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via Festa del Perdono 1 - 20122 Milano - Italy via Roma 171 - 90133 Palermo - Italy info@padjournal.net - editors@padjournal.net

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DESIGN HERITAGE AND VISUAL MEMORIES

The Importance of Printed Ephemera in New Type Making

Between Historical Research and Reuse of Tangible Heritage

Elettra Scotucci

Università degli Studi di Roma La Sapienza Orcid id 0000-0002-9602-8221

Andrea Vendetti

Università degli Studi di Roma La Sapienza Orcid id 0000-0001-6229-1913

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Abstract

The contribution aims to highlight the relationship between typographic ephemera and new movable type making. Ephemera are a fundamental component in the constitution of a more conscious history of graphic design oriented towards the actual impact of design in society. Moreover, type specimens and catalogs represent essential primary sources for the study of the history of typography. In parallel, the phenomenon of the letterpress resurgence is being witnessed worldwide, with the necessity to protect, integrate and replace historical material as a direct consequence. This has led to the need to make new type sets through the combination of traditional and new technologies. Although few academic researchers have already addressed the subject, there is a need for systematization of the autonomous tests carried out by various letterpress-related individuals and entities, some of which are presented as case studies. In this regard, it has been possible to divide contemporary type production into three categories: compensation, remaking and materialization. In order to take place, what has been defined as the remaking of type sets needs to start with the design of the printed letter and thus from the availability of printed ephemera. Consequently, the study of primary sources pertaining to the history of typography becomes basic to make new movable type, while the need for new type sets stimulates the search for reliable and historically accurate primary sources.

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1. The Role of Ephemera in Graphic Design Historiography

In recent years, it has been possible to observe a renewal of research approaches to the graphic design history discipline. Some of the insights arising from the first confrontations of what was considered a "movement" (Meggs, 1985, p. 2) or a "proto-discipline" (Blauvelt, 1994, p. 206) have found an active application in studies that challenged models taken from the history of art, architecture, and industrial design, considering them incorrectly borrowed (Kinross, 1985; Aynsley, 1987; Blauvelt, 1994). Several approaches were considered with the intention of questioning the idea of the "'hero" designer, usually male, believed to be capable of independently bringing innovation worthy of being counted in the historical narrative and consequently studied from a biographical point of view; instead, adopting a more feminist (de Smet, 2009) or open to the social (Wilkins, 1992) perspective, the focus was on relationships with clients, the importance of work teams and the consequences of design in society and everyday life. This has enabled a framing of history from a female outlook (Lupton et al., 2021; Fanni et al., 2021) or from certain minorities' angles (Carey, 2011; Chastanet, 2007), including geographies (Shebab, 2020) or questioning others, revealing neglected areas (Farias, 2014; Fornari et al., 2021). This shift in perspective has allowed us to question the canon of graphic design (Scotford, 1991), a list of designers and artifacts that was established too quickly (Dilnot, 1984) and that, for a long time, slowed down or prevented more in-depth researches on various topics of graphic design history; with the development of design history in the postmodern era and thanks to the contribution of the digital humanities, it has been possible to rethink what it means to document history and make it accessible (Lzicar & Unger, 2017).

In this context, more attention has been paid to the recovery and study of *ephemera* (Twyman, 2008), printed matter for everyday usage that was destined to be tossed immediately after its use, that in some cases may have been preserved due to various vicissitudes. A variety of actors have played a decisive role in this preservation: collecting, with its focus on materials from the past related to the most diverse fields; but also archives not directly connected to the world of graphic design, and the affective relation of private individuals with certain objects, often linked to family history or geographical affiliation. The *ephemera* are the perfect exemplification of the connection between design and everyday life of a given period, constituting an inseparable bond with an approach to social history necessary to overcome the designer-hero view. Besides, as early as 1992, Bridget Wilkins observed that

We should not allow a preoccupation with financial and aesthetic value to blind us to the historical value of all graphic *ephemera*. A wartime ration book has as much to tell us about communication design, people's daily experience, and society in the Second World War – in other words, graphic design history – as a poster by Abram Games. (Wilkins, 1992)

A greater consideration of the everyday objects of graphic design than the masterpieces that have found a place in museums is, for example, the basic assumption of *Graphic design*. *Reproduction and representation since 1800*, published by Paul

Jobling and David Crowley in 1996. This was prompted by the need to "directly contributing to the development of a more democratic and commercial identity for graphic design" (Jobling & Crowley, 1996, p. 4) and, despite some criticism of the approach considered too close to that of social history (Margolin, 1997), the volume is still regarded as one of the most authoritative histories of graphic design.

2. Type Specimen and Catalogs

Typography is a peculiar area of graphic design in which the use of printed *ephemera* as a primary historical source is particularly significant. In fact, any proper graphic artifact possesses a typographic component, a peculiarity that makes it potentially useful for historical research in the field of typography. Therefore, common objects such as posters, tickets, and cards are artifacts that can also be investigated under this aspect. However, a specific category of ephemera is necessary to define the evolution of design, production, and distribution of typefaces. These are type catalogs, specimens, and other advertising material printed by type manufacturers and foundries to publicize and consequently sell their products. It is possible to find the first forms of attention to the subject already in the early 20th century, thanks to the historical research of some printers of the time, including Stanley Morison in England and Daniel Updike in the United States. Over time, specific archives dealing with preservation and enhancement have sprung up and now play a major role in the study of the history of typography. These archives can either be run by universities, as in the case of The Centre for Ephemera Studies, kept at the University of Reading; or can

be private centers, as in the case of Letterform Archive (San Francisco) and St Bride Library (London), which, in addition to providing access to the actual physical archives, make digitization and worldwide availability one of their primary objectives (Fig. 1).

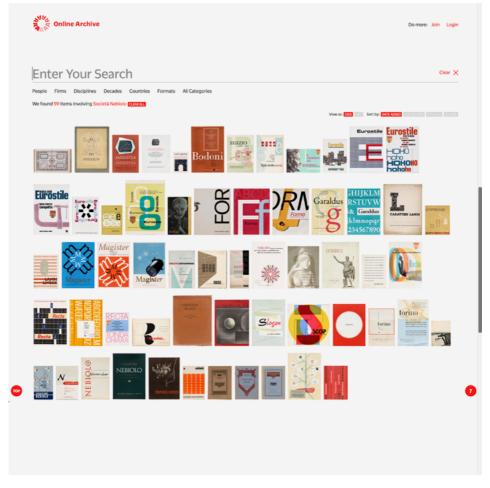


Figure 1. Letterform Archive, overview of the Nebiolo Company *ephemera* in the online archive (Letterform Archive).

In the case of Letterform Archive, a part of the physical collection was digitized by means of high-resolution photographic processes (Harper, 2020), and converged in a specific online archive, hosted on the nonprofit centers' website and freely accessible. This digitization process is constantly being updated, and custom imaging of objects in the collection can be requested. On the other hand, the St Bride Library carried out a project that led to the digitization of – currently – 155 specimens dated before 1831. These scans have been incorporated into the larger Internet Archive project and are freely available. Also, high-quality scans of the specimens can be requested directly from the library.

The use of *ephemera* as an indispensable starting point for the development of the history of typography can also be observed in the recent publication *Type specimens*. *A visual history of type-setting and printing* (Griffin, 2022), whose purpose is to provide an authoritative alternative to the plethora of images of specimens available on the web but lacking contextual indications.

In addition to containing technical and commercial information – such as how to purchase type sets and available sizes – and possible design applications of the typeface, in most cases, specimens and catalogs printed by type producers show the design of available glyphs of the presented alphabet. This specificity makes these *ephemera* indispensable in the study of the evolution of typographic forms. Type catalogs, in particular, which are sometimes dated or, in any case, easier to place in time because of the typefaces they contain, represent a precise snapshot of the production of a specific foundry or wood type manufacturer at a given time (Figs. 2 & 3).



Figure 2. Xilografia Milanese, wood type catalogue, cover (Tallone Editore).



Figure 3. Xilografia di Verona, wood type catalogue, inside page (Associazione Centro Studi Grafici).

They are bound volumes, more or less thick, that were printed several years apart. Except in the case of display artifacts used exclusively by sales representatives of the companies, these were distributed to the various printers, who replaced the obsolete versions with up-to-date ones, which is why only a limited number of samples have survived.

Comparison between versions of the same type catalog, different catalogs from the same company, and between coeval catalogs from diverse manufacturers can provide various results, including the survival and disappearance of certain typefaces – linked to commercial fortunes and thus to changing tastes over time – and evidence of the copying of alphabets between different companies, both nationally and internationally (Rattin & Ricci, 1997).

It is important to emphasize that a large amount of the typefaces designed between the 19th and 20th centuries did not survive the transition to photocomposition first and then to digital: in fact, companies often based their choices on popular tastes, choosing the best-sellers of the time and neglecting many beautiful typefaces that therefore do not exist as fonts (Walters, 2019).

Among the various type catalogs, a special variety are those printed to display wood type sets. These large display type-faces were mainly used to print posters. Sometimes the same typefaces available in the lead were adapted for wooden versions, but special letterforms were often designed for this typology. For this reason, and because of the difference in customers – not all printers used to print posters – wood type was displayed in separate type catalogs.

In Italy, there were various wood type producers (Clough, 2014). In addition to Nebiolo, the main Italian foundry of the 20th century, which also had a wood type department, a number of minor wood type manufacturers existed too: their production of display typefaces sometimes included designs with very distinctive features. The study of this specific area of the history of Italian typography requires in-depth research conducted with a systematic approach. One of the authors is currently mapping and indexing the known catalogs of wood types produced in Italy. This research, conducted among foundations, archives and private collections, may serve as a starting point for future historical studies, as well as a primary source for the reuse of specific typefaces in terms of digital revivals or new type making for letterpress printing.

3. The Resurgence of Letterpress

Since the last decade of the 20th century, it has been possible to notice the diffusion of practices concerning preserving and valorising the tangible and intangible heritage inherent to movable type printing. This phenomenon, known as the "resurgence of letterpress printing" (Williamson, 2013), has rapidly spread throughout the world, leading various individuals and entities to deal with the tools of the movable type printing process. While some of them, having inherited the family business, work in complete continuity with the past. most are approaching letterpress as neophytes. For the recovery of specific knowledge concerning this craft, it was, therefore, necessary for them to make use of various sources (mainly written and oral) in order to acquire a cultural awareness of the relative heritage, in addition to technical notions about the operation and the maintenance of the equipment. In fact, it should be noted that although an industrial dimension characterized movable type printing - for five hundred years, it has been the main means of disseminating knowledge some of the passages involving the design and the printing set-up phases had purely artisanal characteristics.

Letterpress printers have been facing some problems arising from the poor state of preservation of industrial archaeology findings that are at least fifty years old and, therefore, not always perfectly preserved. These working tools – type, presses and all the necessary printing equipment – have become increasingly difficult to obtain, and their price is progressively rising (Shaoquiang, 2021, p. 169). The letterpress revival phenomenon has also developed in Italy (Berra, 2011; Passerini,

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2014), and the issues have been no exception. If the lack of vintage proof-presses (small presses used precisely to obtain proofs before proceeding to print the entire run) is being compensated by the design, the dissemination of models and the assembly of self-made proof-presses (Beckloff, 2022), other, more varied kinds of equipment have required other measures. In particular, one of the most common issues is related to wood type sets, which may have survived with a scarce number of specific characters - ruined over time or carved out by printers in order to obtain other, more useful letters - or even without certain glyphs. Such conditions severely impair the usability of the entire set. It must be emphasized that some of this material - particularly the older or, the less widespread one - has not reached the present day in physical form (movable type) but only through printed *ephemera* (prints, specimens, and type catalogs), making it impossible to use original letterforms, sometimes peculiar to a specific style or era, in modern letterpress projects.

Currently, the revival of letterpress is considered one of the most interesting phenomena in contemporary graphic design (Meggs & Purvis, 2016) and keeps growing in popularity (Wolske, 2021) for reasons related both to the process and the final artifact (Vendetti, 2019). The creation of practices and models that can compensate for issues related to the historicity of the tools is, therefore, a concrete objective for anyone willing to use this printing technique. Finally, it is important to stress how letterpress has been placed at the center of various academic research, which has focused on the use of digital technologies, essential in terms of accessibility and preservation,

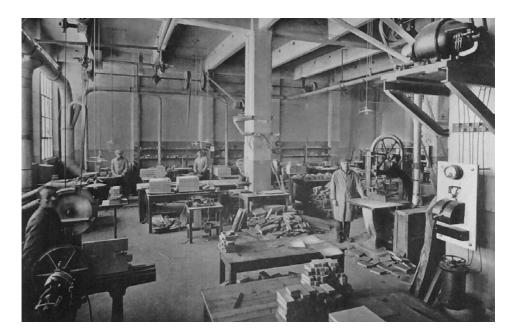
4. The Historical Production of Display Type

The process of movable type printing has remained essentially unchanged over the centuries: one of the aspects that have undergone the greatest change has been the introduction of different materials and technologies to produce type. Economical and practical needs drove this shift: as an example, producing a lead type of a size suitable for posters – above approximately 72 points – was not sustainable due to the substantial weight and high cost of production, in addition to the fact that uneven cooling caused large lead type to distort (Clough, 2014). For this reason, from the 19th century, wood type began to be produced, at first carved by hand – similar to what was done for xylographic images – and later through production progressively geared towards the industrial model (Kelly, 2018, p. 1).

The mass production process for display type, in use until the 20th century, involved the usage of a pantograph router in combination with wooden or cardboard patterns, which made it possible to reproduce the typeface design by milling wood blocks (Kelly, 2016). Such a process was introduced in the United States in 1827 by Darius Wells and perfectioned by William Leavenworth in 1834 (Kelly, 2016): there the raw material used was mostly sugar maple, as it was resistant to pressure of the

printing presses and easily milled, and therefore ideal for type up to 5 inches in size (Heller, 2017). The sugar maple, cut down in winter while the log was frozen, was then sawn into end grain slabs and cured for about two years. A mechanical device brought the cured slabs to the exact typographic height. Then the process entailed a treatment with pumice and linseed oil applied by hand and coats of wood lacguer or varnish alternated with light sandings to create a smooth surface with a protective patina. The polished slabs were sawed in individual blocks of the intended dimension, removing irregularities such as knots or hardwood. After engraving with a pantograph router and removing extra wood with a precision printer's saw, pieces of type produced in such a way needed a final hand-finishing at the trimming table: skilled carvers filed down any inaccuracy and used knives to make the sharp corners and other details (Kelly, 2016). Long grain pine wood was employed for large display typefaces, which was less compact and durable but cheaper (Heller, 2017).

Similarly, in Italy, wood type was at first carved by hand with the aid of stencils (Tallone, 2022), and from the second part of the 19th century on, mass-produced using patterns and pantograph routers (Balossi, 1928). The use of cured pear wood treated with boiled linseed oil has also been documented (Clough, 2014). The Nebiolo company in Turin, Italy's most important type and press manufacturer of the 20th century, boasted in an article of their house organ that pear wood was cured for as long as five years, which made the material compact and less susceptible to changes in temperature and humidity (Balossi, 1928) (Figs. 4 & 5).





Figures 4 & 5. Wood type department of the Nebiolo Company, type manufacturing, in *Archivio Tipografico*, 32(267-268), 1928 (Tipoteca Italiana Fondazione).

5. Strategies for New Type Making

Since there is no longer a production industry to support letterpress, and since type is subject to wear and tear even through regular use, the need to find new solutions for those who have rediscovered this printing technique both as a form of visual expression and as an educational function has arisen. Since characters are made of perishable and scratchable materials, it is not uncommon to find damaged or unusable letters, sometimes even missing. Therefore, the relationship between letterpress and the use of new production possibilities was investigated to enable the valorization of typography's historical and cultural heritage through its use.

Based on the most frequent issues, three possible strategies to make new movable type have been discerned: the *compensation* of characters in incomplete historical sets; the *remaking*

of entire type sets that survive as extremely rare examples or exclusively in the form of printed *ephemera*; and, finally, the materialization of digitally designed typefaces for letterpress use. The first two categories constitute a direct operation to safeguard the typographic cultural heritage, while the third represents both a search for new forms of expression for visual communication and an operation for the update of historical typefaces through the design of new contemporary glyphs. Based on these strategies, three possible design processes were identified: Analog to Analog (AA); Digital to Analog (DA); Analog to Digital to Analog (ADA). These approaches are applicable to different type making strategies according to the analog or virtual origin of the input, depending on whether they start from a physical model, a printed primary source, an existing digital font, or have no basis at all.

It is evident that for the processes starting from Analog, and remaking in particular, it is necessary to make use of authoritative primary sources. In this context, the study and accessibility of printed *ephemera* become prerequisites for historically accurate type making. Through a series of digital processes that have yet to be systematized, which turn a printed surface back into a three-dimensional object, it is, therefore, possible to make pieces of design from the past tangible again. For this operation, the accuracy in the choice of the starting reference is basic in terms of historical correctness. Furthermore, the research and study of such primary sources increases the possibility of rediscovering forgotten typefaces.

Printed *ephemera* can also play an important role in the compensation of rare type sets if similar ones are not available

or difficult to find, thus employing the ADA process. In fact, censusing and publishing operations of historical type sets in the collections of museums and other specific entities are still uncommon. These data are seldom systematized; therefore, starting from printed *ephemera* may be more accessible. In the case of ADA compensation, accuracy in the choice of historical source also becomes particularly crucial in order not to commit gross errors - for example, in Italy, it is well known that many typefaces were copies of others from competing manufacturers or foundries, with the addition of a few details to differentiate specific letters and avoid legal problems (Rattin & Ricci, 1997). Specimens and type catalogs can therefore be considered the best primary sources for rediscovering forgotten typefaces and for carrying out in a historically correct way any operations related to contemporary type production.

6. Experimentations in Progress

Various letterpress-related individuals and entities are currently carrying out experimentations concerning the mixing of traditional methods and digital technologies - CNC milling, laser cutting, and 3D printing - in new movable type making (Bonini Lessing et al., 2019b; Caccamo & Vendetti, 2019). The technical issues to be addressed are different, and concern, on the one hand, the physical properties of the object - height tolerance, resistance to printing pressure, material response to external agents such as moisture and the passage of time, perfect uniformity of the printing surface - and, on the other hand, issues relating to the precision in transferring the letter design to the physical character, with regard to small type, serifs and acute angles.



Figure 6. McKellier Wood Type, compensation of an incomplete historical set (Mark McKellier).

The tolerance of the typographic height is a particularly important aspect that depends on the function of printing presses, which have an accuracy of a tenth of a millimeter.

In England, McKellier Wood Type has long been active on the compensation side, offering printers a service of replacement letters in case of damaged or missing glyphs (Figs. 6 & 7). Typically, the integration of sets is done by duplicating existing but scarce characters, reconstructing the design from printed primary sources, or in the lack of these, relying on the rest of the alphabet to achieve a realistic version of the missing letters (ADA or DA approach). For this kind of operation, the client is asked to supply a printed specimen of the type set or physical characters.

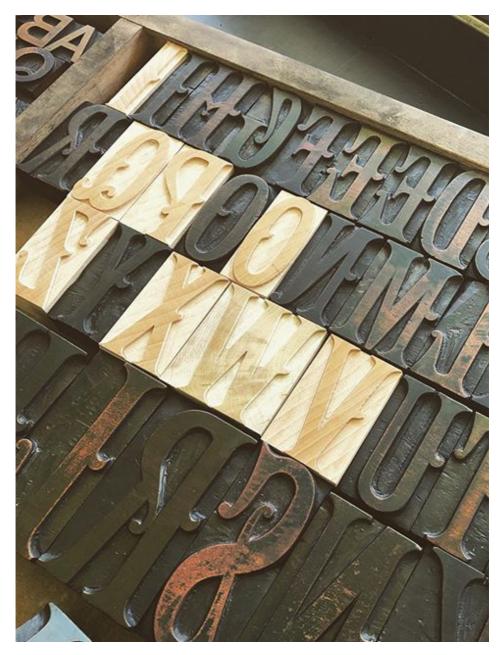


Figure 7. McKellier Wood Type, compensation: replacement letters made from damaged existing characters (Mark McKellier).

McKellier uses end grain hardwood from English sycamore and beech or Canadian maple. The surface is treated with shellac and hand-finished to a traditional smooth printing surface. Wood type is manufactured with a combination of CNC routers and traditional hand woodworking tools (McKellier, 2022).

An example of remaking is the *Typemods* project, led by the recently established LetterIsland, founded in the Canary Islands by Matthias Beck. *Typemods* is a modular typographic system based on a printed specimen of Esteban Trochut's Figuras Geometricas, designed in Spain in the 1930s (ADA approach). This block system allows printers to generate infinite combinations, making it a suitable resource for educational purposes (Figs. 8 & 9). It is produced both as a digital version and as wood type. The exact typographic height is obtained through a combination of a CNC router and a roller sander with different sandpaper grades, achieving a perfectly smooth surface. The wood is then varnished with shellac and polished with oil and pumice powder. From a single wood block thus processed, all the modules of the typographic system are milled using a CNC machine. Subsequently, the individual modules are cut using a traditional printer's saw (Beck, 2021).

Ryan Molloy, a lecturer at Eastern Michigan University, works on font materialization, producing original designs for visual communication. The new type sets and modular geometric elements – produced in end grain maple with shellac printing surface – are digitally designed and explore new formal possibilities within the limits of the technologies and materials involved, generating innovative results for letterpress printing (Fig. 10).

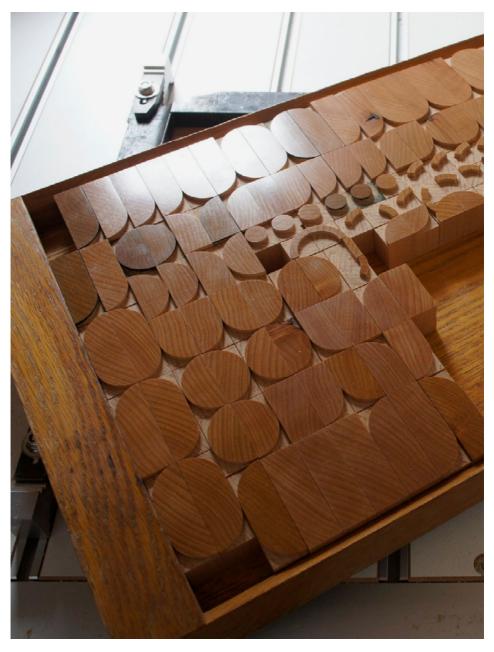


Figure 8. LetterIsland, *Typemods*, remaking: a modular typographic system inspired by Spanish typefaces from the 1930s, manufactured using a CNC milling machine (Matthias Beck).

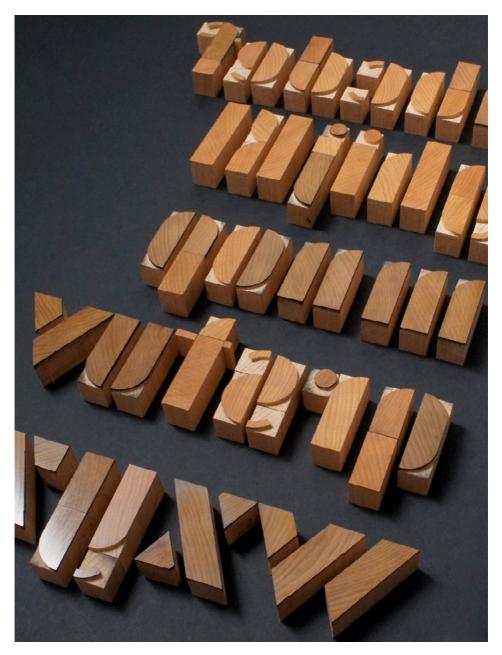


Figure 9. LetterIsland, *Typemods*, stencil alphabet consisting of modular geometric elements (Matthias Beck).

Figure 10. Ryan Molloy, materialization: digitally designed typefaces for letterpress, produced with a CNC milling machine (Hamilton Wood Type and Printing Museum).

The technologies employed are a CNC router and a laser cutting and engraving machine (DA approach). The latest experiments involve the creation of glyphs of non-Latin alphabets (Molloy, 2022). Finally, Molloy has held several workshops and online conferences dedicated to printers to spread specific knowledge about wood type making experiments. One of these, organized as part of the Letterpress United festival (Scotucci & Vendetti, 2021; Wolske, 2021), brought together Molloy, McKellier and Dafi Kühne on the topic of contemporary type production (Letterpress United, 2020).

7. Future Scenarios and Conclusions

At present, the authors are carrying out experimentations concerning new type making. In particular, starting from selected catalogs of wood type produced in Italy, they are proceeding with the compensation and remaking of a number of sets. The aim is to generate an increase of knowledge in the specific field and find solutions to be exploited for practical purposes. Indeed, the main expected outcome is the proposal of scientifically valid procedures and operational models for new type making, in the form of guidelines, aiming to systematize and validate current experiments, often carried out autonomously. The identified target group to which the results are to be addressed are scholars researching in the field of typography, the letterpress community, and graphic designers. The experimentations, which are in their early stage, yield some indications on the accessibility of memory that need to be dwelt upon.

The first indication concerns the digitalization of *ephemera*. The emerging standard, although depending on the nature of the artifact, involves the use of high-resolution cameras, as witnessed by the experience of Letterform Archive (Harper, 2020). Consequently, an indication for institutions wishing to pursue research in this field is to equip themselves with suitable instrumentation. However, digitalisations related to primary sources are only some of the files generated during the process of contemporary type production: vector images, three-dimensional models, and scans of prints are all outputs needed to reconstruct specific type sets. This information, in addition to the specific settings of the machines during the various stages, represents potentially fundamental knowledge for preserving, systematizing, and disseminating the tangible and intangible heritage linked to the history of typography. For these reasons, it is preferable that this information should be released under an open-source license (Russo, 2022).

A better combination of physical and virtual archives could lead, in a post-digital era, not only to the survival of letter-press printing (Hugill-Fontanell, 2022) – which will experience a gradual disappearance or unusability of historical materials – but also to its contemporary adaptation in terms of technologies and visual artifacts. In this sense, the choices regarding typologies, platforms, technological tools, and the possibility of establishing connections will be the discriminating factors that will allow or not such digital archives to survive (Dalla Mura, 2016).

Moreover, remaking appears to be a fundamental strategy to preserve the material heritage of letterpress printing, allowing the reuse of type sets otherwise destined for oblivion. This operation triggers a virtuous circle, whereby those involved in new type making carry out historical research with the aim of using authoritative primary sources.

In conclusion, the operations inherent to the contemporary production of movable type give substance to the relationship between present and past concrete and should be considered as an example of memory preservation not only in a digital way but, above all, in a tangible form. Such design processes stand as valid methods to transmit cultural heritage to future generations.

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IV

BIOGRAPHIES

Andre Andrade

He is a Swiss interaction designer. He was a research associate at EPFL+ECAL Lab from 2019 to 2021 and previously worked for INT Studio, a design studio that works at the intersection of art direction, interactive scenography, and creative programming.

info@andreandrade.ch

Alessandra Bosco

Architect and PhD, she is a Researcher at the IUAV University of Venice (Italy). She is the author of numerous contributions and publications and carries out research in the fields of Design for the enhancement of Cultural Heritage and Exhibition Design with a specific focus on collaborative approaches.

amlbosco@iuav.it

Marcos Chilet Bustamante

Professor of Future Scenarios and Speculative Design at the School of Design, Pontificia Universidad Católica de Chile. Designer from the Pontificia Universidad Católica de Chile, and MA in Critical Theory, Goldsmith College, University of London. Recently, he won the most outstanding overall contribution medal as co-curator of the Chilean pavilion at the London Design Biennale 2021.

mfchilet@uc.cl

Daria Casciani

PhD in Design, Assistant Professor at Politecnico di Milano, Department of Design, and member of the Fashion in Process research laboratory. Her research interests concern the influence of technological innovation of advanced manufacturing and smart integration that allow to imagine scenarios, systems, and innovative solutions. daria.casciani@polimi.it

Lara Défayes

Interaction designer and art director, currently working at EPFL+ECAL Lab. lara.defayes@epfl.ch

Agnieszka Dutkowska-Zuk

She is a Material Social Futures PhD student in the Department of Languages and Cultures and the Lancaster Institute for the Contemporary Arts at Lancaster University. Her interdisciplinary work is supervised by Dr Emily Spiers and Prof. Paul Coulton. Her PhD explores the future of infinite data storage and scenarios in which we will be able to store everything. She is interested in how human memory metaphors shape computer memory's design and vice versa.

Her research can be generally described as Speculative Design, through which she strives to understand how people and technology (will) interact with each other.

a.dutkowska-zuk@lancaster.ac.uk

Andrea Facchetti

Upon completing a BA in Philosophy, Andrea Facchetti holds a MA in Visual and Multimedia Communication (luav University of Venice). In 2017 he completed a PhD at the luav School of Doctorate Studies in the program "Design Sciences", where he developed a research regarding speculative practices and knowledge production in visual design.

Since 2018 he is a Research Fellow at the Free University of Bozen-Bolzano, Faculty of Design and Art.

He is co-founder and co-director of Krisis Publishing, an independent publishing and curatorial platform focusing on media culture, politics of representation and social research.

andrea.facchetti@unibz.it Clorinda Sissi Galasso

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She holds a PhD in Communication Design and is currently pursuing an Executive Master in Management of Territorial Tourism Development in collaboration with Touring Club Italiano. Research fellow at the Politecnico di Milano, her studies

are oriented toward memory representation systems and the valorization of documents preserved in historical archives. She is involved in researching a novel definition for the relationship between memory and places from a communication design perspective, focusing on the concept of the mnemotope. In particular, she is concerned with investigating new map-based communication apparatuses for visualizing complex mnemotopic networks. She is Adjunct Professor within the Design of Communication for the Territory (DCxT) research group of the Department of Design at Politecnico di Milano. clorindasissi.galasso@polimi.it

Silvia Gasparotto

PhD, she is a Researcher at the University of the Republic of San Marino and Deputy Executive Director of the master's degree in Interaction & Experience Design. Her research interests are focused on Design for the enhancement of Cultural Heritage, interaction design, design theory, participatory and collaborative practices. silvia.gasparotto@unirsm.sm

Emily Groves

She is a design researcher and educator. With a background in anthropology, experience design, and inclusive design, her interests lie at the intersection of technology and culture.

emily.groves@epfl.ch

Nicolas Henchoz

He is the founding director of the EPFL+ECAL Lab which explores the perspectives of emergent technologies through design. Trained as a scientist, he previously worked in science journalism and at the direction of the Ecole Polytechnique Fédérale de Lausanne.

nicolas.henchoz@epfl.ch

Margo Lengua

She is a Research Fellow at the University of the Republic of San Marino. She works on research projects focusing on Design for the enhancement of Cultural Heritage, in particular with the application of game design techniques.

margo.lengua@unirsm.sm

Carola Ureta Marín

Chilean designer and visual communicator based in London, specialises in editorial, cultural development and historical research projects. She was part of the curatorial team of the Chilean pavilion entitled *Tectonic Resonances* that won the London Design Biennale 2021. Frequent speaker at international congresses on Design Studies and Design History. She is part of the editorial team of the *Design for more than human futures: Towards Post-Anthropocentric worlding* to be published by Routledge.

carola.umarin@gmail.com

Sabrina Melis

Sabrina Melis is an Italian artist and designer. She is currently a PhD student at the Department of Architecture, Urban Planning and Design of Alghero. In her practice she intertwines artistic and scientific research focused on the exploration of possible approaches to find a way to integrate complex information avoiding the problem of oversimplification.

smelist.@uniss.it

Matteo Moretti

Award-winning designer, he co-founded Sheldon.studio the first studio that focuses on immersive information-experience-design. Matteo Moretti was vice-director of the Interaction & Experience Design Master at the University of the Republic of San Marino, lecturer at the Faculty of Design of the Free University of Bolzano, at the University of Florence, at the SPD Milan, and guest professor at the Data-Design Master of the Elisava in Barcelona.

His design research projects, presented in many academic conferences and events such as TEDx and Visualized.io received the Data Journalism Award 2015, the European Design Award 2016 and 2017.

Moretti has also been a jury member at the World Press Photo 2017-18 (Immersive journalism category) and one of the 100 ambassadors of Italian design in the world 2018, named by the Italian Ministry of Foreign Affairs.

matteo@sheldon.studio

Daniele Murgia

Daniele Murgia is a PhD student at the Department of Architecture, Urban Planning and Design in Alghero. Previously worked as research assistant in SUPSI University of Applied Sciences and Arts of Southern Switzerland, Visual Culture Laboratory. He teaches Physical Computing in Genova at Ligustica Academy of Fine Arts.

As a freelance he works in the Interaction Design, Interactive Design and Music field, focusing his personal research on multi-sensory interface, user experience in digital environments and cross-platform devices.

d.murgia15@studenti.uniss.it

Alessandro Pollini

PhD and Interaction designer, He is Senior Researcher in Industrial Design at the International Telematic University Uninettuno where he teaches Experience Design. His research is on interaction design and, in particular, on design research for empowerment, human-centred automation and the evolution of human-machine interfaces.

alessandro.pollini@uninettunouniversity.net

Delphine Ribes

She is a senior research engineer with a background in computer science and medical image processing. She joined EPFL+ECAL Lab in 2014 to lead the algorithmics, software engineering and digital health activities.

She previously worked as a research engineer and led the clinical research at CAScination GmbH. She also worked as a research engineer for Advanced Clinical Imaging Technology, Siemens Medical Solutions, EPFL innovation park. delphine.ribes@epfl.ch

Ilaria Ruggeri

She is a PhD in Architecture and Design Cultures at the University of Bologna. From July 2022 she is a research fellow at the IUAV University of Venice and since 2016 she has been collaborating with the Design Courses of the University of the Republic of San Marino in research activities, teaching, organization and communication of initiatives and events. Her research topics and publications concern visual identity and communication design applied to public context such as

Her research topics and publications concern visual identity and communication design applied to public context such Museums, territories, and cultural heritage, with a particular attention on the public utility and impact.

She is co-founder of Studio Taller, a graphic and communication design studio based in Rimini. Since 2018 she has been collaborating as a volunteer and professional consultant for "Il Palloncino Rosso", a social promotion association with which she works on projects for social innovation and cultural promotion, creating exhibitions of regional interest, publications and participatory projects related to the conscious reuse of abandoned buildings. iruggeri@iuav.it

Mathieu Salzmann

He is a Senior Researcher at EPFL-CVLab with a courtesy appointment at the EPFL College of Humanities, and, since May 2020, an Artificial Intelligence Engineer at ClearSpace (50%). Previously, he was a Senior Researcher and Research Leader in NICTA's computer vision research group.

Prior to this, from Sept. 2010 to Jan 2012, he was a Research Assistant Professor at TTI-Chicago, and, from Feb. 2009 to Aug. 2010, a postdoctoral fellow at ICSI and EECS at UC Berkeley. He obtained his PhD in Jan. 2009 from EPFL. Mathieu Salzmann's research lies at the intersection of machine learning and visual recognition. He has published over 100 articles at top-tier peer-reviewed machine learning and computer vision venues, including CVPR, ICCV, NeurIPS, ICML, IEEE TPAMI, IEEE TNN-LS.

He regularly acts as an Area Chair for these venues and is an editorial board member for IEEE TPAMI and TMLR. mathieu.salzmann@epfl.ch

Andrea Schneider

She is a user experience researcher with a background in cognitive psychology. She is interested in researching the interaction between humans, technology and design.

andrea.schneider@epfl.ch

Elettra Scotucci

Visual Communication and Graphic designer, Elettra Scotucci is in the second year of her PhD in Design at Sapienza University of Rome. Her main research topics are Typography and Graphic Design History, and the relationship between Design and New Craft in the field of the contemporary production of display typefaces for letterpress printing. Together with his Ph.D. colleague Andrea Vendetti, she runs a letterpress studio in Rome, Slab, which is also a key spot for historical research, experimentation, and educational projects.

Currently she is Teaching Assistant in the Type Design course, both in the English and Italian curricula, at the DCVM master's degree, at Sapienza.

elettra.scotucci@uniroma1.it

Gianni Sinni

He is an Associate professor of Communication Design at the IUAV University of Venice. He has been previously Associate professor and director of the Master Degree Course in Design at the University of the Republic of San Marino. His research topics and publications concern communication design applied to social innovation, complex information and data visualization, with particular regard to the field of public utility.

He has been consultant of the Italian Minister for Technological Innovation and Digitization and of the Team for Digital Transformation at the Presidency of the Council of Ministers for the "Digital Republic" project. He was a member of the Steering Committee of the Agenzia per l'Italia Digitale (Agid) for the definition of the "Design Guidelines for the PA websites".

gsinni@iuav.it

Angelica Vandi

MSc in Design for the Fashion System, PhD student in Design at Politecnico di Milano, Department of Design, and member of the Fashion in Process research laboratory. Her research interests focus on rethinking the ways of modelling, preserving, and transferring fashion cultural reservoir making use of new media technologies, understanding how the digital sphere could be employed to augment the tangible and intangible value of fashion heritage.

angelica.vandi@polimi.it

Andrea Vendetti

After graduating from Sapienza University of Rome with a thesis on the clandestine presses of the Italian Resistance, and after a study period at ENSAD in Paris, he graduated from ISIA in Urbino with a thesis on the historiography of graphic design. He is in the final year of his PhD in Design at Sapienza University of Rome: his research consists of a survey on primary sources for the study of the history of wooden typefaces in Italy.

He teaches Graphic design and History of printing and publishing at Rufa. He works as a graphic designer with archives and associations and is the co-founder of Slab, a letterpress studio in Rome. Slab is a workshop where teaching and research are carried out to safeguard Italian typographic culture, and where workshops, exhibitions and conferences are held. Andrea Vendetti has been an AIAP national councillor since 2022.

andrea.vendetti@uniroma1.it

Michele Zannoni

Associate Professor in Industrial Design at the Università di Bologna (Italy). His published articles and books explore the intersection of interaction processes and visual and product design. His scientific research is concerned with digital and physical products and the evolution of the user interface.

michele.zannoni@unibo.it





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