

Springer Series in Design and Innovation 37

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

OPEN ACCESS


 Springer

Editor-in-Chief

Francesca Tosi, *University of Florence, Florence, Italy*

Series Editors

Claudio Germak, *Politecnico di Torino, Turin, Italy*

Francesco Zurlo , *Politecnico di Milano, Milan, Italy*

Zhi Jinyi, *Southwest Jiaotong University, Chengdu, China*

Marilaine Pozzatti Amadori, *Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil*

Maurizio Caon , *University of Applied Sciences and Arts, Fribourg, Switzerland*

Springer Series in Design and Innovation (SSDI) publishes books on innovation and the latest developments in the fields of Product Design, Interior Design and Communication Design, with particular emphasis on technological and formal innovation, and on the application of digital technologies and new materials. The series explores all aspects of design, e.g. Human-Centered Design/User Experience, Service Design, and Design Thinking, which provide transversal and innovative approaches oriented on the involvement of people throughout the design development process. In addition, it covers emerging areas of research that may represent essential opportunities for economic and social development.

In fields ranging from the humanities to engineering and architecture, design is increasingly being recognized as a key means of bringing ideas to the market by transforming them into user-friendly and appealing products or services. Moreover, it provides a variety of methodologies, tools and techniques that can be used at different stages of the innovation process to enhance the value of new products and services.

The series' scope includes monographs, professional books, advanced textbooks, selected contributions from specialized conferences and workshops, and outstanding Ph.D. theses.

The volumes of the series are single-blind peer-reviewed.

Keywords: Product and System Innovation; Product design; Interior design; Communication Design; Human-Centered Design/User Experience; Service Design; Design Thinking; Digital Innovation; Innovation of Materials.

How to submit proposals

Proposals must include: title, keywords, presentation (max 10,000 characters), table of contents, chapter abstracts, editors'/authors' CV.

In case of proceedings, chairmen/editors are requested to submit the link to conference website (incl. relevant information such as committee members, topics, key dates, keynote speakers, information about the reviewing process, etc.), and approx. number of papers.


Proposals must be sent to: series editor Prof. Francesca Tosi (francesca.tosi@unifi.it) and/or publishing editor Mr. Pierpaolo Riva (pierpaolo.riva@springer.com).


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

Editors

Francesca Zanella 
Department of Engineering “Enzo Ferrari”
University of Modena and Reggio Emilia
Modena, Italy


Giampiero Bosoni 
Department of Design
Politecnico di Milano
Milan, Italy

Elisabetta Di Stefano 
Department of Humanities
University of Palermo
Palermo, Italy

Gioia Laura Iannilli 
Department of Philosophy
and Communication Studies
University of Bologna
Bologna, Italy

Giovanni Matteucci 
Department of Philosophy
and Communication Studies
University of Bologna
Bologna, Italy

Rita Messori
Department of Humanities, Social Sciences
and Cultural Industries
University of Parma
Parma, Italy

Raffaella Trocchianesi 
Department of Design
Politecnico di Milano
Milan, Italy



ISSN 2661-8184

ISSN 2661-8192 (electronic)

Springer Series in Design and Innovation

ISBN 978-3-031-49810-7

ISBN 978-3-031-49811-4 (eBook)

<https://doi.org/10.1007/978-3-031-49811-4>

This work was supported by Centro Studi e Archivio della Comunicazione, Università di Palermo and Politecnico di Milano.

© The Editor(s) (if applicable) and The Author(s) 2024. This book is an open access publication.

Open Access This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Paper in this product is recyclable.

Contents

OBJECTS

Beyond the Beauty-Utility Diatribe: Towards New Aesthetic Categories for the Eco-design	3
<i>Elisabetta Di Stefano</i>	

“The Useful-Beautiful Couplet”: On the Aesthetic Appraisal of Designed Objects	11
<i>Jane Forsey</i>	

Imaginative Object and Mimetic Object	21
<i>Andrea Mecacci</i>	

OBJECTS. Objects Between Anthropology and Material Culture

Seaweed Fabrics for Fashion Design. A Field Research Experience	31
<i>Paolo Franzo</i>	

Material Objects as Dispositive of Memory	41
<i>Toufic Haidamous</i>	

Objects Between Material Culture and Visual Culture	56
<i>Loredana La Fortuna</i>	

Puppets’ Tales. New Design Perspectives for a Multimedia Archive of a Humanity’s Intangible Heritage	65
<i>Vincenzo Maselli</i>	

Anonima Castelli. Objects, Design and Cultural Heritage	75
<i>Dario Scodeller</i>	

OBJECTS. Political and Social Value of Objects

Through the Mirror. Concept Maps to not Lose (One’s Way Between) Objects	87
<i>Silvia Berselli</i>	

For F☆ck's Sake. The Political Narrative of Sex Toys in the Communication of MySecretCase 103
Silvia Biassetton and Noemi Biassetton

Telephones in Italy, the Italtel Study-Case 116
Rosa Chiesa

Design and Self-reproduction: A Theoretical-Political Perspective 127
Alessio Fransoni

OBJECTS. Philosophy and Representation

Everyday Design: The Aesthetic Dimension of Alternative Use 139
Monika Favara-Kurkowski

Digital Objects' Aesthetic Features. Virtuality and Fluid Materiality in the Aesthetic Education 147
Lorenzo Manera

The Value System of Objects Through the Interpretation of Photographic Language 156
Paola Proverbio

Objects, Things, Hyperobjects. A Philosophical Gaze on Contemporary Design 165
Chiara Scarpitti

OBJECTS. Symbolic Value and Use Value

The Evolution of Yacht: From Status-Symbol to Values' Source 177
Giuditta Margherita Maria Ansaloni, Arianna Bionda, and Andrea Ratti

Liberating the Imprisoned Soul of Dorian Gray: Cultural Affordance as Design Tool to Rediscover Cultural Values 187
Andreas Sicklinger and Alireza Ajdari

The Extraordinary Everyday. The Post-Crafts in the Historical City 197
Viviana Trapani

PROCESSES

Archives and Processes 211
Francesca Zanella

25 Ways to Hammer a Nail. “Postrocian” Aesthetics and Everyday Life’s Poetics in Enzo Mari 225
Rita Messori

PROCESSES. Contemporary Strategies and Perspectives

Design Through Body Memory for the Regeneration of Urban Areas 235
Anna Anzani, Giulio Capitani, and Eugenio Guglielmi

Environmental Re-design of the Top San No Touch 2.0 Portable Toilet: The Contribution of the Bio-inspired Approach 244
Mariangela Francesca Balsamo

How to Use Strategic Design Process to Address Complex Challenges: A Practical Case of Application to Discuss Strategic Design Process’ Fundamental Traits 254
Gianluca Carella, Michele Melazzini, and Francesco Zurlo

Design for Emergencies: The Contribution of Design Culture in Emergencies 263
Chiara De Angelis

PROCESSES. Histories of Processes and Processes for History

Exhibiting Design as a Process 275
Fiorella Bulegato and Marco Scotti

Toward Paris! 45 Years of Domus for a Design à la Français 285
Elena Dellapiana

Archival Projects. Tools and Methods for Promoting the Corporate Culture Starting from Historical Brand 295
Elena Dellapiana, Ali Filippini, Chiara L. Remondino, and Paolo Tamborrini

Working in Regress and Beyond, with Rural Material Culture [1] 304
Elisabetta Rattalino

PROCESSES. Design Methodological Processes

Air as a Design Tool: Raw Material, Infra-material Space, and Transformative Matter 315
Francesca Ambrogio

Evasion Design for the Novacene Era Design and Production of Cultural Imaginaries 325
Mario Ciaramitaro and Pietro Costa

The Physical Model as an Evolution of the Design Process: From the “Capostipite” to the Finished Product 334
Alessandro Di Stefano and Davide Paciotti

The Felicitating Factor. Cinzia Ruggeri’s Clothing Project 344
Elena Fava

Environmental Affordances: Some Meetings Between Artificial Aesthetics and Interior Design Theory 354
Fabrizio Gay and Irene Cazzaro

PROCESSES. Dematerialized Processes

The Critical Forms of Design Futures Scenarios: Introducing Unconventional Ways of Scenarios Making 367
Ammer Harb

How Do Design Narratives Play a Role in Cognitive and Social Processes? An Explorative-Systematizing Expert Interview 377
Yasuyuki Hayama and Francesco Zurlo

Human-AI System Co-creativity to Build Interactive Digital Narratives 388
Anca Serbanescu

Envisioning Technological Artefacts Through Anticipatory Scenarios and Diegetic Prototypes 399
Mila Stepanovic and Venere Ferraro

EXPERIENCES

Feeling Through Technology 411
Jocelyn Spence

EXPERIENCES. Education and Culture

Storytelling as a Tool to Design Museum Experiences: The Case of the Secret Marquise 423
Licia Calvi, Bertine Bargeman, Moniek Hover, Juriaan van Waalwijk, Wim Strijbosch, and Ondrej Mitas

Open Communication Design A Teaching Experience Based on Anti-disciplinarity, Thinkering and Speculation 434
Francesco E. Guida

Fashion Education: Cultivating Fashion Designers-Plants 443
Clizia Moradei

Accessible Experiences. Designing Synaesthetic Access to Culture 452
Dina Riccò

Misleading Design Implications of Adopting Embodied Interface in Everyday Objects 462
Umberto Tolino and Ilaria Mariani

EXPERIENCES. Transitions

Communication Design for Welfare, the Challenge of Preserving Human Interactions in Remote Participation. Rethinking and Redefining Collaborative Activities for a Virtual Environment 475
Valeria Bucchetti, Michela Rossi, Umberto Tolino, Benedetta Verrotti di Pianella, and Pamela Visconti

Aesthetics of Design for Social Innovation. Pathways for a Dialogue with Everyday Aesthetics 485
Annalinda De Rosa and Laura Galluzzo

Designing Employee Experience to Experiment with Novel Working Modes. Action Research Project to Support Organizations in Engaging Employees in a Post-pandemic Scenario 493
Michele Melazzini and Gianluca Carella

Design for Behavior Change in Design Education. A Case Study 503
Margherita Pillan

EXPERIENCES. Can Experiences Be Measured?

Italian Cultural Institutions Across and Beyond Covid-19: Designing Digital Cultural Experiences in Extra-Ordinary Times 513
Ilaria Bollati, Valeria Morea, Federica Antonucci, and Marta Spanevello

Beyond Visualisation Data as Raw Material for Uncoded Experiences 526
Lucilla Calogero

Designer and AR Technology: The Relationships Between the User and Virtual 534
Antonio de Feo and Luca Casarotto

The Robotic Service Objects. Design Approach for the Multidimensional Evaluation of Robotic Aesthetics 544
Claudio Germak and Lorenza Abbate

EXPERIENCES. Tourism and Mobile Experiences

Designing a New User Experience for the Travel Sector: A Research Project Reimagining the Role of Travel Stakeholders in the Digital Post-pandemic Age 555
Venanzio Arquilla, Federica Caruso, Davide Genco, and Chiara Parise

Operazione Arcevia. Existential Community. The Reality of the Experience and the Utopia of the Vision 569
Anna Mazzanti

Collaborative Dialogues Between Souvenirs and Territories: From Evocative Objects to Experience-Objects 584
Marina Parente

NARRATIVES

For a Novel and Transversal Narration of Extemporaneous Places of Artistic and Design Thinking: The City’s Network of Crossroads Between Art and Design: The Milanese Case in the 20th Century 595
Giampiero Bosoni

Design Narrative 603
Raffaella Trocchianesi

NARRATIVES. Communications, Strategies, Tools

Space as a Narrative Interface. Phyigital Interactive Storytelling in the Field of Cultural Heritage 613
Letizia Bollini

Worldbuilding Practice as a Collaborative and Inclusive Design Process. The Case of ACTS-A Chance Through Sport 623
Mariana Ciancia and Francesca Piredda

The Role of Infographics in the Representation of Design Research	632
<i>Vincenzo Cristallo and Miriam Mariani</i>	
The Open Logo and the Closed History Notes of a Social History of Visual Identities	640
<i>Michele Galluzzo</i>	
An Advanced Design Tool for Archiving, Mapping, and Narrating a Complex System: The ADU Packaging Innovation Observatory	649
<i>Clara Giardina</i>	
NARRATIVES. Cultural Heritage, Museums, Territories	
From Narrative to Phygital. An Experimental Semantic Survey	661
<i>Marco Borsotti</i>	
Enhancing Local Cultural Heritage by Designing Narrative and Interactive Exhibitions. MEET at the “Museo del Territorio di Riccione”	671
<i>Alessandra Bosco, Silvia Gasparotto, and Margo Lengua</i>	
Making Value: Storydoing Actions for Cultural and Creative Industries	682
<i>Simona Colitti, Ami Liçaj, Lorela Mehmeti, and Elena Vai</i>	
Ustica, a Whole World in an Island Fragment	694
<i>Cinzia Ferrara and Marcello Costa</i>	
NARRATIVES. Interaction, Digital, Sustainability	
Craftmanship and Digitalization in the Italian Knitwear Industry. A Paradigm Shift for the Narrative of Made in Italy	705
<i>Martina Motta, Giovanni Maria Conti, Giulia Lo Scocco, and Rachele Didero</i>	
Design in the Metamorphosis of Matter	714
<i>Michele De Chirico</i>	
Counter-Narratives Against Gender-Based Violence. A Twofold Perspective on Choices in Interactive Dramas	724
<i>Sofia Peracchi and Ilaria Mariani</i>	
Sustainable Mobility as a Sport	735
<i>Domenico Schillaci, Salvatore Di Dio, and Mauro Filippi</i>	

NARRATIVES. Critical Approach, Languages, Explorations

Provocation Through Narratives: New Speculative Design Tools
for Human-Non-Human Collaborations 747
Francesca Casnati, Alessandro Ianniello, and Alessia Romani

Designer as Drama Manager: Understanding the Roles of Narrative Within
Design Processes for Change 756
Mariana Ciancia, Francesca Piredda, and Maresa Bertolo

Interaction and Verisimilitude. How Narration Can Foster the Design
Process 765
Andrea Di Salvo

Conversation Design for Raising Awareness on the Responsible Use
of the Internet: Co-design of a Chatbot Game with Secondary School
Students 773
*Mauro Filippi, Salvatore Di Dio, Domenico Schillaci, Stefano Malorni,
Angelo Scuderi, and Sabrina Guzzo*

From a Word-Formation to a Concept-Formation: Mnemosphere
as a Connective Tool in Interdisciplinary Design 783
Clorinda Sissi Galasso and Marta Elisa Cecchi

Author Index 795

OBJECTS



Anonima Castelli. Objects, Design and Cultural Heritage

Dario Scodeller^(✉)

University of Ferrara, 44121 Ferrara, Italy
dario.scodeller@unife.it

Abstract. Anonima Castelli's historical archive is an interesting resource for studying the industrial production of furniture in Italy between the 1950s and the 1980s.

This article aims to illustrate a preliminary study for a research project dedicated to the archive and the historical production of the Castelli company. The drafting of the research hypotheses was preceded by a few educational experiences carried out as part of the Degree Course in Design at the University of Ferrara, organised in collaboration with the company; these experiences confirmed how worthwhile these archival sources were for inspiring the creative process.

The thesis asserted here is that, as well as historicising the phenomenon of Italian design based on documentary sources, company archives are also able to encourage the revival of production processes with the aim of re-issuing the objects present in historical catalogues.

This way, the original project designs become documents that are useful both for historians and for designers and entrepreneurs interested in making these "memories" operational again.

Keywords: Cultural heritage · furniture design · project archives · archival sources · reenacting · re-issue

1 Design as a Cultural Heritage Asset

The relationship between design and *cultural heritage* can be investigated through two directions of research: one regarding the contribution that design disciplines are able to offer in terms of safeguarding, protecting and promoting architectural, artistic, environmental and many other types of cultural heritage; instead, the other considers design itself, its culture and history, as a public asset to preserve and promote. As the editors of the special issue of "MD Journal" dedicated to *Design as cultural heritage* [1] have emphasised, Italy has a significant cultural deposit made up of a multitude of project archives, design collections and museum study centres, the preservation, study, cataloguing and promotion of which allows us to initiate processes that can pass on knowledge.

The positive effects can occur on several levels.

The first level is cultural: the collection, documentation, study, and circulation through publications, public conferences and exhibitions, of the historical events in

Italian design promotes greater collective awareness of the aesthetic quality and technological innovation that industrial society, with its creative, productive and commercial culture, has been able to generate in a particular historical period. The collective imaginary of Italian design should also be considered as part of this cultural heritage: not only the international circulation of its image, but also what settles in the collective memory and becomes, as claimed by George Kubler, “A visible portrait of the collective identity (...) This self-image reflected in things is a guide and a point of reference to the group for the future, and it eventually becomes the portrait given to posterity.” [2].

In this regard, exhibitions have played a special role. As was highlighted by many case studies illustrated over the course of the most recent conference of the Association of Design Historians (*Design displayed: exhibiting history/the history of exhibitions*), [3] institutions and designers’ preservation of historical documentation on design exhibitions, their study and (when possible) re-enacting, constitutes a practice that preserves memories useful for documenting the social meaning and importance of certain objects over time [4].

The second level of the effects is industrial. One of the characteristics of historical Italian design companies is the production of “*long-selling*” products: objects designed over half a century ago that are still present in sales catalogues, and are periodically updated with regard to regulations, production (and in part, aesthetics), using the original project documents. In this sense, the initiatives recently promoted by companies such as Cassina or Nemo with the archives of Charlotte Perriand and Le Corbusier should be considered as significant, despite not being without limits or contradictions. In this case, with the goal of motivating certain aesthetic choices in the re-issue of furnishings and lighting fixtures, the companies carried out a philological investigation based on the documents present in the LC Foundation archives [5].

But in the historical archives of Italian companies and designers (many of whom are no longer alive), there are also projects preserved that the companies never produced, and which they would like to put back into production. An interesting example, in this sense, is the re-issue project carried out by a few foundations in Milan (Castiglioni, Albini, Magistretti) to return certain historical pieces to their catalogues, with a comparative study of the original designs preserved in the archives of the same foundations, and those at the companies, or, in some cases, putting into production old designs never produced before.

The third level of interest is educational, and involves the possibility of using design collections and archives to stimulate learning processes in the field of design, in particular in the university context.

2 The Anonima Castelli Company

In order to briefly contextualise the history of Castelli, it is necessary to distinguish three periods. The first involves its founding in Bologna at the end of the 1800s, and its development up until the 1930s as a cabinet-making workshop. The second runs from its re-establishment in 1939, with the name Anonima Castelli, until the mid-1960s. The central figure in the company’s rebirth was the founder’s son, Cesare, who, in partnership with Gianni Caproni – the brilliant Italian aeronautics entrepreneur – brought to life

a new company for mass-produced furniture: after the Second World War, the brand started to specialise in the office furnishings sector. The company adopted the strategy of competing in large international public contracts that allowed them to produce in large numbers, albeit in limited series (Figs. 1 and 2).



Fig. 1. Comparing an original drawing of the archive with an original object of the collection

In 1965, upon the death of Cesare Castelli, his son-in-law, Giulio Ponzellini (1915–2011) took over control (along with Cesare’s children) of an ambitious, innovative industrial project that would lead the company to become a market leader in Italy in the 1970s and 80s (along with Tecno) in the production of office furniture, with a notable presence on the international market as well. Starting in the 1960s, the business strategy focused on direct sales, with the opening of single-brand showrooms.

An important role in guiding Anonima Castelli towards the field of design was played, famously, by Giancarlo Piretti (1940), a designer who is still professionally active today [6].

Trained at the Bologna Academy of Fine Arts, and joining Castelli as a designer at a very young age, his creations in the 1960s and 70s helped the company to establish itself in the field of contemporary industrial products for the office and the home. Piretti was the designer, among many objects and systems, of two masterpieces of Italian design: the DSC 106 chair from 1965, characterised by the use of curved plywood and aluminium die-casting; and the Plia chair, produced starting in 1969 in millions of models, characterised by its aluminium hinge and the use, for the seat and the backrest, of Bayer’s Cellidor, which gave the technicians a lot of grief in the development of its production.

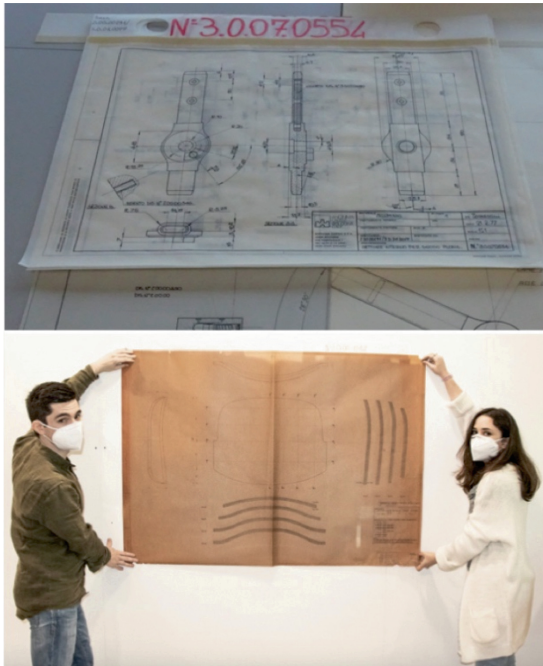


Fig. 2. Students shooting original drawings to study and redesign.

As well as the objects designed by Piretti in his years working for the company, Anonima Castelli has produced pieces designed by many other designers: the Box chair by Enzo Mari; the Superstudio modular systems; the office furnishing systems by Hans Pert and Richard Sapper; the innovative system of Vertebra seats from the partnership of Piretti and Ambasz; the Penelope mesh chair by American Charles Pollock.

As we are now marking the 50th anniversary of the MoMA exhibition, *Italy: the new domestic landscape* (which opened in May 1972), it is worth remembering the contribution provided by Anonima Castelli for the creation of the display towers of the *roof garden*, which housed the exhibit of “domestic design” (in the three categories of “conformist”, “reformist” and “contestative”), objects which were less celebrated than the famous eleven environments, but were ultimately what circulated and sold on the international market [7].

Without dwelling here on the fate of *product-oriented* Italian family companies, which is narrated in full by the other Castelli (Giulio, the founder of Kartell), along with Paola Antonelli and Francesca Picchi, in the book *La fabbrica del design*, [8] let’s just say that, after complex corporate problems that saw its ownership pass into the hands of American *holding companies* (as also happened to another Bologna-based company, Gavina), Anonima Castelli was bought in 2015 by two young Italian entrepreneurs, Enrico and Edoardo Pavan.

3 From the Archive to the Market: Current Production, Educational Experiences and the Research Project

Compared to the size it reached during the years of its impressive growth, today Anonima Castelli is a small company, and its mission is focused on the re-issue of items from its historical catalogue.

The production and re-issue is supported, in terms of operations and business, by two elements:

- a historical archive of project designs that are actively used, despite not yet being digitalised;
- a historical collection created with pieces collected from their current owners through purchases at auctions, from collectors and on the online market.

The collection covers the time frame of half a century, starting from the 1940s.

We could claim that – since it is based on a comparative study of the vintage designs and the pieces in the collection – from a certain point of view, this operation of production and re-issue is guided by a philological approach: at the same time, it is supported by dialogue with some of the company’s historical suppliers and prototypers, who still have a good level of *know-how* with regard to certain processes.

For the entrepreneurs and designers at Castelli one of the main problems involved in the re-issue is the search for technologies suitable for contemporary production systems. They are often forced to adopt solutions that are less “industrial”, and in certain ways more artisan, than those used in the 1970s, when the Plia chair was produced in tens of thousands of pieces, using specialised, dedicated machinery. Today, production amounts to a few thousand pieces per year.

The study of the historical collection sometimes requires the dissection and destruction of the sample. This work has allowed them to understand that in the 1968 version, the structural core of the Alky armchair was made from steel plates fixed to the frame with springs, which today are replaced with an elastic material similar to Nastrocord, embedded in polyurethane foam.

Motivated by scientific interest in Castelli’s historical archive, as the Design School at the University of Ferrara, we have established a relationship with the company, which has engaged us in a series of educational activities and initiated certain research hypotheses.

In 2021, two teaching workshops (one as part of the bachelor’s degree course in Design and one as part of the master’s degree in Innovation Design, at the University of Ferrara) focused on the topic “from the archive to the market”, using Anonima Castelli as a case study.

The course carried out as part of the master’s degree followed the specific theme of the re-issue and updating of certain historical pieces that were no longer in production, according to modern-day needs: the Effe and Elle series of seats in wood and metal, designed in the 1950s by the first technical and artistic director, Antonio Nerozzi; the Platone and Pluff table and seat combination, the Axis system and the 61 system, all designed by Piretti in the 1970s; and the Box chair by Enzo Mari [9]. For each of the historical pieces involved in the proposals for re-issue, Anonima Castelli made the archival documents (primarily executive designs and catalogues from the period) and the pieces from the historical collection available to the students for precise investigations and

surveys. During the integrated course, the students were guided by four teachers with experience of design problems, industrial production processes, marketing and economic evaluation of products: the re-issue project involved all these aspects [10]. In particular, as the master's course was carried out in collaboration with the Unimore Engineering Department, the students were able to make use of the Enzo Ferrari Engineering Department laboratories in Modena, led by professor Francesco Gherardini.

The topic of the course carried out as part of the bachelor's degree was a project for an educational exhibition, dedicated to the historical Anonima Castelli collection, to be displayed at Palazzo Tassoni Estense, the seat of the University of Ferrara Architecture Department. In this case, the design workshop, led by the author of this paper, was accompanied by a course on design theory and criticism held by Professor Elisabetta Trincerini, which, in particular, guided the students in the historical research and the curatorial approach to the exhibition.

To stimulate the students to gain a direct understanding of the objects to be exhibited, a study day was organised at the University of Ferrara where entrepreneurs Enrico and Edoardo Pavan and designer Alessandro Zanella presented numerous pieces from the historical collection to the students in detail, which had been brought to the lecture hall for the occasion.

Various groups of students also went independently to the suppliers to document the production processes.

Indeed, the goal of the exhibition had to be to stimulate understanding of the cultural significance and technical and production quality of Italian design, through the display of pieces from the historical collection and designs from the archive.

As a teacher on both courses, I was able to observe how the students were noticeably stimulated by the study of archive materials and visits to the company and some suppliers; the results of the courses seem to have also been significant for the company, and I hope that this has repaid them for their willingness to allow the students to have direct contact with the items in the collection.

Having direct physical contact with the objects, for example touching with your hand the sad fate of the crumbling foam in the stuffing, understanding the relationship between the project design and executive problems, mouldings etc. was highly educational.

Because, as Pier Paolo Pasolini (who we remember on the centenary of his birth) maintained, you can forget what your teachers, your professors teach you, but not what things teach you [11].

At the same time, some guidelines were prepared for a research project (which we hope to develop starting next year) focusing on rewriting the history of the objects produced by the company between the 1950s and 70s, based on oral and archival documentary sources. Three types of sources have been identified:

- _ oral sources
- _ archival sources
- _ objects

Regarding the oral sources, a preliminary study was launched in 2021, with interviews carried out with former technicians and designers involved in the projects developed by the company in the 1960s and 70s. Despite being aware of the historiographic problems regarding the use of oral sources [12], the purpose of these interviews is to

preserve memories (technical, organisational) that would otherwise be irretrievably lost. The various contributions will be used to create a map of production experiences, which we believe will be useful, in particular, for the reconstruction of the operational context and the production processes that allowed these famous objects to be brought to life.

By way of example, in one of these interviews it emerged that in the pre-production phase for the Plia chair, the moulding tests for the backrest and the seat made from Cellidor – cellulose acetate produced by Bayer, chosen for its crystal clear transparency – reached a deadlock. Once it was made, the backrest would crack close to the point of injection. Neither the designer, nor the production technicians, nor Bayer, who supplied the material, were able to find the solution to a problem that almost led the Castelli company to abandon the project. A solution was found thanks to a plastic materials representative who suggested heating the mould at the point of injection. This story may appear insignificant compared to the chair's commercial success, but it demonstrates how Plia would not have seen the light of day without the collective contribution of skills, typical of the context that has created the best works of Italian design.

Regarding the sources stored in Anonima Castelli's archive, the production files and executive designs, which are the only project documents preserved, are of particular interest.

Until the middle of the 1960s, in the production of furnishing items and systems, the project design generally consisted of an axonometric representation, detailed in intent (for example, the direction of the grain of the wood was indicated), but technically undefined in terms of construction. Under the leadership of the heads of carpentry, the model makers translated these "formal intentions" into "real" scale designs on sheets of white plywood, with thicknesses, joints, veneers and hollow cores all indicated. Unfortunately, these models have now been lost.

In terms of the executive designs created with ink on tracing paper, it is worth noting that they still have significant advantages over the digital representation used today, among which are the immediacy of interpretation and the feeling of a "real" object. Another advantage is that the oldest prototypers still know how to read them, and are able to create a model from them, and then a mould from the model.

Other items of great interest are the technical and commercial catalogues, along with the colour charts, which document the original types of upholstery materials or the shades of paints.

A few catalogues from the 1950s are accompanied by sketches of interiors with various situations at work (probably the work of Nerozzi), and they demonstrate the particular sensibility the Castelli company had in its understanding of the office world and its needs, also in terms of organisation of space.

The catalogues from the 1970s, with their sophisticated illustrations, show Anonima Castelli's ability to interpret the emerging markets for domestic furniture and collective spaces, and their need for space and limited resources. They communicated with a young audience, with products such as Plia, Platone, Pluff, Alky and System 61.

Another resource is architecture and design magazines, whose articles, editorials and advertisements constitute a very interesting source of information. A project to scan numerous advertising editorials in the magazine "Rassegna" is currently being started.

Finally, the objects from the collection. With a forward-looking vision, after acquiring the company, Enrico Pavan began to collect many historical pieces from Anonima Castelli's production dating from the 1940s to the 1980s, from collectors, auctions and online sellers.

The collection, which has grown over time, is now made up of over 60 pieces that constitute study material for the re-issue projects. There are also copies of pieces produced in the *Far East* in violation of copyright laws, which are interesting nonetheless, for comparative analyses with the originals.

The intention of this research is that the collection should be photographically documented and digitally transcribed through processes of reverse modelling.

The research project proposes developing a historical and critical investigation that focuses on two goals:

- cataloguing the documents with the aim of digitalising the archive with Linked Open Data;
- a publication that reconstructs, starting from the history of the projects and their production, the events and the context of collaborative design at one of the most important Italian furniture design companies.

Through the study of this varied collection of sources, we expect that it will be possible to grasp the effort made by an Italian design company in tangibly addressing the themes and problems of mass production, and understand how they built, and continue to build a “value chain” that allows many objects designed half a century ago to keep their iconic power alive in the collective imagination.

References

1. Bulegato, F., Bonini-Lessing, E., Bosco, A., Scodeller, D.: Design come bene culturale (Design as cultural heritage). *MD J.* **8**(4), 6–15 (2019). More generally, for the relationship between historiography of design, digital humanities and digital archives, see: Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., Schnapp J.: *Digital Humanities*. MIT Press, Cambridge, Mass (2012); Castelnuovo, E., Gubler, J., Matteoni, D.: L'oggetto misterioso. Note sulla storiografia del design. In: Castelnuovo, E. (ed.) *Storia del disegno industriale*, pp. 404–413. Electa, Milan (1991). Scodeller, D.: Archivi digitali e fonti documentali del design: nuove prospettive storiche e storiografiche sul design?. *AIS/Design. Storia e ricerche* **10**(5), 12–32 (2017). Scodeller, D.: Archivio come giacimento attivo e allestimento come interpretazione. *MD J.* **8**(4), 70–89 (2019). Bulegato, F.: Archivi digitali per la storia del design. *AIS/Design. Storia e ricerche* **16**(9), 49–52 (2022)
2. Kubler, G.: *The Shape of Time. Remarks on the history of things*, p. 9. Yale University Press, New Haven & London (1962). Kubler offers us an early distinction between tangible and intangible cultural heritage, consolidated by UNESCO *Selfguarding of the Intangible Cultural Heritage* (2003)
3. The 5th conference of the Italian Association of Design Historians, *Design Displayed: exhibiting history/the history of exhibitions* was curated by Fiorella Bulegato, Maddalena Dalla Mura and Gabriele Monti. The proceedings are in the process of being published: Bulegato, F., Dalla Mura, M. Monti, G. (a cura di), *Design esposto: Mostrare la storia/La storia delle mostre*, atti del V convegno nazionale AIS/Design (Università Iuav di Venezia, 26–27 novembre 2021), AIS/Design – Università Iuav di Venezia (2022)

4. The reenactment of historical exhibitions is the revival of a past exhibition that allows visitors to relive the experience of an event, which can only be partially understood from photographs. In recent years, the Achille Castiglioni Foundation has reproduced various small exhibitions created by the Castiglioni brothers between the 1950s and 1980s, in the spaces of Piazza Castello (curated by Beppe Finessi and designed by Marco Manzini)
5. With the name Cassina, we are referring to the colourful re-issue of the Cassina Perriand armchair and sofa, and with Nemo, to the Le Corbusier lamps. In this regard, see: Scodeller, D.: Nemo. Le lampade di Le Corbusier. *Luce & Design* **2**, 8–9 (2017)
6. Carugati, D.G.R.: Castelli. Mondadori, Milan (2000). Carugati, D.G.R.: Giancarlo Piretti. Silvana Editoriale, Milan (2003)
7. For the New York exhibition, see Scodeller, D.: Exhibition, anti-exhibition: su alcune questioni espositive del pop-radical design italiano 1966-1981. *AIS/Design. Storia e ricerche* **3(2)**, 10–28 (2014)
8. Castelli, G., Antonelli, P., Picchi, F.: La fabbrica del design. Conversazione con i protagonisti del design italiano. Skirà, Milan (2007)
9. Today, the Box chair copyright is held by Italian design company Driade
10. The Design Management for Innovation workshop as part of the master's degree course in Innovation Design at the University of Ferrara was made up of four teachings taught by professors Dario Scodeller (Integrated Design), Francesco Gherardini (Design Validation), Francesco Orlando (Innovation Management) and Marino Cavallo (Design Evaluation)
11. Pasolini, P.P.: Lettere luterane. Garzanti, Milan (1976)
12. Contini, G., Martini, A.: Verba manent. L'uso delle fonti orali per la storia contemporanea. Carocci, Rome (1993)

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

