thanks to the institutions that have funded the conference and the present publication (The Department of Humanities, Social Sciences and Cultural Industries and CSAC, University of Parma; the Department of Philosophy and Communication Studies, University of Bologna; the Department of Humanities, University of Palermo; the Department of Design, Politecnico di Milano; and the Department of Engineering Enzo Ferrari, University of Modena and Reggio Emilia) and all those who, in different ways, have contributed to reach this result (particularly Alice Biancardi and Marta Elisa Cecchi, and also: Okuniev Avhustyn; Katia Botta; Gabriela Del Rosario Abate; Giorgia Ferri; Salvatore Martino; Serena Massimo; Diego Valle; and Laura Xhaja). Without their help, it wouldn't have been possible to make this event and this volume happen. We hope that this book will become a useful tool of reflection on the theoretical and methodological aspects between humanities and design.

The scientific committee and book editors:

Giampiero Bosoni, Elisabetta Di Stefano, Gioia Laura Iannilli, Giovanni Matteucci, Rita Messori, Raffaella Trocchianesi and Francesca Zanella.

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Ustica, a Whole World in an Island Fragment

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Abstract. In 2019, a memorandum of understanding has been signed by the Visual and Graphic Design Laboratory (part of the Design and Territorial Culture Master's Degree Course) and the Study and Documentation Center operating on the Island of Ustica. The above-mentioned agreement officialises a synergic relationship of exchange between the Course and the Center, which has always been active in promoting knowledge and divulgation of the many island's patrimonies. This knowledge allows both professors and students from the Design School in Palermo to access data, documents, and present research through publications, as well as having access to archival, textual and iconographic materials. The projects developed within the Laboratory, from 2018 to 2022, concern the development of artifacts in the fields of visual identity, editorial graphics, infographics, and interactive graphics. The afore-mentioned projects are all based on a digital archive, built through the collection of fragments during the first phase of the research. Territorial identity signs are re-interpreted according to new unprecedented points of view.

Keywords: Visual design · web design · infographic · territory · Ustica

1 State of the Art

Ustica is a "little piece of land" in the Mediterranean Sea. All of its numbers are little, concerning the area measurements, perimeter, altitude, distances, demographics; the "littleness" of these number, however, is inversely proportional to the importance of its history: an emerged land, a remainder of an extended volcanic system that "lives" under the sea abyss. Ustica island is located North-East of Palermo, from which it is distanced by 67 km of water. This proximity is the reason why Ustica is considered as part of Palermo's urban area. The island's surface barely covers 9 km², with a population of less than 1500 residents.

The most ancient forms of life on the island date back to Neolithic Age, followed by different settlements of many ancient Mediterranean populations (Phoenicians, Greeks, Carthaginians, and Romans). Right after them, Ustica was inhabited by a community of farmers, then replaced by a corsair's hideout until 1759, the year in which King Ferdinand of Bourbon issued an order that helped repopulate the island. This way, Ustica lived through an alternance of periods of population and long desertions, also due to the challenging life conditions. However, describing the ancient history of the place would

require too much space and in-depth analysis, which could lead us astray from the main theme: the relationship between design and narration, meant as the designer's ability to fulfil his role as a translator of contents of different natures (both visible and invisible). According to this point of view, a designer shall be able to bring those contents to a visual dimension, by giving them a culturally accessible narrative structure, whose purpose is to share and transmit new forms of knowledge, to communicate, divulge, add value to the many stories that can emerge from a single territory (Fig. 1).



Fig. 1. P. Reginella, Ustica tells her own story

In 2019, a memorandum of understanding has been signed by the Visual and Graphic Design Laboratory (part of the Design and Territorial Culture Master's Degree's Course) and the Study and Documentation Center operating on the Island of Ustica¹. The abovementioned agreement officialises a synergic relationship of exchange between the Course and the Center, which has always been active in promoting knowledge and divulgation of the many island's patrimonies. This knowledge allows both professors and students from the Design School in Palermo to access data, documents, and present research through publications, as well as having access to archival, textual and iconographic materials. Yet another benefit originated by this agreement is the chance to open a discussion with some

¹ Study and Documentation Center of Ustica Island, http://www.centrostudiustica.it/index.php/ il-centro-studi-ustica.html last accessed 2021/10/14.

of the foundingmembers of the Study Center, such as Vito Ailara², Mariella Barraco, Nicola Longo. All of them have been involved in a series of meetings and conferences organized and hosted by the University, the Center (on the island itself), the Sicilian Gramsci Institute and online during the pandemic period.

2 Methodology

All of the above, allowed the research project to adopt the normal methodology used in history of design's studies: combining contents collected from both primary sources (involving different kinds of archival materials and oral testimonies) and secondary sources (represented by scientific publications).

The island's territory has been chosen as object of study exactly because of the density of its history and also individual stories linked to places, people, objects. This never-ending density continues unveiling new data on the island, allowing more studies and research to develop, and showing what a true microcosm Ustica really is.

The research project is developed within the new Master's Degree Course in Design and Territorial Culture, which was issued in 2018 and which bears in its title the vocation to take care of the territory and its heritage (historical, archaeological, cultural, naturalistic, eno-gastronomic...) through practises and methodological instruments taken from the discipline of design. The final purpose of this process is the one of promoting the territory, innovating it, making it accessible by also respecting its past and the will to build future sustainable scenarios. In the context of the Laboratory, within the period 2018–2022, many projects have been developed, concerning some of the island's stories (both major and minor stories) and developing artifacts in the fields of visual identity, editorial graphics, infographics, and interactive graphics.

Those projects, those little pieces of a whole (as in Leo Lionni's fable)³, are meant to compose a sort of digital archive, a great container divided through themes and macroareas, comprehending single words or entire lists of words (which are incomplete, at the same time, given the extent of contents). Every word or list tells something about the island: a story, a character, an object, any aspect from the most remote to the more recent past.

A digital archive, composed by significant fragments of the rich and multi-faceted history of Ustica, has been created in order to be implemented through time, by involving further research and studies, embodying the spirit that has always led the Study and Documentation Center's actions. The purpose of the project has always been the one of making Ustica's heritage known, both by foreigners and inhabitants of the island. The methodology employed is less conventional and more participative, relying on an interactive digital archive that could help preserving cultural contents (as well as creating new ones).

Over the years, the project focused on different themes, starting from the knowledge and the analysis of the entire island, passing through specific historical topics (which have already been studied by the Center) such as political exile, the Gramsci School,

² See Ailara, V., Caserta, M.: Il confino politico a Ustica nel 1926–27 "Immotusneciners", Ustica. Study and Documentation Center of Ustica Island (2016).

³ Lionni, L: Pezzettino. Babalibri, Milano, (1975).

Ustica's transformation from confinement island to touristic island. The project also involved taking care of the Study and Documentation Center's visual identity, as well as its publications' editorial planning, represented by the tomes and the review *Lettera*, by the web site and event communication. The Laboratory literally took care of the many resources of the Center, transforming them into study material and object of the research project, restoring the fundamental relationship between shape and content on which the design of visual communication is based.

During the development of the digital archive, we started by working on defining the word lists, which revealed themselves as irreplaceable instruments for knowing, collecting, and cataloguing the many elements in which we ran into during the research.

We imagined collecting them and grouping them according to their theme, assonance, affinity, in order to overcome the fragmentary nature of the data and to create a disconnected (yet rationally organized) system, whose purpose is to focus on single themes in different ways.

The list is the origin of culture. It is part of the history of art and literature. And what does culture want? To make infinity understandable. It wants to create order – not always, yet frequently. And, as human beings, how can we face infinity? How can we grasp for the incomprehensible? Through lists, catalogues, museum collections, encyclopedias, dictionaries. Lists don't destroy culture, they create it. [1,33].

What has been built is the seed of a digital archive structured as a taxonomic list. A potentially endless list that could recall the Echian memory's vertigo. Moreover, there is also a reference to Peter Greenway's research and theatrical project named *One hundred objects to represent the world*, staged in Palermo during the 1997's edition of Festival del Novecento. Greenway's project is linked to the visionary project of Carl Sagan, the American astronomer who sent two Voyager Satellites in the space, in 1977. On the inside of those satellites, Sagan put the Golden Records: two records made of gold that were engraved with rationally ordered lists of words, sounds, images, whose purpose was to be a testimony of the human genre presence on Earth, for eventual alien living forms.

Greenway works follow a list of voices, a catalogue with no linear or prearranged order [2]. In the same way, the Laboratory's digital archive assumes the shape of an unordered ensemble of fragments, in which the narration is not linear, it has no start nor end, and it doesn't follow a predetermined sequence. Every story stems from a single fragment and traces a trajectory towards other fragments and stories. Or, sometimes, it just ends in itself.

In the archive, the fragment is a media object [Ibid.] with its own features and functions: it is an image, a text or a single term, a video or an audio. It is characterized by a language or a specific technique: photography, drawings, maps, icons and pictograms, interviews, excerpts from repertoire films, live audio.

3 Process

The students in the Laboratory classified the fragments according to six categories of media objects: text, video, audio, single image, gallery of images, maps.

Such classification originated a multidimensional database, as far as possible from the tree structure based on taxonomic classification systems that only consider the presence

of an object within a specific category. In the multidimensional system, the media object, the fragment, is like one of a polyhedron'smany faces: an object that just describes a part of a whole; the ensemble of all the faces gives us the complete form of the polyhedron, as an exhaustive description of the object that has to be represented. It is an object that doesn't classifies as an indivisible whole, whereas it decomposes in an ensemble of features, each one representing an aspect of the object, giving a different way to examine it [3].

Nevertheless, what is the exact number of faces we need to compose the polyhedron? In which order, interlocking or sequence do these faces have to be put together?

Quoting George Perec, in his preamble to *Life: a User's Manual*: "we can look at a piece of a puzzle for three years straight, believing to know everything about its configuration and colour, without making a bare progress: the possibility of linking that piece to the others is all that matters [...] just the recomposed pieces will assume a readable character, a sense: when isolated, a piece of a puzzle has no meaning" [4].

Yet, if the puzzle has but a unique solution (the one of its own author), recomposing the fragments hasn't always a predictable result.

For its own definition, the fragment is the part of that whole that doesn't exist anymore. A whole that we can barely imagine or reinvent through our personal vision.

Moreover, the writing in the digital archive is electronic, it is not traditional and that is why «it defines its own positive aspects in terms of non-linearity, non-consequentiality, non-finiteness and non-closure» [5].

How can this electronic writing be managed then? Starting by the semantic organisation of contents put in a HTML structure, the visual representation of the archive (or rather, its interface) has been generated by using a single component system, that can be recomposed in different contexts. Therefore, the archive creation process didn't concern the design of single pages but the one of single components, of atoms: HTML elements that, if recomposed, generate molecules whose composition gives life to the organisms who populate the templates, by receiving contents that create the pages [6].

The passage from atoms to molecules, from organisms to templates in order to achieve a final product (the pages), traces the path that brings to the definition of the base elements of a design system: a totality of standard objects for the project management on a large scale, reducing redundancies and creating a shared language, which is visually coherent between the web pages or other communication artifacts [7].

4 Results

From the beginning, the stated aim has been the one of giving independence to a unique coherent and structured information (the archive of fragments) from its multi-faceted visual representation. This representation presents hierarchies that change according to the weight with which every component is bestowed, bearing in mind that those components are reconfigurable according to each student's personal vision.

Every student has developed his own design system, by defining not only the single components but also the user flow and the interactions generated by the users [8].

Moreover, the guidelines for a correct use of typography, icons and colours have been issued; a manual of visual identity, traditionally linked to the typography world, which is

now encompassed within a broader system in which styles and behaviours are normed, being the electronic writing fluid and mutational (recalling Maldonado's definition).

The Ustica's Study and Documentation Center web site redesign was a starting point for the application of this process, even though many hypotheses of other web projects have been developed, concerning specific topics that came across as relevant (consequently needing further examinations). The process naturally extended to the analogic traditional communication artifacts: the review *Lettera*, a divulgation periodic by the Study Center, the posters, signage, merchandising, infographics.

Hereafter, we are about to describe the experience of some of the selected projects, particularly the ones we consider examples of the effectiveness brought by the theorical fundamentals chosen for the research and on which the Laboratory based the work discussed until this point. Some of the afore-mentioned projects have some common denominators: typography as a minimal element; a unique matrix to decline in various components and communication artifacts; the synthetic sign of the pictogram, which becomes texture when reiterated; the infographics, in order to bring clearness and synthetize the eventsfrom a specific historical period.

In his project, Pietro Reginella decomposes single typographical characters of the Alegreya font in smaller parts, in order to detect all the common anatomical parts: ascenders, descenders, eyes, serifs, shoulders that can be mixed and recomposed to shape a system of icons that represents the terms of a glossary made of fragments (divided in categories and subcategories). The glossary is represented through two different shapes: the first is a list, the second one is the orthogonal interlocking of single terms within a grid. Exploiting weights and variants of the font, the shape of the island is recreated. The detail of the single term is expressed by putting the icon in the center, an icon which presents itself to the user with a short animation that simulates a movement linked to the sense and the nature of the term itself (a rabbit that jumps, the spinning light of a lighthouse). Another purpose of the animation is to show the anatomical parts that meticulously compose the term. The interface is minimal, the negative space and the hierarchies are managed in order to achieve as much clearness and accessibility as possible.

Mattia Baffari, Francesca Immorlica and Roberta Lo Giudice chose the graphic sign of the parentheses, instead, as a metaphor for a container of objects or a delimitator for a precise and closed time frame. Through infographics, they narrate the history of the continuous migration of politically confined people in the Mediterranean, concerning specifically the ones who had a forced stay in Ustica between 1926 and 1927, describing their trajectories, meetings and exchanges (Fig. 2).

As for Reginella, a glossary of fragments for a new representation of the island is the starting point of Luisa di Martino and Susanna Lisma's project. Every fragment assumes the shape of a piece of the texture that recalls a landscape element of the island. The textures are the base elements of the design system, as their combination generates the dynamic mark of the island, together with a series of merchandising customizable products. All of this is possible thanks to an online configurator that allows to generate a graphic motive, which can be downloaded and printed autonomously, or even ordered and picked up directly on the island.

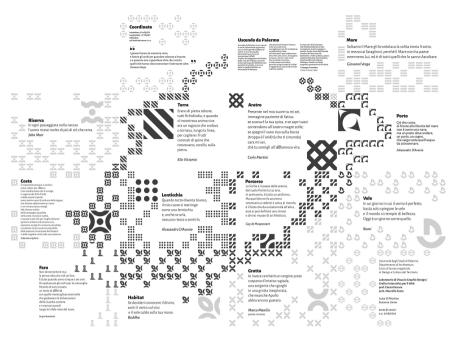


Fig. 2. M. L. Di Martino, S. Lisma, Interactive map of Ustica

The nautical alphabet flags constitute the list from which Mariangela Vaccara takes the inspiration to create a personal alphabet connected both to concepts that are linked to the island's identity (such as exile, connections, tourism, marine reserves) and to a signage system for the territory.

The complex infographics system adopted by Martina Coniglio and Filippo Maria Nicoletti frames the historical period between 1950 and 1961, a period that witnesses Ustica's transformation from a place of confinement to a touristic destination. A succession of facts that involved everyone (residents and foreigners) in a continuous exchange of ideas, positions, and interests. In order to talk about this transformation, the focus was put on the single characters and their interactions. The many crucial events that occurred during the afore-mentioned period have been synthetized, paying attention to the single characters and the personal positions each one of them occupied during the transformation of the island. These characters were put in three different categories: *Usticesi, Foresti, Non usticesi.* Moreover, those categories were divided in subcategories: *Pro turismo, Contro turismo, Pro e Contro, Non schierati.*

A broader period, the one from 1770 to 1998, was investigated and addressed by Maria Rita Zodda and Stefania Russo, who examined a wide collection of cartographic representations of Ustica. In every representation, the extrapolation of content was limited to the physical outlining of the island and its borders; the overlap of all the borders resulted in a new dynamic and interactive form. By intercepting a single border, it is possible to access a determined historical period and its corresponding collection of fragments from the shared digital archive. It is, therefore, an interface which compresses an otherwise long timeline in a unique element.

The research on fragments as identity signs of a territory, together with their reinterpretation according to newpoints of view, gave life to new stories. During the four years of the Laboratory experience, those stories (borrowing Mario Cresci's words) behaved as textures, woven together through analogies, overlapping and chasing each other while asking the observer for an effort of his fantasy. These textures, these stories make him a part and a prisoner of the narration at the same time [9].

A path towards knowledge acts through research, projects, and education. «All the islands, even the ones we already know, are unknown until we don't land on them» [10].

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