

Women 'as subjects': documentation, methodology, interpretation and enhancement

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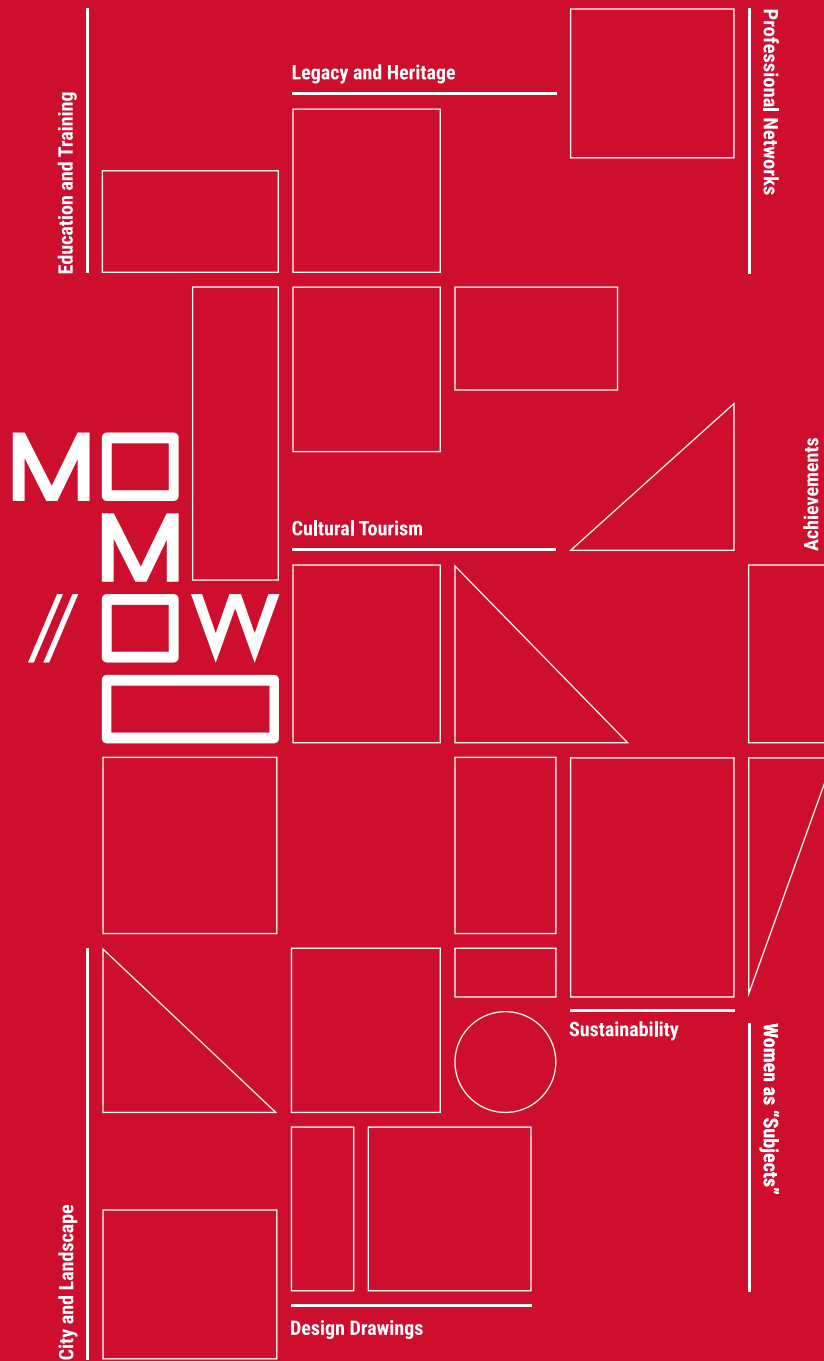
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Women's Creativity since the Modern Movement (1918–2018)

Toward a New Perception and Reception



WOMEN'S CREATIVITY SINCE
THE MODERN MOVEMENT



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EDITED BY

Helena Seražin, Caterina Franchini and Emilia Garda

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Andrea Furlan



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TEXTS REVISION

Chapter A

Alenka Di Battista, MoMoWo, ZRC SAZU
Katarina Mohar, MoMoWo, ZRC SAZU
Helena Seražin, MoMoWo, ZRC SAZU
Barbara Vodopivec, MoMoWo, ZRC SAZU

Chapter B

Henrieta Moravčíková, MoMoWo, STUBA
Nina Bartošová, MoMoWo, STUBA

Chapter C

Ana María Fernández García, MoMoWo, UNIOVI
Isabel Barro Rey
Noelia Fernández García
Esther Rodríguez Ortiz, MoMoWo, UNIOVI

Chapter D

Elena Masala, MoMoWo, SITi

Chapter E

Maria Helena Souto, MoMoWo, ENSILIS IADE
Eduardo Côrte-Real
Silvia Rosado

Chapter F

Marjan H. Groot, MoMoWo, VU
Ilja M. Meijer, MoMoWo, VU
Caterina Franchini, MoMoWo, POLITICO - DIST

Chapter G

Caterina Franchini, MoMoWo, POLITICO - DIST
Emilia Garda, MoMoWo, POLITICO - DISEG

PROOFREADING

Helena Seražin, ZRC SAZU
Katarina Mohar, ZRC SAZU
Barbara Vodopivec, ZRC SAZU
Salmah Eva-Lina Lawrence

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Chapter G

Women 'as Subjects': Documentation, Methodology, Interpretation and Enhancement

Caterina Franchini

Interuniversity Department of Regional & Urban Studies and Planning, Politecnico di Torino and Università di Torino – DIST, (MoMoWo International Co-coordinator)

Women 'as Subjects': Documentation, Methodology, Interpretation and Enhancement

The history of the works of women in architecture, civil engineering and industrial design belongs to contemporary history. In fact, except for a few isolated and exceptional cases, women have worked in these fields since the second half of the nineteenth century.¹

Historiography on women is fully integrated into a concept of memory whose semantic spectrum has increasingly extended, enriching itself with meanings.² In recent times, research on female professionals in the fields of architecture and design has also become a popular 'history making' phenomenon.³ These research studies have begun to be conducted by different categories of

1 The exceptions include: Katherine Briçonnet (1494–1526), who contributed to the refurbishment of Château de Chenonceau (1514–1522), named 'Château des Dames'; Pautilla Bricci (1616–1692), a member of the Accademia di San Luca who in 1663 designed and built Il Vascello Villa in Rome (demolished in 1849) with her brother Basilio (1621–1692) on behalf of the abbot Elpidio Benedetti, who was the agent of Mazzarino and the King of France at the court of Rome; Lady Elizabeth Mytton (1632–1705), who designed 400 buildings in her architectural studio. See Lucia Krasovec Lucas, "Modern Women in (Modern) Architecture: Some Cases (Genesis of a Modern Lifestyle)," in *MoMoWo: Women Designers, Craftswomen, Architects and Engineers between 1918 and 1945*, edited by Marjan Groot, Helena Seražin, Caterina Franchini and Emilia Garda (Ljubljana: Založba ZRC, 2017), 214–29, <https://doi.org/10.3986/wocrea/1/momowo.1.12>. About Il Vascello Villa, see Carla Benocci, *Villa Il Vascello* (Rome: Erasmò, 2003).

2 For an extensive consideration of the multifarious concept of memory and its implications in contemporary society, the essential reference is Paul Ricoeur, *La mémoire, l'histoire, l'oubli* (Paris: Édition du Seuil, 2000).

3 A landmark in the empirical study of popular and public history is David P. Thelen and Roy Rosenzweig, *The Presence of the Past: Popular Users of History in American Life* (New York: Columbia University Press, 1998). On 'Public history', see Paul Ashton and Hilda Kean (eds.), *People and their Pasts: Public History Today* (Basingstoke: Palgrave Macmillan, 2008).

people (most often women); therefore, recent research practices have widely differed from those established by traditional research by professional historians in areas such as art, architecture, building and design. In research practices on the history of women, both the use of documentary sources and the relationships with the studied objects and the past are manifold. The 'new scholars' tend to be driven by the desire to recover or cultivate group and professional memories or rediscover and enhance local identities. As a general rule, they attempt to establish direct and immediate relationships with the moments and aspects of the most recent past.

Both in the context of popular history making and in more traditional academic studies, research experiences on women in the design of the built environment are inspired by the desire to 'find those who were lost' and 'reweaving the threads' of professional memory in the fields of architecture, civil engineering and design.⁴ Their ultimate goal is also to re-establish the identities of those professions that have long been dominated by men, as has their history has been.

Through the rediscovery of individual, professional and social memories, the process of historicising the works of women designers aims to recover the material and immaterial cultural heritage that has been kept in the shadows or removed altogether by the dominant culture, a recovery for the benefit not only of women but of the whole community.

If it is true that, according to the most reliable definitions, history is 'knowledge through sources', it is also true that history has used and continues to use paradigms, methods, critical analyses and sources in different ways according to factors such as the different periods and contexts in which it is studied, the area or research topic being addressed, the historiographical trends that have developed over time, the objective to be reached, and the required rhetoric.

The reconstruction/construction of women's collective memory appeared on the historiographic scene as a result of a highly multifaceted process that cannot be exclusively traced back to feminist demands, as is customarily stated. This process is closely related to the definition of the qualitative and quantitative specificities of the sources of contemporary history over the last three decades of the twentieth century.

Polycentricities of Sources and Historiography: Overcoming Disciplinary Paradigms and Conventional Research Themes

Since 1962, when Madeleine Bettina Stern published *We the Women: Career Firsts of Nineteenth-Century America* (New York: Schulte), the geography of historical research sources began to widen chronologically towards the contemporary world and thematically toward unexplored horizons. The polycentrism of sources was joined by a historiographical polycentrism which, by rejecting the rigid paradigms and disciplinary hierarchies of the past, also contributed to the conservation of documents, freeing them from the influence of the dominant historical culture. New research paths emerged alongside previously explored ones, such as those suggested by the quantitative or serial historiography theorised by Pierre Chaunu and widespread mainly in France and the United States.⁵

The plurality of research approaches and the interpretative points of view of the 1970's –which conciliated the distinction between 'major' and 'minor' sources– began to illuminate parts of the past that had remained in the shadows for too long. Women's work is notoriously one of those shadowed areas of history. In the same decade, the downplayed archival sources of positivist historiography, as well as the disdained ones of idealistic historiography, returned to claim their place in historical research.

In 1977, using the documentation gathered in the Archive of Women in Architecture of the Architectural League of New York, Susana Torre published her book, which is as famous as it is pioneering: *Women in American Architecture: A Historic and Contemporary Perspective* (New York: Whitney Library of Design), describing the exhibition of the same name.

Like all research on the archival sources of the twentieth century, investigation of the sources produced by women architects, civil engineers or designers has also clashed with the prejudice that archival documents are decreasingly important the closer they are to the present time. On the other hand, the tendency to assign a more significant historical importance to the documentation of the past than to that of the present is still highly prevalent in the oldest archival institutions. Furthermore, in the past, historical culture has also had a restrictive influence on choices regarding the conservation of documents of recent production.⁶ All of this has led to the formation of gaps in the documentation that are particularly significant in the history of the built environment of the last two centuries.

4 See Caterina Franchini, "Women in the History of Architecture and Design: Sailing to a New History," in *MoMoWo: 100 Works in 100 Years: European Women in Architecture and Design: 1918–2018*, edited by Ana María Fernández García, Caterina Franchini, Helena Seražin and Emilia Garda (Ljubljana: ZRC Publishing House, 2016), 238–43.

5 See Pierre Chaunu, *Histoire quantitative, histoire sérielle* (Paris: Armand Colin, 1978).

6 It suffices to recall that the specificity of contemporary history only began to be recognised in the Eighties. In Italy, the Italian Society for the Study of Contemporary History (SISSCO) was founded in 1989. See Isabella Zanni Rosiello, "Archivi, archivisti, storici," in *Il potere degli archivi: Usi del passato e difesa dei diritti della società contemporanea*, Linda Giuva, Stefano Vitali and Isabella Zanni Rosiello (Milan: Bruno Mondadori, 2007), 18, 30.

Documentary gaps have begun to be partially filled with the creation of the first institutions specialised in the study and conservation of project documents in North and Central Europe, such as the Arkkitehuurimuseo in Helsinki in 1956;⁷ the Bauhaus-Archiv in Darmstadt in 1961; the Arkitekturmuseet of the Svenska Arkitekters Riksförbund in Stockholm in 1962 (SAR, ArkDes since 2013);⁸ the Archives d'Architecture Moderne (AAM) in Brussels in 1969; and the Norsk Arkitekturmuseum in Oslo in 1975. The Canadian Centre for Architecture (CCA) was established in Montreal in 1979,⁹ followed a year later by Le Centre d'archives d'architecture du XXe siècle in Paris, which has been open to the public since 1991.¹⁰ Strangely enough, even these specialised institutions have very few archival fonds produced by women designers. One of the main reasons for their scarcity is the fact that the role of women in the hierarchies of political, social and professional power has been, and remains, mostly marginal. Archives have always had a very close connection with the powers in society.

As it is known, throughout history the various kinds of power and their institutions determined the aggregation and location of archives and how they were organised. Ultimately, it was precisely those same forms of power that created the reasons for the archives' creation, as well as directing their use over time.¹¹ Therefore, scholars approaching research on the works of women must still 'flush out' and 'elicit' archives and form new collections of documents,¹² as occurred at the beginning of the 1970s for Susana Torre's "Women in American Architecture" project carried out with The Architectural League of New York. For this project, in fact, the committee in charge 'decided to form an archive to collect biographical and project data about the careers of women design professionals ... Under the auspices of the Archive of Women in Architecture, a national survey was undertaken and extensive historical research begun'.¹³

Almost fifteen years after the end of the project, the Administrative Director of the Architectural League of New York Marita O'Hare, who had participated in the formation of the Archive, recognised how the Archive had grown in importance, well beyond its initial purpose. Not only did it constitute the knowledge base for the creation of the exhibition and the book, but it also 'fostered a consciousness of historical continuity that seems essential to creative processes, whether as an enriching matrix, as a standard to be measured against, or indeed, as a tradition to be challenged'.¹⁴

Reflecting on the Archive's formation, Marita O'Hare wrote:

I am reminded of Virginia Woolf's essay on women and fiction entitled "A Room of One's Own," which was published in 1929. One passage, in particular, comes to mind: one could not go to the map and say Columbus discovered America and Columbus was a woman; or take an apple and remark, Newton discovered the laws of gravitation and Newton was a woman; or look into the sky and say aeroplanes were invented by women. There is no mark on the wall to measure the precise height of women.¹⁵

Why have women's accomplishments so often been omitted from architectural history, and how can we correct the record? These are the questions that spurred the architectural historian and Bulgarian constructivist architect Milka Bliznikov (1927–2010), who immigrated to the United States in 1961, to found the International Archive of Women in Architecture (IAWA) in 1984. 'Established as a joint programme of the College of Architecture and Urban Studies and the University Libraries at Virginia Tech',¹⁶ this extraordinary archive is still the only one of its kind in the world.

Finding a Way to 'Flush Out' Hidden Names and Projects in Archival Labyrinths

Excluding the exceptional case of the IAWA, identifying archives of women designers currently requires tackling the preservative fragmentation resulting in the fragmentation of institutional power at various territorial levels that occurred in the last decades of the twentieth century. At that time, in parallel with the widening of the geography of sources, private and public bodies with some degree of autonomy started to appear.

7 The Architecture archive also preserves the photographic collection of the Finnish Architecture Association founded in 1949.

8 The ArkDes collection has 500 Swedish architects' fonds (see: "Library and collections," ArkDes, <https://arkdes.se/en/library-and-collections/>).

9 In the same year, the International Confederation of Architectural Museums (ICAM) was founded in Helsinki, which is part of the International Council of Museums (ICOM) and the International Council of Archives (ICA).

10 The list of fonds can be viewed at "Archiwebture," Cité de l'architecture & du patrimoine, <https://archiwebture.citedelarchitecture.fr/fonds?p=3>.

11 See Stefano Vitali, "Premessa," *Il potere degli archivi*, 8.

12 With reference to the topic of the establishing women's archives, for an illustration of concrete examples of what it means to 'flush out', 'elicit' or 'invent' archives, see Alessandra Contini, "Archivio per la memoria e la scrittura delle donne: Un cantiere aperto," *Archivio storico italiano* 594 (2002), 769–87 (in particular page 773).

13 Marita O'Hare, "Foreword," *Women in American Architecture: A Historic and Contemporary Perspective*, edited by Susan Baybrooke and Susan Davis (New York: Whitney Library of Design, 1984, 1st edition 1977 edited by Susana Torre), 6.

14 O'Hare, "Foreword," 7.

15 O'Hare, "Foreword," 6.

16 "Home," International Archive of Women in Architecture (or IAWA), <http://spec.lib.vt.edu/IAWA/> (accessed January 2018).

The phenomenon of archival 'Balkanisation',¹⁷ which was already recognised by Philippe Bélaval in 2001, has intensified in recent years as a result of the computerisation of documentary systems, the constant increase of institutions that preserve historical archives and the proliferation of independent archives. Archives of local public bodies, private institutions, industries and companies, families, and individual professionals are increasingly made available to the public. However, regulations regarding the access, selection and use of the most recent documentation are still problematic barriers.

At present, the identification of archives of architects, therefore, comes up against an ever-mazy archival labyrinth due to the complexity of both the contemporary documentation gathering processes and historical documentation management. Finding the archival fonds of professional women within this labyrinth is a difficult task for several reasons. The most evident of these is the fact that women's surnames often change with marriage. In fact, women often disappear in archives not because of small transcription errors –as in José Saramago's suggestive novel *All the Names* (New York: Harcourt Brace & Co, 1997)– but because when women married they took the surname of their spouses professionally as well as personally. Consequently, the reconstruction of professional women's family lives plays a much more relevant role, at times an essential one, than it does for their male colleagues when identifying archival fonds and documents.

The identification of the first women designers was, and remains, further hampered by the fact that even their first names are often not registered in full or are registered differently than their official names. In fact, it is customary for women to adopt the nickname used in private life in their professional life.¹⁸ Sometimes only the initials of their given name appear in both primary and secondary sources. Consider, for example, the extraordinary patent for hexagonal buildings (1886) by Harriet Morrison, whose married name was Irwin, which is ambiguously signed 'H.M. Irwin', as Madeleine B. Stern did not fail to note.¹⁹

The reason why the first American woman (from North Carolina) 'to patent an architectural invention for a dwelling' did not want to appear either by her first name or by her maiden name is unknown. In the text of the Patent Letter, the inventor avoids the use of personal pronouns or possessive

adjectives that could reveal her female identity. Perhaps Harriet Morrison Irwin feared that the United States Patent Office would not seriously take into account the invention of a woman in the construction industry? This assumption may have some basis in reality, as can be argued from the following quote:

The Patent Act of 1790 opened the door for anyone, male or female, to protect his or her invention with a patent. However, because in many states women could not legally own property independent of their husbands, many female inventors didn't bother to patent their new inventions. Mary Kies broke that pattern on May 5, 1809. She became the first woman to receive a U.S. patent for her method of weaving straw with silk.²⁰

Other, more subtle reasons underlying the difficulties of locating women's archives may be due to the role they played in the professions of civil engineer and architect, which for many years have been, and in part still are, traditionally male.

As for women architects, their professional activities often began or extended to fields akin to architecture, which did not, however, coincide with it. In the case of women who started working before the Second World War, it can be seen that in almost the whole of Europe they have consecrated their time, even more than their male counterparts, in the practice of interior design, set design, theatrical set design, furniture design, product design, decorative arts or graphic design. Therefore, considering how sometimes architectural archives do not care about these various activities, numerous other archives must be referred to in order to reconstruct all of an author's works.

Concerning product and furniture design, the manufacturers' archives will contain the archival fonds or documents of the women architects. These company archives are still essential in the study of women designers, even if they, as did the women architects, often worked in parallel in many other related fields.

In some countries, company archives disappeared along with the closure of companies caused by political-economic circumstances. One example is the breakup of Yugoslavia. These disappearances created documentary gaps that have had severe consequences for the history of an entire period of industrial design.

As for exhibitions and fairs or theatrical sets, the organising bodies may possess archival collections to be consulted. Consider, for example, the historical archives of prestigious institutions such as

17 On the 'Balkanisation' of archives, see Philippe Bélaval, "Archives et République," *Le Débat* 3, 115 (2001), 100–17.

18 Among others, consider: Gae (Gaetana) Aulenti; Lina (Achillina) Bo Bardi; Cini (Maria Cristina Mariani Dameno) Boeri; Margherita (Rita) Bravi Mori; Fede (Federica) Cheti; Susie (Susan) Cooper; Jela (Gabriela) Ferrario Mari; Liane (Juliana) Ficher Zimble; Anni (Anneliese Fleischmann) Albers; Lux (Luise) Guyer; Grete (Margarete) Lihotzky Schütte; Ko (Jakoba Helena) Mulder; Marie (Maria Cornelia) Kuyken; Gunta (Adelgunde) Stölzl.

19 The document quoted by Madeleine B. Stern is *Improvement in the Construction of Houses*, United States Patent Office, Letters Patent No. 94, 116, August 24, 1886. Madeleine B. Stern, "Three American Women First in Architecture: I Harriet Irwin 1869," in Madeleine Bettina Stern, *We the Women: Career Firsts of Nineteenth-Century America* (Lincoln: University of Nebraska Press, 1994, 1st ed. New York: Schulte, 1962), 58.

20 "Mary Kies Became the First Woman to Receive a U.S. Patent," America's Story from America's Library, http://www.americaslibrary.gov/jb/nation/jb_nation_maryk_1.html (accessed January 30, 2018).

the Milan Triennale,²¹ the Venice Biennale (Historical Archives of Contemporary Arts - ASAC),²² or the archives of important theatres.

Concerning interior design, one should consult the archive/fonds of the author of the building for which the women architect designed interiors and pieces of furniture and, if possible, the client's private archive.

The question of clients' archives is always a delicate and intricate issue. As seen in the contributions by Claudia Mattogno²³ and Rosa Tamborrino²⁴ to the MoMoWo Symposium, sometimes women clients played a co-authorial role in the complex design process ranging from conception to creation. Here are just some of the women who commissioned architectural works that have become icons of the Modern Movement: Dutch socialite Truus Schröder-Schräder (1889–1985), who commissioned the Rietveld Schröder House (G.Th. Rietveld, Utrecht, 1924); American art collector Sarah Stein (1870–1953), who together with her husband and her friend Gabrielle Colaco-Osorio de Monzie (1882–1961) commissioned Villa Stein (Le Corbusier, Garches, 1927); Chicago nephrologist Dr Edith Farnsworth, who commissioned the Farnsworth House (L. Mies van der Rohe, Plano, 1945–51); and Canadian architect and philanthropist Phyllis Barbara Bronfman Lambert (1927), Seagram's heiress and director of planning for the Seagram Building (L. Mies van der Rohe, New York, completed in 1958).

Another possibility is that some women architects/designers carried out significant theoretical activities or were feminist activists, with the result that their archives have merged into institutions of various kinds that have little to do with architecture. In this book, Raffaella Poletti presents

21 See "Archivio storico," La Triennale di Milano, <http://old.triennale.org/it/archivio-storico>. The Historical Archive has been digitised since 2005 and subsequently made accessible to the public. At the Milan Triennale, the Archive of Paola Lanzani and Piercarla Toscano Lanzani Racchelli collects the furnishing projects created from 1961 to 2006 for the most important Italian and foreign chains of shops and department stores, including La Rinascente, Croff and Upim.

22 The ASAC was inaugurated in 1928 with the name Historical Institute of Contemporary Art. With this establishment, the Biennale was equipped with a specific institute that was not only responsible for the conservation of documentary materials that were progressively passed to it by the different offices, but also for their increase with fonds and collections of other origins. "Historical Archives of Contemporary Arts (ASAC)," La Biennale di Venezia, <http://www.labiennale.org/it/asac> (accessed January 4, 2018).

23 See Claudia Mattogno, "Building Genealogies, Learning from Feminism: Women as Designers and Planners" (paper presented at MoMoWo Symposium 2018, Polytechnic of Turin, Italy, 13th-16th June, 2018), full paper is annexed to this chapter. The author also traces a synthetic picture of the main secondary sources to use to build genealogies: exhibition catalogues, anthologies, journals, autobiographies and critical essays.

24 See Rosa Tamborrino, "Collecting & Linking Creative Culture of Women: Women Designers and Women Clients for Another History" (paper presented at MoMoWo Symposium 2018, Polytechnic of Turin, Italy, 13th-16th June, 2018), the full paper is annexed to this chapter. This lecture addressed the critical issue of how the digital archive can be designed as a digital platform for a 'virtual re-composition' of women's involvement in the process of architectural transformation of the twentieth century as both women designers and clients.

the case of the archive of Marta Lonzi (1938–2008). The archive of architect Marza Lonzi, an exponent of Italian feminism, was received by the Elvira Badaracco Foundation (Women's Studies and Documentation) in 2017; since its establishment in 1994, this foundation has promoted studies on women's culture and women's social and political experience.²⁵

Resuming the matter of hidden names, it must be mentioned that in Europe, as elsewhere in the world, female designers practised with their husbands, fathers, brothers or male colleagues.

In most of these cases, at least until the 1960s, the design contribution of these women has been sought in archives and fonds that do not even bear their name. In fact, it was common practice for the professional firm to maintain or carry the name of a man for commercial reasons. For example, the Finnish architect Alvar Aalto has never included the name of his first wife Aino Marsio in the name of his studio, although he has repeatedly acknowledged her vital role in the design work. Not even his second wife and architect Elissa Kaisa Mäkinen, who took over the studio after her husband's death, saw her name as part of the Alvar Aalto brand.

These cases of professional and life coupling are still numerous today since the co-maintenance of marriage and partnership makes it easier for women to organise work and home life. Another reason can be traced to a reflection of the hierarchy of roles within the family and society in the organisation of the architect and the civil engineer's professional studio.

The story of the archive of Jennie Luise Bethune (née Blanchard) offers an interesting example. She was the first American woman to become a member of the American Institute of Architects in 1888; when Luise Blanchard Bethune died in 1913, she left her husband and studio partner, architect Robert Armor Bethune, 'all her interest or share' in her 'office furniture and office library, books and papers', and all her 'interest in all uncollected office accounts and claims'.²⁶ However, upon Robert's death in 1915, the archive passed to William L. Fuchs, the architect partner of Bethune's studio since 1890. He died in 1930, and 'according to Margaret D. Fuchs (daughter of William L. Fuchs) the office records "have been long since been disposed of".²⁷

The names of women designers and their works are also hidden in the archives of public institutions' personnel. In fact, it was common for women architects or civil engineers to hold design positions in public administrations after having practised the profession as freelancers.

Different motivations drove women, including women pioneers, to become public officials within

25 See Raffaella Poletti, "The Marta Lonzi Archive: Subjectivity in the Creative Process" (paper presented at the MoMoWo Symposium 2018, Polytechnic of Turin, Italy, 13th-16th June, 2018), the full paper is annexed to this chapter.

26 Madeleine Bettina Stern, "Three American Women First in Architecture: II Louise Bethune 1881," *We the Women*, 66.

27 Stern, "Three American Women First in Architecture," note on sources, 324.

their various historical-geographical contexts, most often because, for them, working in the public building sectors –from educational buildings to social housing– assured the stability that better suited their family duties. Therefore, the archives of public institutions, including state or national archives, can be of great help in studying women's contributions to construction.

The recent research by Vladana Putnik Prica at the archives of the Ministry of Civil Engineering of Serbia and those of Alexandra Alegre, Maria Becherel and Ana Fernandes through the documents of the Department of Construction for Technical and Secondary Education of the Portuguese Ministry of Public Works and Communications remain a clear demonstration of this.²⁸

Women can be officially recognised for their authorship of the works they designed and built from the staff files (which are not always available for reasons of privacy). For a long time, it was customary for only executive staff, almost always men, to sign the works.

One example I encountered in my research is that of Ada Bursi. She was an architect of the Municipality of Turin who designed houses and schools from the late 1940's. Only after twenty years of work, a year before his retirement, was Bursi authorised to sign one of her projects. Her signature does not appear in the drawings for the nursery school Piccolo Torino; nevertheless, documents from her folder at the Historical Archives of the Municipality of Turin demonstrated her authorship.²⁹

In the case of buildings that are still under public ownership, the search for original projects is hampered by the documents being in current archives, which are not accessible to the public. Thus, finding original documents related to recent buildings as well as buildings currently in use is not always possible.

The identification of sources for historical research on the cultural legacy of women designers is further complicated when considering the typological variety of documents that pass through and feature the contemporary age. In addition to the archives, which have already been mentioned, photographic, film, television and radio archives have relevance for studying the new sources entering the historiographic scene.

Old and New Sources for a New Historical Narrative: A Specificity of Contemporary Historiography

Since the last decades of the twenty-first century, contemporary history has seen the emergence of its own specificity related to the quantitative and typological aspects of its sources. Censuses, reorganisations, inventories, publications (digital and otherwise) platforms and websites have progressively elicited and introduced into the network of historical culture a large number of documents that are characterised by as many typological varieties.³⁰

A distinctive feature of contemporary historiography is that it is increasingly faced with sources other than those used in studies focusing on other historical periods; namely, sources that were not considered in the past or did not exist, such as photographs, films, audio-visual materials, audio recordings, websites and digital platforms.

The invention and growing diffusion of new technologies for the reproduction and storage of images and sounds has allowed designers to expand the types of documents produced –photographs, films, videos, sound recordings, 3D digital modelling³¹– to create, communicate and document not only architectural and design works but also the professional and life experience of their creators. Songwriters, directors, authors of television and radio programmes, journalists, historians and critics of architecture and design have in turn produced just as many documents in which the built environment and its creators have been presented and narrated from multiple points of view.

Beyond the "Visible Veil": Still and Moving Images

Designers' use of photography in the various phases of the design process and construction process beyond the presentation of their outcome has progressively extended over time, due in part to the communicative immediacy of photographic images,³² so much so that in our society of communication, photographic images (mostly digital) have largely replaced written text. With the extension of the use of photography and its derivatives, the amount of information conveyed with written text or with traditional drawing has progressively decreased.

From the Modern Movement on, which aimed to be international, photography has begun to impose

28 See the full papers presented at the MoMoWo Symposium 2018 (Polytechnic of Turin, Italy, 13th–16th June 2018) annexed to this chapter: Vladana Putnik Prica, "The Role of Female Architects in Designing Schools in Belgrade (1918–1941)"; Alexandra Alegre, Maria Becherel and Ana Fernandes, "The Design of Educational Buildings in Portugal: A Feminine Contribution in the Sixties."

29 Caterina Franchini, "Women Pioneers in Civil Engineering and Architecture in Italy: Emma Strada and Ada Bursi," in *MoMoWo: Women Designers*, 93–100, note 68, <https://doi.org/10.3986/wocrea/1/momowo/1.04>. Ada Bursi's archive was 'invisible' since it was non-inventoried and just very recently it has appeared in the records of the State Archive of Turin, thus allowing future studies.

30 See Rosiello, "Archivi, archivisti, storici," *Il potere degli archivi*, 17.

31 Regarding the methods that different generations of architects have for dealing with digital tools in their design process, see full paper presented at the MoMoWo Symposium 2018 (Polytechnic of Turin, Italy, 13th–16th June 2018) annexed to this chapter: Teresa Sapey, *Io Donna Torinese, Falsa and Cortese*.

32 In general, for the history of architectural photography, see Giovanni Fanelli and Barbara Mazza, *Storia della fotografia di architettura* (Rome-Bari: Laterza, 2009).

itself as a means of representation and a design communication tool, as it can overcome the linguistic and cultural barriers of written text effectively. In fact, many designers of the Modern Movement were also the photographers of their works or used photographic language as their critical adjunct, as is clear in the photomontages of the pioneer of industrial design Marianne Brandt (née Liebe, 1893–1983)³³ or the role played by the photographer and story-teller Lucia Mohly (née Schulz, 1894–1989) in communicating the vision of the Modern advocated by the Bauhaus school.

A photograph taken by a designer of her/his work is highly subjective, thus, if it is properly analysed, these photographs can lead the scholar beyond the "visible veil," contributing to unveiling the author's poetics.³⁴ By analysing the photographic document, the scholar will be able to decode the interpretative elements that underlie the purposes of the production of the image itself.

More generally, like other sources, photographic documents should never be considered objective, in spite of their alleged impartiality related to their technical nature and the precision in the representation of the object image.³⁵ Architectural or product design photography has revealed a paradox in 'the use of a system of representation of physical subjects to create images and non-existent object: photographic realism at the service of the unreal'.³⁶ One must bear in mind the intrinsic non-objectivity of all sources of visual communication, regardless of whether they are still or moving images. These sources have to be used with great caution in historical investigations, taking into account that they are vulnerable to manipulation by all, including subjects other than their original author. Nevertheless, it is also true that when a manipulated, retouched and distorted image becomes famous and is part of the collective imagination, it becomes another truth.³⁷ When these images are historically and critically interpreted, they also reveal perceptions and receptions that contribute to enriching the historical vision.

Films can be another highly effective source for constructing new narratives with widely varying intentions. A film can be analysed in order to investigate the role of the architect in society or the common perception of Modern architecture in certain periods and places where the film is produced and/or set. This type of investigation is also applicable to the role of the woman designer,

as demonstrated by the original work of Adam Nadolny. This scholar analysed the figure of the woman architect in two Polish films of the 1960s, which he selected after browsing the *Filipolski* online database.³⁸

Further research paths can be carried out from the film's location in order to understand how a specific architectural work or urban space in an 'imagined time' becomes a carrier of different messages than those for which they were conceived.³⁹ In fact, film reflects the perceptions and interpretations of directors, screenwriters, directors of photography and all the other operators who have in turn drawn on their own repertoire of sources. This repertoire of sources, which is almost always different from that of the designer or historian, can echo the ideological orientations, chronicles and protests of an era. An emblematic example is the famous fictional film about corruption and building speculation in Italy in the 1960s, *Le mani sulla città* (*Hands on the city*, Italy, 1963). In this film, the leftist movie director Francesco Rosi chose to set the headquarters of the main character –the builder and city councillor in the ranks of the rightist Edoardo Nottola– in the penthouse of the highly criticised Società Cattolica di Assicurazioni skyscraper in Naples, which was built by architect Stefania Filo Speciale.

The documentary films are another 'new source' to which gender scholars pay attention. As part of the Women's Creativity since the Modern Movement (MoMoWo) project, at the 2nd Workshop (3th-5th October 2016, Ljubljana at the Research Centre of the Slovenian Academy of Sciences and Arts), the Dutch documentary film of the 1960s "*Een nieuw dorp op nieuw land*" by the realist-modernist director Louis van Gasteren was shown and discussed. In this 25-minute film on the construction of the new village of Nagele (1958–63), the two women architects Lotte Stam-Beese and Mien Ruys appear for only a few seconds, showing how he still intentionally exalted 'male architectural heroism'.⁴⁰

Regardless of its genre, a film should be the subject of a critical analysis that attempts to unveil how reality and fiction are combined, which narrative modules were used, and what message they wanted to communicate. For this purpose, it may also be helpful to analyse documentary materials

33 See Elisabeth Otto, *Bauhaus-Archiv and Museum für Gestaltung* (Berlin), *Tempo, Tempo! Bauhaus-Fotomontagen von Marianne Brandt* (Berlin: Jovis, 2005).

34 For the language of photography, see Roland Barthes, *La camera chiara: nota sulla fotografia* (Turin: Einaudi, 1980).

35 See Adolfo Mignemi, *Lo sguardo e l'immagine. La fotografia come documento storico* (Turin: Bollati Boringhieri, 2003).

36 Paolo Brandinelli, "Il documento fotografico d'architettura: dal dibattito sull'oggettività all'autenticità inattestabile," in *Gli Archivi per la storia dell'architettura: atti del convegno internazionale di studi dell'architettura* (Reggio Emilia, 4th-8th October 1993), edited by Gino Badini (Rome: Ministry for Cultural Assets and Activities, Central Office for Archives, 1999), vol. I, 106.

37 See Peter Burke, *Testimoni oculari: il significato storico delle immagini* (Rome: Carocci, 2002), 18.

38 See the full paper presented at the MoMoWo Symposium 2018 (Polytechnic of Turin, Italy, 13th-16th June 2018) annexed to this chapter: Adam Nadolny, *Women Architects in Polish Feature Films of the Sixties*.

39 For this research path, the websites dedicated to the relationship between cinema and architecture are of interest; see, for example, *World Architects, Architecture and Film*, <https://www.world-architects.com/en/pages/film/architecture-film> (accessed February 3, 2018).

40 Marjan Groot, "The Makeable Landscape and Society. Gender-representation and the Male Architect as Post-war Hero in a Dutch Documentary," in *MoMoWo 2nd International Conference-Workshop: Women Designers, Architects and Engineers between 1946 and 1968*, edited by Helena Seražin, Caterina Franchini and Emilia Garda (Ljubljana: Založba ZRC, 2016), 28.

that show what happened before, during and after the film production.⁴¹

Although it certainly does not provide irrefutable evidence, film documentation can create new historical narratives in which possibilities and proof interact while also remaining distinct but consistently intertwined with other types of documents, each analysed with its specific methodology.

Contemporary historiography, including gender historiography, emphasises the typology and structure of sources beyond the traditional ones on which to construct historical narratives. However, it should be noted that new gender issues do not necessarily refer to new sources: they can also be based on new interpretations of well-known sources. Some of the sources which have long been left in the dark and have recently come to light include novels, or 'women's writings',⁴² and oral testimonies.

'Listening to Sources'. Gathering and Eliciting Oral Documents and Creating Audio Archives

Oral testimonies have existed for centuries but disappeared from historical studies; they began to appear again in the 1960s, gradually gaining importance among scholars of contemporary history.

The consideration that historians have given to oral sources has gone hand in hand with an interest of the curators in this type of source. Radio programmes have been recorded and preserved, and Oral History research centres have been established at universities. In addition, audio-visual libraries have been created within libraries that have gradually started to include fonds and develop projects on architecture and design and their protagonists.

The Oral History Program of the Archives of American Art at the Smithsonian Institution is one of the oldest and most authoritative collections of oral testimonies, dating back to 1958. Modelled after the Columbia University Center for Oral History, the Archives' Oral History Program includes the themes 'Architecture & Design' and 'Women'.⁴³ Among the projects of this programme, the Nanette L. Laitman Documentation Project for Craft and Decorative Arts in America is of particular

interest. From 2000 to 2012, the project covered the recording and transcription of 235 oral history interviews with key figures in American craft, including many craftswomen.⁴⁴

Turning to architects, since 1983 the Chicago Architects Oral History Project (CAOHP) has documented architects' contributions to Chicago during the twentieth century. The CAOHP was established under the auspices of the Art Institute's Department of Architecture to record the life experiences of architects, including women, who shaped the physical environment in Chicago from the early 1900s to the present day.⁴⁵ Similarly, in 1995 the British Library established the National Life Stories Architects' Lives project to document the life and work of British architects and their associates over the course of the twentieth and twenty-first centuries. Numerous interviews (1264) are available from the British Library Sounds, which also includes a section on pioneering women in different fields.⁴⁶

Oral sources have been and continue to be used to investigate the thoughts and actions of women. One of the reasons for the use of these sources is that women, even those who worked in the building or decorative arts, left few written records. Sometimes no written records exist since they belonged to those categories of people who have long been marginalised from the centres of power. Aside from that, the main reason for resorting to oral sources is inherent in the research by contemporaries of an opposing or alternative historiographical practice that is interested in creating a story 'from below' to 'illustrate the socially invisible (e.g., working women) or hear the unexpressed'.⁴⁷

In particular, gender studies pay considerable attention to oral testimonies with the aim of constructing alternatives to the traditional narratives that are also able to restore emotional aspects and attract the interest of a wider audience than the small one composed mainly of expert scholars.

An emblematic example of the attempt to build 'experimental (hi)stories of architectural practice'

41 See Luciana Devoti (ed.), "La memoria del cinema: atti del convegno internazionale di studi, Torino, 28-31 Maggio 2003," in *Archivi per la storia: rivista dell'Associazione nazionale archivistica italiana*, XVII, 1-2 (Modena: Mucchi, 2004).

42 On 'women's writings', see the innovative census project focusing on the writings of women in the public and private archives of Tuscany established in 1998 (<http://www.archiviodistato.firenze.it/memoriadonne/>). Contini, "Archivio per la memoria e la scrittura delle donne," 769-87.

43 "About the Collections. Learn about the Archives' holdings and Oral History Program," Archives of American Art-Smithsonian Institution, 2018, <https://www.aaa.si.edu/collections/about-the-collections> (accessed January 10, 2018).

44 "The Nanette L. Laitman Documentation Project for Craft and Decorative Arts in America. About the Project," Archives of American Art-Smithsonian Institution, <https://www.aaa.si.edu/node/1120> (February 27, 2014; accessed January 10, 2018). In 2007 and 2009, a project was carried out focusing on women artists, art historians and curators who have had a lasting and significant influence on the American art world. See "Elizabeth Murray Oral History of Women in the Visual Arts Project," Archives of the American Art-Smithsonian Institution, <https://www.aaa.si.edu/inside-the-archives/elizabeth-murray-oral-history-of-women-the-visual-arts-project> (February 12, 2016; accessed January 10, 2018).

45 "Chicago Architects Oral History Project," The Art Institute of Chicago, <http://digital-libraries.saic.edu/cdm/landingpage/collection/caohp> (accessed January 10, 2018).

46 "National Life Stories: Architects' Lives," The British Library, <https://www.bl.uk/projects/national-life-stories-architects-lives> (October 5, 2017, accessed February 10, 2018). See "Pioneering-women," British Library Sounds Oral-history, <https://sounds.bl.uk/Oral-history/Pioneering-women> (accessed February 10, 2018).

47 Peter Burke, "Prologo: la nuova storia, passato e futuro," in *La storiografia contemporanea*, edited by Peter Bruke (Rome-Bari: Laterza, 1993), 17.

is the Voices of Experience project (VoE, www.voices-architecture.com). The project was initiated by Jude Barber and Suzanne Ewing and is carried out in collaboration with the Glasgow Women's Library. Since 2016, this project has been creating an audio archive of women's work experience in late twentieth-century construction design in Scotland, with the intention to steward disciplinary stories. As described by Suzanne Ewing in her abstract for the MoMoWo Symposium 2018:

[VoE] constructs a series of conversations between a highly experienced architect and a professional at the outset of her career ... The VoE project aims to deepen and extend methodological exploration of the archives of architecture, through the listening, editing and presenting of site-based conversations as audio-archives, transcripts and public conversations, offering a hybrid method for researching and communicating the practice-based and relational knowledge of architecture.⁴⁸

Another project that is similar to VoE is AA XX 100. Launched in 2017 to celebrate the centenary of women at the Architectural Association (AA) in London, Yasmin Shariff and her team work closely with the AA archivist, filming and recording oral histories with AA alumni, teachers and staff, men and women, past and present. So far they have conducted seven interviews: Joyce Taylor (née Wilson), Inette Austin-Smith (née Griessmann), Jean Symons (née Layton), Patricia Bullivant (née Bowden), Patricia Hepple, Eldred Evans and Su Rogers (née Brumwell).

The stories we are collecting are extraordinary not only for shedding light on the AA school in the 1940's, 50's, 60's and 70's (we are yet to cover the 80's, 90's and 00's), but equally the broader lives of women and men as architects during these periods in England. Though women were first admitted as students to the AA in 1917, they were a minority for many years afterwards. These women are part of a small handful who at that time went on to become architects and designers and practice in their field. They are pioneers.⁴⁹

These types of projects demonstrate that even when scholars address the issue of the contribution of women designers, they still find themselves 'eliciting' and 'constructing' new sources by conducting interviews in person. While converting the oral source into written text, they will have the opportunity to put more or less importance on elements such as context, facial expressions and gestures, all of which contribute to the interpretation of oral testimony.

More generally, as A. Portelli states:

[oral historians try to] convey the sense of fluidity, of unfinishedness, of an inexhaustible work in progress, which is inherent to the fascination and frustration of oral history – floating as

it does in time between the present and an ever-changing past, oscillating in the dialogue between the narrator and the interviewer, and melting and coalescing in the no-man's land from orality to writing and back.⁵⁰

As often happens, when the end-user of the oral source is the conductor of the interview, the relevance that she/he can give to the dialogic relationship between the interviewee-narrator and the interviewer and the comparison/confrontation between the two subjectivities will be bent to the interviewer's will. Therefore, as happens with other sources, the question is whether the final result is a real, plausible, false or almost-invented source originating from memory and the sensitivity of the people who on the one hand elicit the story and on the other who tell it. Therefore, as with other types of sources, even in the written history through oral sources, we must pay close attention to the producers, the objectives they want to achieve, the context in which they act, and other factors.⁵¹

Parallel to the European MoMoWo project, in the last few years, some female architects in various parts of the world have expressed the need to raise awareness about the current contribution of women to architecture by undertaking independent documentation and communication projects.

Following the well-known Pritzker committee controversy about Denise Scott Brown's prize⁵² that sparked a global debate on women in architecture in the winter of 2013, the Serbian architect Milena Zindović decided to undertake a web-based campaign on women's contributions to architecture in her country. Faced with the scarcity of archives to be studied, Milena Zindović and her other colleagues broadened the sphere of their actions. They systematically conducted and disseminated a series of 'interviews with successful female colleagues and young architects'.⁵³ These interviews were available in two languages, Serbian and English, on the research website *Women Architects of Novi Stad* (<http://wa-ns.com>), and they proved to be an excellent medium for attracting new audiences.

Sharing the same aim, during the three International Conference-Workshops (Leiden, 2015; Ljubljana, 2016; Oviedo, 2017), MoMoWo interviewed textile designer Christine van der Haak; architect and urban planner Ana María Fernández-Maldonado; design-engineer Males van Dullemen; architects Ninke Happel and Joke Vos and civil engineer Darinka Battelino. During the third Workshop, at the *Arquitectas en la profesión* roundtable (hosted by the Colegio Oficial de Arquitectos de Asturias),

48 See the full paper presented at the MoMoWo Symposium 2018 annexed to this chapter (Polytechnic of Turin, Italy, 13th-16th June 2018) by Suzanne Elwing, *Making (Hi)Stories of Women in Scottish Architecture*.

49 Hannah Durham, "To Listen: The AA XX 100 Oral History Programme," AA Conversations, <http://conversations.aaschool.ac.uk/hannah-durham/> (London: Architectural Association, March 10, 2015, accessed February 10, 2018).

50 Alessandro Portelli, "Oral History as Genre," in *Narrative and Genre: Contexts and Types of Communication*, edited by Mary Chamberlain and Paul Thompson (London: Routledge, 1998), 23.

51 On the use of oral sources see: Giovanni Contini and Alfredo Martini, *Verba manent, L'uso delle fonti orali per la storia contemporanea* (Rome: Nuova Italia Scientifica, 1993).

52 A public interview with Denise Scott Brown was conducted during the MoMoWo International Travelling Exhibition "MoMoWo. 100 Works, 100 Years, 100 Women" held on 22nd June 2017 at Delft Technical University.

53 See the full paper presented at the MoMoWo Symposium 2018 annexed to this chapter (Polytechnic of Turin, Italy, 13th-16th June 2018) by Milena Zindović, *Women in Architecture Initiative in Serbia: The Importance of Promoting Women's Work in Architecture*.

MoMoWo co-organiser Ana María Fernández García interviewed several women architects, including the doyen of the Official Association of Architects of Asturias, Sonia Puente Landázuri. Lastly, a talk-show has been organised at the opening of the MoMoWo Symposium (Turin 2018) for the same purpose. The women interviewed included the engineer and leader of the *Ingenio al Femminile* (Ingenious women) Ania López, councillor of the National Council of Engineers, Stardust Architects (Anca Cioarec and Brîndușa Tudor) and the architect-members of the association *La Voce delle Piante* (The voice of plants).

Oral sources have been shown to facilitate communication with the public, while the task of the sources' creation and chosen medium for their reproduction and dissemination –written, audio or video– requires facing the inherent limits of the oral source.

As usual, when writing history, individual documents of any kind can regain their meaningfulness only when interwoven with other sources, within an 'indistinct levelling'⁵⁴ created with the increase in documentary production and circulation. At present, scholars can increasingly create large aggregations and 'horizontally' interweave sources to build 'memories' and 'other identities' by using information and communication technologies (ICT). Especially in the last decade, ICT has contributed to emphasising the role of informational resources in social and cultural development, giving rise to unprecedented phenomena such as the accumulation of enormous masses of data that can be accessed, searched and quickly exchanged all around the globe.

Digital sources, Inventories and Online Censuses.

The MoMoWo Database on Women's Archives

In the intergalactic imperial archive, 'two hundred and fifty thousand years of the history of the empire are preserved; [in it] we could find the answers to questions we had not even considered'.⁵⁵ This digital archive depicted by Andreas Eschbach in *Die Haarteppichknüfer: Roman (The carpet makers)* systematically and faithfully preserves every single trace of the past and those who lived it. We like to imagine that this archive also contains all the documents produced by the women designers of the empire. One could imagine that by querying the archive, interwoven data and documents would be systematically displayed on our monitor.

In the real world, digital archives have currently proved to be useful for collecting documentation that is as heterogeneous as it is disseminated in ever-expanding galaxies of archives. However, several

54 Rosiello, "Archivi, archivisti, storici," 37.

55 Andreas Eschbach, *Miliardi di tappeti e di capelli* (Rome: Fantucci, 2006, ed. or. 1995), 152, 258.

issues remain unresolved, including how to design digital platforms capable of providing virtual rearrangements of complex interwoven information and constellations of documents.⁵⁶ This issue is at the centre of the thought and experimentation that has been carried out by the Polytechnic of Turin (Polito) since 2014 for the design and implementation of the Database on Women's Archives, whose results were presented at the MoMoWo Symposium (Turin, 2018).⁵⁷

The purpose of the database is to conduct a continuous mapping of archives and archival fonds of European and non-European women designers who have worked in Europe from 1918 to 2018. The goal is to offer scholars an open access tool that is available online (<http://www.momowo.eu/database-webgis/>) and useful for creating new narratives of architecture, construction and contemporary design.

In its various implementation phases, the geo-referenced database has progressively increased the visibility of the neglected and forgotten works of female authors in order to favour their knowledge, protection, conservation, restoration and enhancement. Pursuing this objective, a spontaneous collaboration between MoMoWo and the open source catalogue Architectuul –a worldwide architecture community– was created for the creation of the *Pioneer Architects* campaign *Women in Architecture*.⁵⁸

Additionally, in 2018 MoMoWo Polito (C. Franchini and E. Garda) cooperated with the Italian non-profit association of the International Working Party for the Documentation and Conservation of buildings, sites and districts of the Modern Movement (Do.Co.Mo.Mo._Italia) by creating the thematic itinerary "Cherchez la femme" (with M.T. Feraboli for Lombardy), which highlights the variety of architecture built in Italy by women architects. This itinerary is part of a project to promote Italian architecture of the second half of the twentieth century, entrusted by the Ministry of Cultural Heritage and Activities and Tourism (MiBACT) to the Sapienza University of Rome in collaboration with Do.Co.Mo.Mo._Italia.

56 Regarding digital archives, Rosa Tamborrino's contribution "Collecting & Connecting the Creative Culture of Women as Cultural Heritage: Norah Geddes, Kate Cranston and a new digital archive concept for an alternative history" (paper presented at the MoMoWo Symposium, Polytechnic of Turin, Italy, 13th-16th June 2018 and annexed to this chapter) places this issue at the centre of the debate: how digital archives can be conceived as a digital platform for a virtual historical re-composition based on key interpretations focused on women in architecture.

57 Enrica Maria Bodrato, Francesco Fiermonte, Caterina Franchini and Emilia Garda, "The MoMoWo Database: Searching for 'Kamino': Mapping to Build and Share Knowledge" (panel presented at the MoMoWo Symposium: International Conference Women's Creativity since the Modern Movement (1918–2018): Toward a New Perception and Reception, Polytechnic of Turin, Lingotto Campus, Turin, Italy, 13th-16th June 2018). C. Franchini was responsible for scientific coordination and data research; E.M. Bodrato assessed the consistency of the fonds and prepared the data entry; F. Fiermonte saw to the technical implementation and data entry; E. Garda supervised the preparation phases.

58 Regarding Architectuul, see Boštjan Bugarič, "Pioneer Architects: The Open Source Catalogue Architectuul," (paper presented at the MoMoWo Symposium, Polytechnic of Turin, Italy, 13th-16th June 2018), full paper is annexed to this chapter.

Within the MoMoWo database, my research to date on the identification of archives and archival fonds was combined with the twofold analysis of women designers and their works. To carry out this research, I have used data from other activities related to the MoMoWo project (travelling exhibition, workshops, cultural itineraries), as well as censuses and repertoires of works and designers available on the web. Moreover, the digitalisation campaigns of the last few decades have made inventories and digital documents of project archives available online, which are proving to be useful research tools.

The digital sources I analysed have turned out to be somewhat 'volatile', unstable and subject to rapid obsolescence. Platforms and databases appear and disappear online every day from the web; their contents are updated continuously and are growing. Therefore, I identified and selected the data while also considering its degree of 'stability'. In regard to monitoring these changes, the MoMoWo Polito team concluded that they could only be managed with the creation of a 'permanent monitoring unit' to implement in future research projects.

The systematic analyses carried out on national censuses, inventories and various kinds of portals suggest that women designers, their works and the archival documents they have produced are still underrepresented. This is one of the reasons why the tangible and intangible cultural legacy of women continues to present difficulties in being studied, recognised, protected and valued.

Consider, for example, that the Do.Co.Mo.Mo. Virtual International Exhibition (MoMove [http://exhibition.docomomo.com./](http://exhibition.docomomo.com/)) in 2016 only included 39 European women out of a total of 929 authors.⁵⁹

The documentary gap is evidenced by the "National Census of Italian architecture of the second half of the twentieth century," which is currently managed by the Directorate General for Contemporary Art and Architecture and Urban Peripheries (DGAAP) of MiBACT. In February 2018, the census available online had less than 200 women's works out of a total of 3057 architectural works throughout Italy that were identified since 2000.

In the national census, the percentage of the works of women to be protected or brought to the attention of authorities and designers does not even reach 10%. The number of works mapped varies considerably from region to region depending on the state of progress of local censuses. In only four out of 17 regions, the percentage of works designed by women architects individually or in teams exceeded 10%. The highest percentage was found in Liguria (16%, 10 works), followed by Marche (13%, 2 works), Molise (12%, 12 works) and Abruzzo (11%, 15 works). Lombardy contained the most, with 59 works of women counted in the census and available online, yet the percentage is only 8%.⁶⁰

The data available on the national platform online is variable because it is continuously updated and only partially reflects the progress of the censuses in each region. Sometimes the websites of the regional *Soprintendenze* (superintendent bodies) of cultural heritage show more complete and current local census data that have not yet been incorporated within the national platform. This is the case for the Lombardy Region, which has expanded its campaign from 2013 to 2015 and contained approximately 70 works by women designers (<http://www.lombardiabeniculturali.it/architetture900/>). As highlighted by Maria Teresa Feraboli, who participated in this last regional census, the presence of women's works begins to become numerically significant when also considering so-called 'minor' architecture that is somehow related to the local context and meaningful for the local history.⁶¹

At the national level, excluding the best-known Italian or foreign women architects,⁶² around half appear to be engaged in employment relationships or even occasional collaborations, while the other half owns individual or associated studios. Concerning the latter case, associated studios of family members are the majority. In the national census, there are only 22 works signed exclusively by a woman.

The documents of most of the architecture included in the census are in designers' private archives or in archival fonds bearing the name of the male architect with whom the woman has also worked as co-author. For instance, the documents of Carla Federspiel are in the *Fondo Marco Zanuso* at the Fondazione Archivio del Moderno (Modern Archive Foundation) of the University of Italian

59 Less than half of these came from countries in the EU today. From Austria Helene Koller-Buchwieser (1912–2008) and Margarete Schütte-Lihotzky (1897–2000); from Denmark Railii Paatelainen (b. 1926) and Karen Clemmensen (1917–2001); from Finland Railii Paatelainen (b. 1926); from Germany Herta-Maria Witzemann (1918–99), Hertha Hammerbacher (1900–85) and Ursulina Schüler-Witte (b. 1933); from Greece Souzana Antonakaki (b. 1935), Eleni Goussi-Dessylla (b. 1938), Seva Karakosta (b. 1938) and Elli Vassilikioti (b. 1923); from Italy Franca Helg; from the Netherlands Mien Ruys; from Scotland Wendy Corrigan.

The results of the research on the presence of women's works in the publications of Do.Co.Mo.Mo_International and in the Virtual Exhibition MoMove were presented by Caterina Franchini at "MoMoWo: Women and Modern Movement Heritage" (Round Table with Emilia Garda and Helena Souto at the 14th Docomomo International Conference Adaptive Reuse: The Modern Movement toward the Future, Calouste Gulbenkian Foundation, Lisbon, September 7, 2016).

60 The data refers to February 2018 and is the result of the browsing carried out by Caterina Franchini on the website "Architetture del Secondo 900," Direzione Generale Arte e Architettura contemporanea e Periferie urbane - DGAAP, <http://architetturcontemporanee.beniculturali.it/architetture/index.php> (accessed January - February 2018).

61 See Maria Teresa Feraboli, "Female Design and Architectural Archives in Italy: A Preliminary Investigation among Online Search Tools" annexed to this chapter (paper presented at the MoMoWo Symposium: International Conference Women's Creativity since the Modern Movement (1918-2018): Toward a New Perception and Reception, Polytechnic of Turin, Lingotto Campus, Turin, Italy, 13th-16th June 2018).

62 Luisa Aiani Parisi, Gae Aulenti, Antonia Astori, Anna Castelli Ferrieri, Carla Federspiel, Afra Bianchin, Cini Boeri, Margherita Bravi, Luisa Castiglioni, Maria Antonietta Cester Toso, Odile Decq, Terry Dwan, Giuliana Genta, Johanna Grawunder, Grafton Architects, Liliana Grassi, Zaha Hadid, Franca Helg, Enrica Invernizzi, Doriana Mandrelli Fuksas, Piera Ricci Menichetti, Franca Stagi, Gigetta Tamaro, Laura Thermes, Egle Maria Trincanato, Patricia Viel, Nanda Vigo.

Switzerland in Mendrisio; the documents of Anna Castelli Ferrieri are in the *Fondo Ignazio Gardella*, and those of Egle Maria Trincanato are in the *Fondo Samonà*, which are both at the Centro Studi Archivio Comunicazione (Communication Archive Study Centre, CSAC) of the University of Parma. An archival fond of Egle Maria Trincanato is also at the archives of the Venice University Institute of Architecture (IUAV).

Among all the women architects whose works are in the online national census, only four of these have an archive or archival fond listed in their name in an institution. The Franca Stagi Archive is conserved at the 'Luigi Poletti' Civic Art Library in Modena; the Giuliana Genta Archive is at the Central State Archives in Rome; the Franco Albini and Franca Helg Archives are at the Franco Albini Foundation in Milan and the *Fondo Liliana Grassi* is at the Historical Archives of the Polytechnic of Milan. The historical archives of schools, universities or polytechnics preserve valuable archival fonds for ongoing studies,⁶³ but their consultation is often subject to privacy restrictions. Even when these archives are in digital form, they seldom have open access for the same reason.

It has been possible to find some archives/fonds/collections that are in public institutions through the Unified Information System for the Archival Superintendent bodies (SIUSA) and the online publications of the Archives of Architecture Association AAA/Italia. The research has also been carried out using online catalogues of the archives of the Museums of Architecture and Design in Europe and in the world as well as various platforms on women.⁶⁴

As it is extraordinary and unique, not merely because it specialises in women in architecture but also because it represents around 40 countries in the world, the International Archive of Women in Architecture (IAWA) is a valuable source for growing the MoMoWo Database. Browsing the Guide to the IAWA Collections⁶⁵ revealed that most of the collections are of European architects, namely 52.28% (184 out of 352), while only 37.5% (132) are from North American women architects.

The IAWA Biographical Database will allow for tracking the women designers' fonds conserved in other archives in order to continue the mapping. For this purpose, some websites specifically dedicated to making the work of women in architecture visible are also useful, such as the New

Zealand website 'Architecture + Women-NZ' (<http://www.architecturewomen.org.nz/>), which has provided a current database on women in architecture associated with New Zealand since 2011.⁶⁶ This website can be used to identify the names of European women architects who have worked in New Zealand and the New Zealanders who have worked in Europe, then to search for their archives.

The archives of professional associations of architects and engineers as well as those of women associations can also offer useful clues for finding the project archives of female professionals. Consider, for example, the recent surveys carried out by trade magazines such as the Women in Architecture Survey by the British magazine *The Architectural Journal*, which gathers data on the women enrolled at the Royal Institute of British Architects (RIBA).

The aim of the MoMoWo Database on Women's Archives is to help the scholar community to share and pursue the recognition of women's contributions that have been omitted or forgotten by the histories of architecture, urban planning, landscape and design. The main aspiration is to recover the lagging knowledge in order to fill a cultural gap, just as has occurred for other disciplines that have been attempting a 'historical reparation' in past decades through the recovery of gender memory that has been affected by long-term 'documentary amnesia'.⁶⁷

Information and communication technologies (ICT) make it possible to collect data, select and share it, thus increasing access to sources. However, as revealed by the research conducted, the visibility given to women's works remains quantitatively limited and the path to be taken requires carrying out biographical investigations to use as a starting point for finding these women's project archives. The identification of 'pulverised' archival fonds and documents in the 'nebula' of archival institutions and the discovery of personal archives are essential in order to progress with both the construction of individual case histories and the creation of quantitative histories.

Individual Case Histories for Intersectional Identities. Personal Archives: Paper and Digital Mirrors

The research case studies presented at the three MoMoWo International Conferences-Workshops (Leiden, 2015; Ljubljana, 2016; Oviedo 2017) have shown that in the present state of women's studies in architecture and design, biographical research is still necessary to bring to the forefront

⁶⁶ In recent years, this database has often been accompanied by a series of quantitative and qualitative surveys, such as different remunerations between sexes and difficulties in reconciling family life and work.

⁶⁷ See Maria Bacchi, "Colmare un vuoto e costruire una memoria," in *La memoria e l'archivio: Per una storia della presenza femminile a Mantova in età contemporanea: Atti del seminario Mantova, 28-29 Ottobre 2000*, edited by Gruppo 7 Donne per la pace, (Mantua: Gianluigi Arcari, 2001), 17-28.

⁶³ See Margherita Bongiovanni, "Women Architects and Engineers from the Polytechnic of Turin Archives" (lecture presented at the MoMoWo Symposium: International Conference Women's Creativity since the Modern Movement (1918-2018): Toward a New Perception and Reception, Polytechnic of Turin, Lingotto Campus, Turin, Italy, 13th-16th June 2018).

⁶⁴ Among others: National Technical Museum of Prague, Architecture Collections of the Nasjonalmuseet of Oslo, National Museum of Ireland Archive, Museo Nazionale delle Arti del XXI secolo - MAXXI of Rome, the website La Scienza a due Voci (<http://scienzaa2voci.unibo.it/>).

⁶⁵ See "Guide to the IAWA Collections," International Archive of Women in Architecture (or IAWA), <https://spec.lib.vt.edu/IAWA/guide.html>, (accessed January-February 2018); "IAWA Biographical Database," Virginia Teach, <https://iawadb.lib.vt.edu/>, (accessed January-February 2018).

works, professional, family and private events and gender issues that reveal professional stories and practices.

Biographies are magnifying lenses through which to select specific data on which to build transnational interpretative scenarios based on 'intersectional identities' that can give the history of architecture/design its gender balance.

The interest in applying a transnational and 'intersectional' approach in the field of architecture has recently been confirmed by Lori Brown's and Karen Burns' project for the creation of *The Bloomsbury Global Encyclopedia of Women in Architecture 1960–2015*. By the creation of a collection of 1200 biographies of women architects, educators, activists and theorists, the project is intended to be a 'study of women's agency in shaping the ideas, production, and reception of the recently built environment [and as a whole it aims to] provide key terms for contemporary feminist architectural history'.⁶⁸

Personal archives are one of the primary sources of individual case histories. Aside from a few exceptions, personal archives or archival fonds have been a historically significant phenomenon since the nineteenth century. Their creation coincided with the rise of the principle of individuality that featured first the romantic culture and then liberal culture, along with the spread of the mononuclear family. It is in this process of change that women slowly began to free themselves from their condition of marginality.

Until the second half of the twentieth century, scholars primarily turned to personal archives to document the activity of eminent figures in politics, science and the arts. Only since the second half of the twentieth century, as the interest in historiography for the private sphere of individuals has grown, historians have begun to consider personal archives in their entirety as an exhaustive representation of the existential situation of their creator.⁶⁹ At the same time, the conservative strategies tended to increasingly identify personal documents. However, it was only with the enlargement and democratisation of the spectrum of social categories represented in archival institutions that even women's documents began to be preserved.

Only in this century, due to the spread of globalisation, the enhancement of individual and local aspects has assumed increasing importance in research. In fact, these aspects are considered

more gratifying or reliable compared to the dangers of uprooting connected to the phenomena of cultural massification.⁷⁰

The creation of personal archives has been the result of initiatives undertaken by family members, spiritual heirs or conservation institutions after the death of their author/creator. Inevitably, these archives have also suffered from the relationships of power and gender hierarchies present in the family, social, professional and institutional dynamics.

Traditionally, in families, the memory transfer of men's works was entrusted to women, to the mothers, sisters, wives or daughters, but such a transfer has almost never happened in the opposite direction. In contrast, the preservation and transfer of memory in the institutions remained mainly entrusted to male scholars/curators who were seen as the only legitimate persons.

During the twentieth century, the awareness of a personal archive's ability to contribute to constructing the memory of oneself and one's own existential/professional path for the benefit of oneself, one's material or spiritual heirs, of one's own discipline, or more generally of posterity has increased. This awareness has grown among the members of different social categories, including people from art, culture and liberal professions, but oddly enough, to a lesser extent among women. In fact, as already observed for the female writers, the female architects/designers also have 'less aptitude to document their existence and their role in society'.⁷¹

One of the specificities of historical research on the work of women in general, particularly professional women in construction and design, lies in the difficulty of finding their professional/personal archives.

Black Box versus Magic Box: The Woman Designer's Archive

The various research experiences presented during the three MoMoWo Workshops have shown that, in most cases, professional archives of women were not created with the intention of being passed down (unintentional archives), and that is why they have often been destroyed or lost.

When scholars succeed in tracking down an unintentional archive, they almost certainly will face uninventoried documents and begin to categorise them according to their interpretative criteria. As a result, the original nature of the archive will change reflecting the construction of the thought of

⁶⁸ Lori Brown and Karen Burns, *Intersectional and Transnational Feminist Histories: The Logic behind the Bloomsbury Global Encyclopedia of Women in Architecture 1960–2015 (forthcoming 2021)*, full paper presented at the MoMoWo Symposium 2018 (Polytechnic of Turin, Italy, 13th–16th June 2018), annexed to this chapter.

⁶⁹ Regarding personal archives, see Giulia Barrera, "Gli archivi di persone," *Storia d'Italia nel secolo ventesimo: Strumenti e fonti*, Vol. 3: *Le fonti documentarie*, edited by Istituto nazionale per la storia del movimento di liberazione in Italia and Claudio Pavone (Rome: Direzione Generale per i Beni e le Attività culturali, Dipartimento per i beni archivistici; Direzione generale degli archivi, 2006), 617.

⁷⁰ See Remo Bodei, *Se la storia ha un senso* (Bergamo: Moretti & Vitali, 1997), 79.

⁷¹ Linda Giuva, "Le carte di una vita: Suggestioni archivistiche dai documenti di Alba de Céspedes," in *La memoria e l'archivio*, 44.

those who at that time reorganised collections to create their narrative. Discovered and inventoried by Ceylan İrem Gençer and Işıl Çokuğraş since 2015, the archive of one of the first women architects in Turkey, Mualla Eyüboğlu-Anhegger, is an inspiring example for our topic.⁷²

Women designers tend to avoid creating their archive to be passed down for several possible reasons.

Preserving many different documents, including sketches, notes, drawings, three-dimensional models, metric calculations, technical reports, photographs, as well as correspondence with clients, workers or suppliers, that have lost their original function in a professional studio is a burdensome task. Beyond the terms imposed on professionals by law, tackling such a task implies being aware of the value of the professional experience gained and of its value and the value that one's works could have for future generations.

As Linda Giuva states regarding studying the writer Alba de Céspedes' home archive, 'Remembering and being remembered is a deliberate project, it is the result of self-esteem and affection of oneself',⁷³ and perhaps it is also a manifestation of confidence in the future generations' ability to change the world for the better. The underestimation by women designers of the importance of their own work can be a consequence of the marginality that women have experienced in society as well as the role they played in male-dominated professions.

When they are found, archives of women designers can offer a many-sided, even emotional, perception of their producer and her work. For example, the presence/absence or order/disorder of some documents can reveal the different relevance a woman professional ascribed to the various phases of her life, to the works accomplished, or show the repercussions of professional, family and social relationships.⁷⁴ In fact, a designer's archive typically preserves technical materials as well as sketches, notes, memos, reflections, publications and objects that have been significant in the expression of the creative process of the designer.

72 The archive of Mualla Eyüboğlu-Anhegger is one of the rare archives of architects preserved in Turkey today. These include the professional archive of Altuğ Çinici and Behruz Çinici, which can be consulted at the Salt Research Centre (Istanbul) since 2015. See the full papers presented at the MoMoWo Symposium 2018 annexed to this chapter (Polytechnic of Turin, 13th-16th June 2018): Ceylan İrem Gençer and Işıl Çokuğraş, "Sophisticated Professional Life and Archive of Mualla Eyüboğlu-Anhegger." On the work of architect Altuğ Çinici, see Zeynep İren Kuregibuyuk, "Women as Design Partners: First Founded Husband-and-Wife Partnership in Modern Turkish Architecture."

73 Giuva, *Le carte di una vita*, 44. Alba Carla Lauritai de Céspedes y Bertini (Rome, 1911-Paris, 1997), writer, poet and Italian partisan, traced and retraced maps of her home to be able to find the documents she had hidden in every piece of furniture, from the kitchen to the bathroom.

74 These considerations also apply to the archives of other women. On the archive of the historian Franca Pieroni Bortolotti, see Linda Giuva, "Archivi neutri, archivi di genere: Problemi di metodo di ricerca negli universi documentari," *Reti della memoria: Censimento di fonti per la storia delle donne in Italia*: Vol. 1: *Gruppo archivi*, edited by Oriana Cartaregia and Paola De Ferrari (Genoa: Coordinamento donne lavoro cultura, 1996), 40.

In some cases, the professional archive can be destroyed by its creator. Dissatisfaction with one's work, fear that one's legacy will not be understood, or the desire that the works created are the only element communicating one's own poetics or design practices, could be some reasons behind such destructive action. Other reasons may be the unwillingness to have others decide what one has been or the concern that others can highlight the conflicting sides of one's own creativity through documents. Stefania Filo Speciale (Naples, 1905–1988), the first female architect who succeeded in carrying out an intense construction activity in Naples, is an engaging case study. It seems that she burnt her archives after having been isolated by her academic colleagues and harshly criticised by the architectural historians and critics of her generation. At first, she was accused of being fascist and later blamed for taking part in propriety speculation following the construction of the 'skyscraper' for the insurance company Società Cattolica (1954–9).⁷⁵ Yet the actual reasons behind Speciale's destructive act remain unknown. In this case, as in similar ones, the buildings take on an even more fundamental value for the scholar, and other archives have to be 'flushed out'.⁷⁶

In the best cases, when an architect, engineer or designer has shown from the start of his or her professional activity a bright and lively intention to form and pass down her/his professional archive, this archive becomes an instrument of 'self-representation', 'self-aggrandisement, self-memorialization' of her/his work.⁷⁷ One such example is the archive of Lina Bo (1914–1992) at the Istituto Lina Bo e P.M. Bardi (former Istituto Quadrante, 1990). The institute is located in the famous Casa de Vidro (1950-51, Sao Paulo, Brazil), which was the home of the couple and the first architectural work of Lina (Achillina) Bo in Brazil and later became an icon of the Movement Modern. The archive contains drawings, documents and photos, which are partly accessible online, and is flanked by the library, which also contains Lina Bo's personal books.⁷⁸

The personal/professional archive is a 'mirror', whether on 'paper' or digital, through which her/his producer reflects and conveys her or his image and story. This archive is configured as a form of 'individual self-narrative', a 'kind of witnessing' and 'evidence of identity'.

75 See the full paper presented at the MoMoWo Symposium 2018 annexed to this chapter (Polytechnic of Turin, Italy 13th-16th June 2018) by Chiara Ingrosso and Aurora Maria Riviezzo, "Stefania Filo Speciale and Her Long-Overlooked Legacy to Twentieth Century Italian Architecture."

76 Concerning the Ina-Casa Housing Project in Agnano (Naples) by Filo Speciale's the historical Archive of the Istituto Autonomo Case Popolari- IACP Naples has proved to be essential in the recent studies by Carolina De Falco, "Immagine e sviluppo della Napoli occidentale: case pubbliche e ricostruzione," *Eikonocity* Vol 2, 1 (2017), 85-99, <http://dx.doi.org/10.6092/2499-1422/5074> (accessed, March 30, 2018). See also the recent book by Carolina De Falco, *Case INA e luoghi urbani. Storie dell'espansione occidentale di Napoli*, (Naples: CLEAN edizioni, 2018).

77 Catherine Hobbs, "The Character of Personal Archives: Reflections on the Value of Records of Individuals," *Archiviaria* 52 (2001), 131–33.

78 See the Istituto Lina Bo e P.M. Bardi - Casa de Vidro, <http://www.institutobardi.com.br>.

Women designers' archives are not a 'black box' or passive containers of documents, but rather a sort of 'magic box' through which reflections of the producer's dialogue with her own memory and gender memory can be gathered. In other words, these archives have to be assumed as a 'place of identity and genealogy, and as a return to roots'⁷⁹; when brought into the present by scholars, they are projected into the future to reconstruct the link between individual, professional and collective memories and identities.

Towards Quantitative Horizontal Histories for a Feminisation of the 'Reversed Filiation' of the Past

In our century, even up to the threshold of the present, the research on women's works not only clashes with matters related to the archives of the present –current archives which are sometimes still under formation and not yet selected as historical memory– but it also encounters specific issues related to the production, use, conservation and transmission of digital archives. The archives of architects/designers have in fact begun to take digital form since the coming of the digital age. Although digital technologies are suitable archiving means for their immediate use, they have already shown their fragility over a more extended period.⁸⁰

When a historian makes use of a digital document, the problem of identifying who produced it and for what purpose, by which criteria it was selected and other such issues are complicated by the de-materialisation of the document itself, which facilitates its transmission, delocalisation and possible tampering. Therefore, digital sources pose new challenges for scholars regarding identifying their producers, formation process, conservation and transmission. For these reasons, when we use digital sources for our historical research, we must rethink the concepts of originality, authenticity, and verifiability of the source itself.

Despite the broad range of sources that historians at present have at their disposal, serious gaps endure, and new documentary gaps suddenly appear with which we have to contend.

How to defend oneself from an excess of documents or to fill the gap in the documentation are questions that must be dealt with on a case-by-case basis, even in research studies on the work of

women in the built environment. These studies are driven by the desire to re-establish the identity of those professions such as architecture, civil engineering and urban planning that have long been the prerogative of men, just as their historiography has been.

Ever since information and communication technologies (ICT) began, highlighting the role of information resources in social and cultural development over the last decade, giving rise to unprecedented phenomena such as the accumulation of enormous volumes of data, this data has become accessible and quickly transmissible even at a considerable distance. At present, ICT applied to both research and cultural dissemination can contribute to gathering and selecting those serial sources containing homogeneous and comparable data necessary to write a new quantitative history of women's works. Quantitative history as '*une autre histoire*'⁸¹, which appeared in France as early as the mid-1970s, is currently starting to be applied to research on the contribution of women to the world of construction and design through ICT.

By creating 'quantitative-horizontal' histories, it will soon be possible to overcome the scenario outlined by the mainstream historiography, which is traditionally 'vertical' and uniquely featured by 'male filiation' of the protagonists of the History of Architecture and Design. It will then be possible to re-activate the process of 'reversed filiation',⁸² according to which fathers are not those who generate children but are the sons and daughters who generate not only fathers but also mothers.

A comprehensive 'horizontal' investigation of the works can contribute to forming a more inclusive and democratic vision of the history of architecture, the city and design. We believe that in an era like the present, in which society and the cultural world call for equal opportunities between men and women, we must question the thought processes that have led even the most accredited historical interpretations to exclude women's contributions in order to find novel methodologies for creating new genealogies of works and authors.

79 Alessandra Contini and Anna Scattigno, "Un cantiere aperto: Il censimento della scrittura delle donne (XVI e XX secolo)," in *Carte di donne: Per un censimento regionale della scrittura delle donne dal XVI al XX secolo: Atti della giornata di studio, Firenze, Archivio di Stato, 3 Febbraio 2005*, Vol. 1, edited by Alessandra Contini and Anna Scattigno (Rome: Edizioni di Storia e Letteratura, 'Memoria e scrittura delle donne', 'Sussidi Eruditi', 2005), 29.

80 About the consequences of the vulnerability of digital documentation, see Stefano Vitali, *Passato digitale: Le fonti dello storico nell'era del computer* (Milan: Bruno Mondadori, 2004).

81 François Furet, "Le quantitatif en histoire," *Faire de l'histoire*, Vol. 1, edited by Jacques Le Goff and Pierre Nora (Paris: Gallimard, 1974), 53; Vital Chomel, "Une autre archivistique pour une autre histoire ?" *La Gazette des archives* 91, 1 (1975), 238–48; François Furet, *L'Atelier de l'histoire* (Paris: Flammarion, 1982); Jacques Le Goff, "Monumento/ Documento," *Enciclopedia*, ad vocem, Vol. 5 (Turin: Einaudi, 1978), 38– 48.

82 Maurizio Bettini, *Contro le radici: Tradizione, identità, memoria* (Bologna: Il Mulino, 2001), 5–15. In his book, the Italian philologist and anthropologist claims that it is not the past that produces the present, but the present that shapes its past. The author goes into the fascinating process of transforming the past into tradition by identifying a 'reversed filiation' process, according to which fathers do not generate children but children generate fathers.