

MARIAGRAZIA FANCHI\* - MATTEO TARANTINO\* - ROSA BAROTSI\*\*

## HEAVEN CAN WAIT? Gender (Im)balance in Contemporary Italian Film Crews

### *Abstract*

In the mid-to-late 2000s, the digitalization of film production in Italy carried a promise of increased diversity and cultural pluralism due to the lower entry barriers. About a decade later, in 2016, the so-called Franceschini law introduced a revision of the norms regulating public funding which included a mandate for greater inclusivity. Did these developments fulfill their promise? The article answers this question empirically by investigating the roles occupied by women within Italian film productions and co-productions that obtained clearance (*nulla osta*) for national theatrical distribution between 2017 and 2021. We examine the gender composition of each film for ten heads of department involved in its production, drawing on the database produced by the CENTRIC/CineAF project. We proceed to correlate gender balance with a set of structural features (genre, format, budget). Finally, we examine the makeup of the creative teams in which women were involved, and their evolution over a period of sixty years (1964-2021). We argue that the promise of increased diversity in Italian cinema was only marginally kept. We demonstrate that the centrality of female professionals is greater in low-budget cinema and that women's careers still suffer in terms of progression, continuity and longevity compared to those of their male counterparts. In conclusion, we highlight the limits of existing gender equality policies, evaluate the risks hidden in the processes of feminization of some of the professions (such as pay drop), and reflect on the promises and limits of big-data approaches in counteracting discrimination and supporting pluralism and equity.

### *Keywords*

Gender equity; film industry; production studies; big data; creative teams

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## 1. INTRODUCTION

Cultural and creative industries are often held up as exemplary cases of how the digital transition drives the shift from old to new paradigms within political, cultural, economic, and social projects. This shift is described as hinging on a set of key practices, such as collaboration, open participation, fluid *heterarchies*, communal evaluation, and as promoting radically innovative approaches. In 2006, Axel Bruns coined the neologism *produsage* to define this new model (building upon the 'third wave' theory formulated

\* Università Cattolica del Sacro Cuore, Milan – mariagrazia.fanchi@unicatt.it; matteo.tarantino@unicatt.it.

\*\* Università degli Studi di Modena e Reggio Emilia – rosa.barotsi@unimore.it.

in the 1970s by Alvin Toffler<sup>1</sup>) and to emphasize the opportunities it offered to overcome injustice and inequality in culture, economy, and society<sup>2</sup>. And yet – as demonstrated by the example of one of the creative industries’ major exponents, the film industry – these promises of equity in the digital age have translated into very modest advances at best<sup>3</sup>.

The limits and risks of the concept of produsage and the new productive routines it engenders have been discussed extensively. To quote Alessandro Gandini and James Graham: “after the enthusiastic call for the rise of a ‘creative’ class, the condition of today’s creative economy appears to be quite different from the expectations that accompanied its acclaimed surge”<sup>4</sup>. According to the literature, *the new creative scenes*, to use John Hartley’s expression<sup>5</sup>, reveal *five weaknesses*. First: contemporary creative economy workers (such as artists, freelancers, social entrepreneurs, and so on) *operate in an underregulated space* which can lead to various forms of deprivation and exploitation<sup>6</sup>. Second: the *separation between ‘work time’ and ‘life time’ is collapsing*, and the ‘economic’ is re-embedding in the ‘social’, eroding another fundamental achievement in labour rights<sup>7</sup>. Moreover, certain forms of *participatory culture*<sup>8</sup> and the involvement of active audiences in creative industries have been criticised by some for causing the devaluation of the reputation of professionals<sup>9</sup>, potentially, in some cases, leading to their replacement by an unlimited workforce of unpaid *amateurs*, or *professional Amateurs*<sup>10</sup>. Some of the critics have suggested that the same participatory culture that supports and promotes the involvement of these users in the production cycle is also giving rise to the ‘decentralization of creation’, as Andrew Currah calls it: the displacement of creative work from professional spaces which, according to the author, may lead to the loss of technical opportunities and, potentially, of production quality<sup>11</sup>. Others have countered that in reality this form of amateur or fan labour constitutes a constant stream of value production for corporations, a form of (mostly) unpaid work that is becoming ever-more

<sup>1</sup> A. Toffler, *The Third Wave*, New York: Bantam, 1980.

<sup>2</sup> A. Bruns, *Blogs, Wikipedia, Second Life, and Beyond. From Production to Produsage*, New York: Peter Lang, 2008.

<sup>3</sup> M. Fanchi, M. Tarantino, “Has Digital Transformation Impacted Gender Imbalance in Italian Cinema? A Data Analysis of Creative Clusters 2004-2016”, in *Digital Transformation in the Cultural and Creative Industries. Production, Consumption and Entrepreneurship in the Digital and Sharing Economy*, edited by M. Massi, M. Vecco, Y. Lin, Oxford-New York: Routledge, 2021: 162-184.

<sup>4</sup> J. Graham, A. Gandini, “Introduction”, in *Collaborative Production in the Creative Industries*, edited by J. Graham and A. Gandini, London: University of Westminster Press, 2017: 15.

<sup>5</sup> J. Hartley *et al.*, *Key Concepts in Creative Industries*, London: Sage, 2013: 17-20. See also: J. Hartley, W. Wen, H.S. Li, *Creative Economy and Culture. Challenges, Changes and Futures for the Creative Industries*, London: Sage, 2015.

<sup>6</sup> A. Gandini, C. Bandinelli, A. Cossu, “Collaborating, Competing, Co-Working, Coalescing. Artists, Freelancers and Social Entrepreneurs as the ‘New Subjects’ of the Creative Economy”, in *Collaborative Production in the Creative Industries*: 15-32.

<sup>7</sup> I. Pais, G. Provasi, “Sharing Economy. A Step towards the Re-embeddedness of the Economy”, *Stato e Mercato*, 105 (2015): 347-378.

<sup>8</sup> A. Delwiche, J. Jacobs Henderson, eds., *The Participatory Cultures Handbook*, London-New York, Routledge, 2013.

<sup>9</sup> A. Keen, *The Cult of Amateur. How Today’s Internet is Killing our Culture*, New York: Doubleday, 2007.

<sup>10</sup> C. Leadbeater, P. Miller, *The Pro-Am Revolution How Enthusiasts Are Changing Our Economy and Society*, Demos, 2004. Accessed September 12, 2022. <https://www.demos.co.uk/files/proamrevolutionfinal.pdf>.

<sup>11</sup> A. Currah, “Managing Creativity. The Tensions between Commodities and Gifts in a Digital Networked Environment”, *Economy and Society*, 36, 3 (2007): 467-494; Y.D. Bolter, *The Digital Plenitude. The Decline of the Elite Culture and the Risk of New Media*, Cambridge: (MA) MIT Press, 2019.

crucial in certain sectors of the digital creative industries<sup>12</sup>. Finally, cultural and creative industries are strongly resisting change. Angela McRobbie, in *Be Creative*, denounced the resilience of conservative agencies in cultural enterprises<sup>13</sup>. One of the most significant pieces of evidence of the resistance to change in the cultural industries is the persistence of a pronounced gender imbalance, despite increasing lobbying and policy efforts to redress it over the last decade. In the words of Skadi Loist and Elisabeth Prommer regarding the unequal access of women to the German film sector, “for an industry that describes itself as ‘creative’, the dominant practices are shockingly conventional and far from progressive”<sup>14</sup>. Even relatively recent professions or industries with less historically-established hierarchies of value show signs of this: for instance, while the Nigerian movie industry, Nollywood, demonstrates some of the opportunities offered by informal and innovative cultural economies for creativity and accessibility<sup>15</sup>, these have not translated into an expansion of access to women professionals any more than in areas with century-old consolidated film industries<sup>16</sup>. Other relatively recent sectors, such as the video-game industry or VFX, show similar patterns of disadvantage for women professionals<sup>17</sup>.

In this context of promises undelivered, the article examines the working conditions of women in Italian cinema in order to assess the ongoing gender balancing processes in one of the most prominent creative industries, and, more broadly, in the Italian economic and productive system. Specifically, the article compares contemporary data with the nonlinear process of reducing the gender gap over more than half a century, highlighting the ambivalence of the increase in the number of women in Italian film crews and the persistence of a significant gender imbalance and unequal working conditions between women and men in terms of career progression, continuity and longevity.

The main focus of the article is on the five years from 2017 to 2021, therefore touching upon the effects of the pandemic on the process of gender balancing and the working conditions of women in the national cinema industry in ten above- and below-the-line roles. The small gains documented over these five years are placed in context by comparison with data on gender inequality in the Italian film industry in the near-60 years since the institution of the first organic film law in the country, Law 1213 of 1965, also known as “Legge Corona”. Before moving on to the presentation and discussion of our results, we introduce the framework of data-based approaches to gender equity research, as well as the tools and methods we used in our projects. In our conclusion, we reflect on the ethical and practical methodological challenges of data-driven approaches.

<sup>12</sup> A. De Kosnik, “Fandom as Free Labor”, *Digital Labor*, Routledge, 2012, 124-5.

<sup>13</sup> A. McRobbie, *Be Creative. Making a Living in the New Culture Industries*, London: Wiley, 2015.

<sup>14</sup> S. Loist; E. Prommer, “Gendered Production Culture in the German Film Industry”, *Media Industries*, 6 (2019), Nr. 1, 108. DOI: <https://doi.org/10.25969/mediarep/14849>.

<sup>15</sup> R. Lobato, “Creative Industries and Informal Economies: Lessons from Nollywood,” *International Journal of Cultural Studies*, 13, 4 (2010): 337-354; Id., *Shadow Economies of Cinema, Mapping Informal Film Distribution*, London: BFI, 2012. A. Jedlowsky, “Small Screen Cinema: Informality and Remediation in Nollywood”, *Television New Media*, 13, 5 (2012): 431-446.

<sup>16</sup> A. Ukata, “Women and Representations in Nollywood. Questions of Production and Direction”, in *Women in the International Film Industry. Policy, Practice, and Power*, edited by S. Liddy, Cham (Switzerland): Palgrave-Macmillan, 2020, 315-330. [https://doi.org/10.1007/978-3-030-39070-9\\_10](https://doi.org/10.1007/978-3-030-39070-9_10); Id., *The Image(s) of Women in Nigerian (Nollywood) Videos*, Berlin: Galda Verlag, 2015.

<sup>17</sup> M. Kivijärvi, T. Sintonen, “The Stigma of Feminism: Disclosures and Silences Regarding Female Disadvantage in the Video Game Industry in US and Finnish Media Stories”, *Feminist Media Studies*, 22, 5 (2022): 1083-110; J. Erhart, K. Dooley, “‘Post Goblins’ and ‘Predators’: Identities, Experiences, and Contributions of Women in Australian Screen Postproduction and Visual Effects Sectors 2020/2021”, *Studies in Australasian Cinema*, 16, 1 (2022): 17-34.

## 2. GENDER POLICIES AND DATA: STRENGTHS AND WEAKNESSES

Although relatively young, the debate on data feminism has already produced substantial critical contributions<sup>18</sup>. Data feminist principles – which encourage us to examine power, challenge power, elevate emotion and embodiment, rethink binaries and hierarchies, embrace pluralism, consider context, and make labour visible<sup>19</sup> – promise to greatly improve the quality and effectiveness of data-based research, while also urging us to confront a new set of challenges. Before examining the data on Italian film crews, it is therefore essential to clarify the theoretical and methodological framework within which we move, with its limitations and opportunities.

The study of gender through big data – defined as data at a scale that requires data science and digital tools to be captured and processed efficiently<sup>20</sup> – faces several difficulties. The first is the absence of an effective “knowledge ecology framework”<sup>21</sup>. As Doris Ruth Eikhof, Jack Newsinger, Daria Luchinskaya, and Daniela Aidley write: “what gender equality initiatives are possible and probable depends on what gender knowledge is produced and circulated, and which aspects of gender inequality that knowledge makes visible”<sup>22</sup>. Despite the growth of attention to gender inequality issues, fuelled also by movements such as #metoo, information regarding women’s role in media industries, and, in particular, in the screen industries, continues to be deficient. This problem has always troubled studies of women and work due to the tendency to relegate the female workforce to the grey areas of the informal economy through lack of contracts or contracts that under-represent actual work<sup>23</sup>.

Secondly, the limitations of the data-centred approach can be traced to the mismatch between the categories conventionally used to describe and weigh productive activity and the atypical forms in which women’s work is expressed. At the beginning of the new millennium, reflecting on the difficulty of tracing a history of women’s work, Barbara Montesi wrote:

statistical survey, which has been, and is, a source of primary importance for verifying the dimensions of women’s access to different professions and their evolution over time has, contributed to the codification of the bias for the ‘awkwardness’ often shown by statistical surveys in framing the multiple activities of women<sup>24</sup>.

Using big data to analyse gender inequality means having to face the absence and inaccuracy of information, and recognizing the epistemological limits of data and the inevitable bias they generate in their representation of reality. According to Cullen and Murphy, for example, analyses based on big data almost always neglect the experiences of women workers, focusing exclusively on numbers: how many women work in a

<sup>18</sup> C. D’Ignazio, L.F. Klein, *Data Feminism*, Cambridge (MA): MIT Press, 2020.

<sup>19</sup> *Ibid.*

<sup>20</sup> C. Abreu Lopes, S. Bailur, *Gender Equity and Big Data: Making Gender Data Visible* (Report, UN Women, 2018).

<sup>21</sup> D.R. Eikhof *et al.*, “And ... Action? Gender, Knowledge and Inequalities in the UK Screen Industries”, *Gender Work Organ*, 26 (2019): 840-859.

<sup>22</sup> *Ibid.*: 841.

<sup>23</sup> B. Conor, R. Gill, S. Taylor, “Gender and Creative Labour”, *The Sociological Review*, 63, S1 (2015): 1-22. DOI: 10.1111/1467-954X.12237.

<sup>24</sup> B. Montesi, “Donne, professioni, cittadinanza”, *Storia e problemi contemporanei*, 31, 9 (2002): 148. Our translation.

particular sector or how many women occupy top roles<sup>25</sup>. This numbers-only approach to data has negative consequences for the drafting and application of gender policies. Maria Jansson and Luise Wallenberg's recent study on the Swedish film industry is significant in this respect<sup>26</sup>. Even if, in 2016, Sweden achieved the 50:50 goal – half of all audiovisual productions supported by public funding were directed by women – the numerical parity has not meant the disappearance of inequality and injustice against women, as the testimonies of directors, actresses, and producers collected by the two authors reveal. The centrality of big data within gender-gap analyses, if not mitigated by an awareness of its limitations, risks creating problematic scenarios, to the point of potentially increasing the gap itself.

The third issue emerging from contemporary debates concerns the lack of models that are able to measure intersectional effects and the tendency to limit the analysis to the gender dimension alone, in a binary perspective<sup>27</sup>. The discussion rightly tends to focus on the political consequences of this lack, but it is also important to examine the specific methodological and ethical challenges related to data acquisition and management brought to the fore by intersectional analysis, as well as analysis of gender outside the binary view<sup>28</sup>.

Finally, a growing number of contributions have examined the possibility of circumventing some of the limitations mentioned above through the use of social network analyses<sup>29</sup>. Social network analysis makes it possible to go beyond the mere counting of women and men, and to identify the conditions, in terms of the composition and functioning of the creative scenes, that favour the inclusion of female professionals and best support them in their career paths. According to Deb Verhoeven *et al.*: “Social Network Analysis provides methods for visualizing these group relationships” and “for identifying strategically important components and participants in the network” in order to “dismantle” or “open up” male-dominated creative scenes<sup>30</sup>. Mark Lutter's well-known study of the casts of some 350,000 U.S. film productions between 1929 and 2010, for example, demonstrates that actresses have less linear career trajectories than their peers and significantly higher dropout rates when they are working in “closed” creative teams composed of professionals who tend to collaborate exclusively with each other<sup>31</sup>. Conversely, the risk of failure and career interruption is lower for actresses cast in projects

<sup>25</sup> P. Cullen, M.P. Murphy, “Leading the Debate for the Business Case for Gender Equality, Perilous for Whom?”, *Gender, Work and Organization*, 25, 2 (2018): 110-126. <https://doi.org/10.1111/gwao.12199>.

<sup>26</sup> M. Jansson, L. Wallenberg, “Experiencing Male Dominance in Swedish Film Production”, in *Women in the International Film Industry*, 2020: 163-178.

<sup>27</sup> K. Guyan, “Constructing a Queer Population? Asking about Sexual Orientation in Scotland's 2022 Census”, *Journal of Gender Studies*, 31, 6 (2022): 782-792, DOI: 10.1080/09589236.2020.1866513; B. Collier, S. Cowan, “Queer Conflicts, Concept Capture and Category Co-Option. The Importance of Context in the State Collection and Recording of Sex/Gender Data”, *Social & Legal Studies*, 31, 5 (2022): 746-772. DOI: 10.1177/09646639211061409.

<sup>28</sup> Intersectionality, or the idea that in order to understand social inequalities we need to view systems of oppression as interlocking, was developed within US-based Black feminism, in the theories of the Combahee River Collective (1977), Kimberlé Crenshaw (1991), and Patricia Hill Collins (2002), amongst others.

<sup>29</sup> M. Fanchi, M. Tarantino, “Has Digital Transformation Impacted Gender Imbalance in Italian Cinema? A Data Analysis of Creative Clusters 2004-2016”, in *Digital Transformation in the Cultural and Creative Industries*: 162-184.

<sup>30</sup> D. Verhoeven, K. Musial, S. Palmer, S. Taylor, S. Abidi, V. Zemaityte *et al.*, “Controlling for Openness in the Male-Dominated Collaborative Networks of the Global Film Industry”, *PLoS One*, 15, 6 (2020): 2. DOI: 10.1371/journal.pone.0234460.

<sup>31</sup> M. Lutter, “Do Women Suffer from Network Closure? The Moderating Effect of Social Capital on Gender Inequality in a Project-Based Labor Market, 1929 to 2010”, *American Sociological Review*, 80, 2 (2015): 329-358. <https://doi.org/10.1177/0003122414568788>.

with open creative teams. Lutter's conclusions are not automatically extendable outside the specific context in which the scholar conducted his analysis; they do, however, show the relevance of "social capital" as a resource for female professionals against segregation and gender inequality.

Starting from this framework, the article (and more widely, the CENTRIC software and the CineAF project that was based on it) sets three methodological goals: to address the lack of information about women's work in Italian cinema; to promote new and more effective data policies against gender inequality that will be able to highlight women's working conditions and the conjunctures that generated them; and to make available a set of categories and indexes that will highlight the feminization processes in audiovisual professions, including questioning the fact that the growth of women's presence in the screen industries is always and in any case a positive prospect.

### 3. THE CENTRIC SOFTWARE

The CENTRIC software has been in development since 2019 at the Università Cattolica del Sacro Cuore of Milan to provide a unified framework for the systematic collection, storage, analysis and visualization of data about audiovisual industries, as opposed to piecemeal per-project approaches. It has been used to develop the CineAF database, which contains crew information on films produced or co-produced in Italy between 1964 and 2021<sup>32</sup>. Although the CineAF project has recently concluded, CENTRIC continues to gather data on an annual basis and enlarging its scope and breadth of analysis. CENTRIC has collected and analysed data on the crews of Italian film productions or co-productions that obtained the *nulla osta* (state authorisation) for theatrical distribution (Law no. 161 of 1962) from 1 January 1964 to 1 November 2021. From 2 November 2021, with the abolition of the *nulla osta* requirement (Law 220/2016), CENTRIC collects data on audiovisual products that obtain age classification or ratings<sup>33</sup>.

The database contains two main kinds of data: one regards individual films and other audiovisual products (including such information as title, year, unique id, as well as a variety of scores calculated by the system); the other contains individual crew entries for each film, which, for the purposes of this project, includes heads of department in ten professions: director, writer, cinematographer, editor, composer, make-up artist, set decorator, special effects supervisor, producer and costume/wardrobe manager<sup>34</sup>. Although this circumscribed set of professions does not cover the entirety of film crew positions, it broadly reflects the general makeup of the average Italian production team's decision-making roles (the majority of Italian film productions fall into the low budget

<sup>32</sup> CineAF (A Cinematic Archive for the Future: Women's films in Italy, 1965-2015) has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 891966. The project took place between 2020-2022 and was conducted by Rosa Barotsi under the supervision of Mariagrazia Fanchi and with the collaboration of Matteo Tarantino. For more information, see [cineaf.eu](http://cineaf.eu).

<sup>33</sup> A catalogue of these entries can be consulted at the website of the Direzione Generale Cinema e Audiovisivo of the Italian Ministry of Culture <https://cinema.cultura.gov.it/database-nulla-osta-film/>; accessed February 2023.

<sup>34</sup> Only leading roles are considered for each professional class; thus, for instance, assistant directors are not included as directors.

range)<sup>35</sup>. Since gender information is not included as a field in online databases, the gender information for each credit is inferred through probabilistic estimates. Such estimates take into consideration, in this order, the presence of any pronouns or other terms that indicate a gender preference in the professional's short bio, and, in the absence of such indicators, the professional's first name. Since we are not asking individuals to self-define and cannot be sufficiently confident about the scale of pronoun and biographical information that exists in our data pool, we make it explicit that the resulting "attributed gender" should not be considered as the gender of the *individual*, as much as the gender of the *professional instance* recorded in the film credits. While in many cases this works as a satisfactory proxy of the individual's gender, we must keep in mind the scientific, ethical, and political limitations of this approach, some of which we will discuss in the conclusion.

CENTRIC obtains information by extracting and cross-referencing data about Italian films from multiple open-access online databases<sup>36</sup>, as well as institutional sources<sup>37</sup>. As of 13 October 2022, the database contains 132,882 entries for professionals, corresponding to 47,554 individuals. Each crew entry includes: the film title, the film's unique ID, the professional's unique ID, their name and the gender attributed to them by the system (which includes "company" for collectives and "unknown" when gender could not be conclusively estimated). Male-attributed (henceforth, for simplicity, "Male") professionals are about three times as many as Female-attributed ones (henceforth "Female") in the database.

Table 1 - *Percentage of professionals in the database by attributed binary gender*

ATTRIBUTED GENDER	% ON TOTAL
OTHER/UNKNOWN	1,85%
COMPANY	21,30%
FEMALE	20,75%
MALE	56,09%
GRAND TOTAL	100,00%

Source: CENTRIC/CineAF. Università Cattolica.

As part of its analytical functions, CENTRIC automatically calculates numerical scores to measure various film features. One of these is the Gender Balance Score (GBS), which calculates the ratio of male professionals to female ones for each profession and in each film (ranging from -1 when 100% male to +1 when 100% female, with 0 representing gender balance).

<sup>35</sup> *Valutazione di impatto della Legge Cinema e Audiovisivi* (<https://cinema.cultura.gov.it/comunicazione/eventi-e-pubblicazioni/valutazione-di-impatto/>); *Tutti i numeri del cinema italiano. 2020* (<http://cinema.cultura.gov.it/wp-content/uploads/2022/03/Tutti-i-Numeri-del-Cinema-e-dellAudiovisivo-%E2%80%93-Anno-2020.pdf>); accessed February 2023.

<sup>36</sup> The currently available modules interface with [imdb.com](http://imdb.com), [mymovies.it](http://mymovies.it), [cinemaitaliano.it](http://cinemaitaliano.it), [comingsoon.it](http://comingsoon.it) and [cinematografo.it](http://cinematografo.it).

<sup>37</sup> As of 2017, our core official sources originate from the Italian Ministry of Culture: distribution/censorship authorisation records and datasets comprising films that applied for public funding.

The database constructed through CENTRIC during the CineAF project is also designed to address the ethical challenge of collecting accurate gender data in the following ways: the participatory interface we are developing will allow users to propose changes and integrations of the collected data<sup>38</sup>. By allowing for a granular approach to their careers, professionals will be able to modify their data for specific periods or even specific films, thus recording changes throughout their biography<sup>39</sup>. Finally, quantitative analyses will be enriched with context by fostering an accompanying activity of collecting qualitative data through testimonials and life stories.

In this article, the data collected by CENTRIC into the CineAF database informs our analysis around three core questions:

– Q1: what is the share of women workers employed in contemporary Italian cinema? Which professions have a better gender balance and which, conversely, are marked more deeply by a gender gap?

– Q2: what type of projects (in terms of director team composition, genre, and budget) engage higher numbers of female professionals?

– Q3: What are women's working conditions in the Italian cinema industry in terms of career stability, continuity, and progression?

Cutting across these three questions are two further, interlocking questions: have policy innovations, such as the gender balance incentives for public funding introduced with the 2016 Franceschini Law, and external phenomena, most significantly the Covid-19 pandemic wave of 2020, impacted these dynamics?

The analysis draws upon two samples of data collected by CENTRIC: overall dynamics are based on the dataset developed for the CineAF project (1964-2021), whereas the analyses on the contemporary situation will employ a five-year subsample (2017-2021), for a total of 1,236 films.

### 3.1. *Adding is not enough: limits and risks of the feminization process*

In 2021, despite the health crisis, the significant slowdown in production<sup>40</sup>, and the greater difficulties of female professionals in balancing work and family, the share of women employed in domestic film production shows a mild growth (tab. 2).

<sup>38</sup> A sampling of the database (around 20%) was manually checked by a team of rotating editors, operating under supervision of the project team, during a pilot launch in the Spring of 2022. Each edit had to be manually approved by a supervisor. Editors were assigned a package of films and double-checked all given entries by manually examining available information (such as biographies, interviews etc.). During the experiment, we assigned all distributed films from 1964-1965 and 2010-2021 to a team of 265 students. This resulted in a total of 21,557 edits performed on the database. Crew edits accounted for 28.01% of the total. Editors were selected amongst graduate students who attended film and media courses at the Catholic University of Milan.

<sup>39</sup> K. Heyam, *Before We Were Trans: A New History of Gender*, London: Basic Books, 2022, 12-14.

<sup>40</sup> In 2020, Italian film productions decreased by more than 20 percent: from 325 films in 2019 to 252 in 2020. *Tutti i numeri del cinema italiano. 2020*. <http://cinema.cultura.gov.it/wp-content/uploads/2022/03/Tutti-i-Numeri-del-Cinema-e-dellAudiovisivo-%E2%80%93-Anno-2020.pdf>; accessed February 2023.

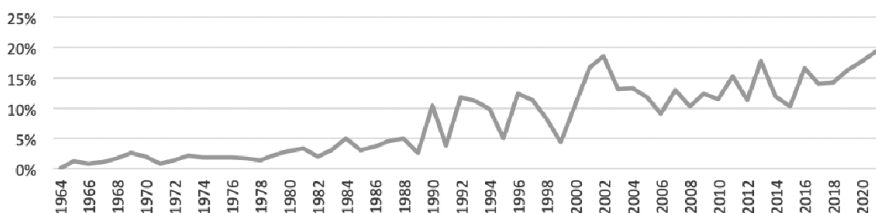


Table 2 - *Percentage of women by profession. 2017-2021*

	2017	2018	2019	2020	2021
DIRECTION	14%	14%	16%	18%	19%
SCREEN WRITING	22%	20%	22%	20%	23%
EDITING	27%	28%	25%	28%	27%
MUSIC	12%	14%	11%	12%	16%
DoP	8%	11%	9%	10%	10%
PRODUCTION	25%	28%	28%	28%	26%
COSTUMES	78%	76%	72%	78%	82%
SET DESIGNER	44%	46%	50%	48%	58%
MAKE-UP	70%	70%	75%	73%	73%
SFX	9%	6%	10%	9%	12%

Source: CENTRIC/CineAF. Università Cattolica-Ministero della Cultura.

The increase is slight, and it does not affect all professional roles; however, even those few extra percentage points in shares that are still, overall, significantly low, are indicative of a process that seems, perhaps for the first time, to upset the deep-seated mechanisms of the film industry. To take the specific example of directors, the significance of this small, contemporary upward trend becomes clearer if we compare it with data for the preceding 60-year period. Figure 1 shows the curve traced by the quota of women directors in Italian feature-length films that obtained authorisation for theatrical distribution between 1964 and 2021. Based on our data, the last five years show the longest positive trajectory for women directors in Italy in over half a century. Although there is no guarantee that this constitutes a systemic change, the percentage of women directors shows a slow, steady growth compared to the continuous, and at times vertiginous, ups and downs of the past – that typical trend that Susan Liddy has described as “two steps forward, but one step back” (fig. 1).

Figure 1 - *Percentage of Italian feature films' women directors. 1964-2021*

Source: CENTRIC/CineAF. Università Cattolica-Ministero della Cultura.

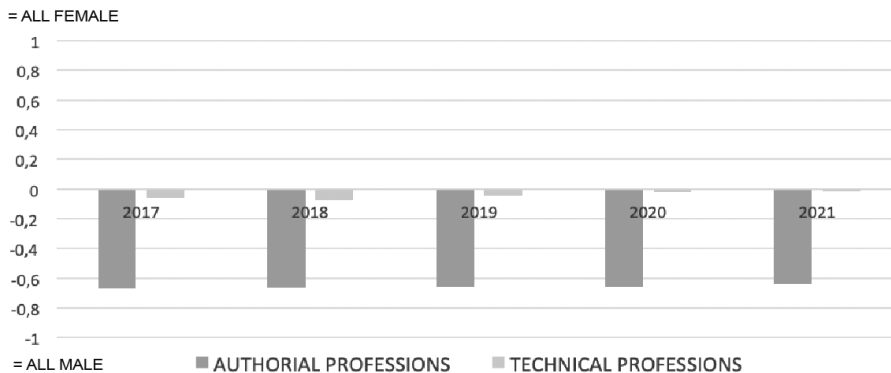
Although this might be cause for some cautious optimism, focusing on the numbers alone is not enough. As Verhoeven, Bronwyn Coate, and Vejune Zemaityte point out:

Policies that focus on adding more women without consideration of “down-the-line” gate-keeping are likely to result in reiterating the current two-tier structure within the industry in which men continue to dominate the most lucrative aspects of the business and women are effectively relegated to the edges.

The feminization of those “edges” – specific film professions where the vast majority of workers are women – requires a different form of intervention and attention, if we don’t want to risk producing changes that generate other, more insidious, forms of inequality and injustice.

In fact, when looking in detail at how the gender composition of Italian film production initiatives is changing, two potentially critical factors emerge. First, the number of women grows unevenly in different professional roles. Figure 2 shows the incidence of women in authorial professions (directing, screenwriting, editing, music composition, and cinematography) and in technical or managerial ones (production, and heads of department in costume, set design, special effects, makeup) over the period 2017-2021. Along with confirming the severe gender gap in the national creative scene, the graph shows the different speeds and possibilities of the feminization process in Italian cinema. Whereas the technically specialised professions tend toward the zero line and thus toward a more gender-balanced condition, the authorial professions are still and distinctly male-dominated and show a higher resistance to change. This, as we know, does not mean that specific technical professions are necessarily more gender balanced: in fact, some of the most polarised professions, one way or the other, are found in below-the-line roles.

Figure 2 - Gender Balance Score (GBS) of authorial and technical professions. 2017-2021



Source: CENTRIC/CineAF. Università Cattolica-Ministero della Cultura.

Which brings us to our second critical factor. A more pronounced tendency toward feminization emerges in traditionally female-dominated roles: costumes and set design. For instance, the share of female costume designers has continued to increase, reaching 82% in 2021 (up from 78% in 2017), whereas set design has seen the largest increase of the film professions we examined, going up by 14% between 2017 and 2021. The mechanism that leads women to gain easier access to professions where they are already present in good numbers generates an imbalance in the opposite direction and risks turning these jobs into objects of that process of devaluation – economic and contractual –

of women's work that Milly Buonanno already observed and denounced in the case of journalism<sup>41</sup>.

Thankfully, signs of a counter-trend are also emerging: the slight increase in the share of women in music direction (from 11% in 2019 to 16% in 2021), also recorded at the European level<sup>42</sup>, or the slight but exemplary rise in the presence of women in special effects, trace a possible alternative to feminization trends, not in the direction of a generic increase in the presence of women, but of focused interventions into those areas where gender segregation is most severe.

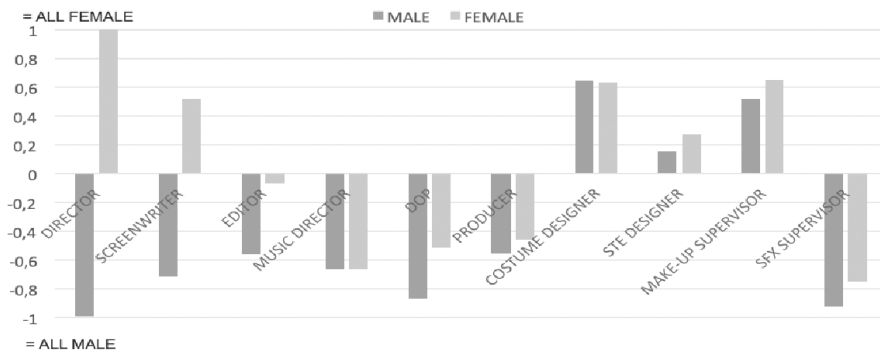
Even if the rise in numbers of women working in the film industry did not stop with the pandemic, we are still far from having any guarantees of the effective transformation in the make-up of the Italian film industry workforce: both because the 50:50 goal is dramatically distant (considering the ten roles surveyed by CENTRIC, 87% of works produced in 2021 were male-dominated) and because merely 'adding' women is not enough.

### 3.2. *Where (and how) women work*

Our data shows that the presence of women in Italian cinema varies on the basis of two parameters: professional roles and types of projects. Some production initiatives favour women's work, while others configure non-inclusive work environments characterized by severe segregation dynamics.

Regarding the first parameter, we found that female direction represents the foremost driver of feminization of Italian film crews. Indeed, when the direction is predominantly female (in other words, when it has a GBS tending to +1) the presence of women in the creative team tends to increase. Figure 3, like the previous one, depicts the gender composition of creative teams using the Gender Balance Score index. The figure shows that when the direction column is above the 0 line – which indicates a prevalence of women professionals – the ratio of women to men tends to increase in the other professional roles as well.

Figure 3 - *Gender Balance Score (GBS) per profession by female-driven and male-driven works. 2021*



Source: CENTRIC-CineAF- Università Cattolica.

<sup>41</sup> M. Buonanno, *Visibilità senza potere. Le sorti progressive ma non magnifiche delle donne giornaliste italiane*, Naples: Liguori, 2005.

<sup>42</sup> P. Simone, *Female Professionals in European Film Production*, October 2022. <https://rm.coe.int/female-professionals-in-european-film-production-2022-edition-p-simone/1680a886c5>; accessed February 2023.

This insight can be interpreted in two ways: on the one hand, it might be proof of the effectiveness of equity actions that operate on decision-making roles, providing, for example, easier access to funding when films are directed by female professionals<sup>43</sup>; on the other hand, it might indicate the onset of a feminization process, such as the risk of (re-)creating a category of “women’s projects”, which we would do well to be wary of.

A second parameter, with equally ambivalent implications, is the genre of film projects, which strongly correlates with women’s presence<sup>44</sup>. This is usually explained in the debate with reference to production costs and the persisting perception of the risk of assigning expensive projects to women directors<sup>45</sup>. For instance, research has suggested that the fewer women directing thrillers or action movies could be explained by the higher production costs of such features (compared with dramas or comedies), which would drive producers to prefer male directors<sup>46</sup>. This reading is corroborated by our data emerging from the Italian context (tab. 3)<sup>47</sup>.

Table 3 - *Percentage of female-driven and male-driven films by genre. 2017-2021*

	<i>FEMALE DRIVEN</i>	<i>MALE DRIVEN</i>
Documentary	34%	19%
Drama	26%	26%
Comedy	12%	19%
Biopic	8%	3%
Romance	4%	4%
Thriller	3%	4%
Historical Drama	2%	3%
Musical	2%	1%
Family Movies	2%	1%
War	2%	1%

Source: CENTRIC/CineAF.Università Cattolica-Ministero della Cultura

<sup>43</sup> In Italy, for example, the recent Cinema Law (220/2016, implementing decrees of 07/31/2017 and 11/09/2017) favours access to public funding for films with one or more women as directors, screenwriters, or composers.

<sup>44</sup> See for instance the Annenberg Foundation’s *Inclusion Initiative* reports. <https://annenberg.usc.edu/research/aii>. Accessed September 13, 2022; accessed February 2023.

<sup>45</sup> A. Coles, D.R. Eikhof, “On the Basis of Risk: How Screen Executives’ Risk Perceptions and Practices Drive Gender Inequality in Directing”, *Gender, Work & Organisation*, 28, 6 (2021): 2040-2057. <https://doi.org/10.1111/gwao.12701>.

<sup>46</sup> S.L. Smith *et al.*, “The Ticket to Inclusion: Gender & Race/Ethnicity of Leads and Financial Performance Across 1,200 Popular Films”, 2020. <https://assets.uscannenberg.org/docs/aii-2020-02-05-ticket-to-inclusion.pdf>; accessed September 13, 2022; S.L. Smith *et al.*, “Inclusion in the Director’s chair. Gender, Race, & Age of Directors Across 1,200 Top Films from 20177 to 2018”, 2019. <https://assets.uscannenberg.org/docs/inclusion-in-the-directors-chair-2019.pdf>; accessed September 13, 2022.

<sup>47</sup> The percentages were calculated on the total number of female-driven audiovisual products and on the total number of male-driven audiovisual products respectively (that is, products that had a GBS of over +0.5 and below -0.5 respectively for the director’s role). It should also be noted that genres below 1% are excluded from this table, and that each film can be associated with several genres: thus, the sum of the shares does not add up to 100.

As the table shows, female directors are more present in documentaries (+15% compared to male-directed productions), a genre that, on average, has lower production costs than fiction.

The hypothesis that women professionals tend to work in low-cost projects more than in high budget ones is confirmed by the average cost of female-directed films. It is necessary to point out that production cost information was available for 51% of the sample. Within this sub-sample, films directed by women show average budgets that are 38% lower than those of their male counterparts.

While undoubtedly discriminating, the economic dimension of production is not the only element impacting the feminization process. For Ana Alacovska and Dave O'Brien, for example, different genres of cultural production configure *different working environments*, also from the point of view of relationships among professionals and labour models, which in turn influence the presence of women in the creative scene<sup>48</sup>. Once more, this is evidence that numbers can only go part of the way in helping us understand the complex terrain of exclusion in the creative industries.

### 3.3. What are women's working conditions in the Italian cinema industry?

Looking at career progression, stability and longevity is one way of disentangling these complexities. Our data shows that contemporary career dynamics of women professionals in Italy are characterized by perduring structural fragilities. For instance, in above-the-line professions, a higher percentage of female professionals tend to work in pairs with a male colleague more than their male counterparts: for instance, 15% more in direction and screenwriting, and 11% more in editing (see tab. 4). Although this is partly explained by the larger proportion of male professionals across all examined sectors, at the same time, it can also be read as an indicator of dependency of female professionals on male ones.

Table 4 - *Percentage of professionals working alone, in mixed pairs, or in other group forms, by profession. 2017-2021*

		<i>DIRECTION</i>	<i>WRITING</i>	<i>EDITING</i>
<i>FEMALE</i>	SINGLE	69,76%	20,92%	70,85%
	F/M PAIR	18,54%	25,26%	18,18%
	OTHER GROUP FORM	11,71%	53,83%	10,97%
<i>MALE</i>	SINGLE	81,78%	29,32%	74,03%
	F/M PAIR	3,57%	10,37%	7,49%
	OTHER GROUP FORM	14,65%	60,21%	18,48%

Source: CENTRIC/CineAF.Università Cattolica-Ministero della Cultura.

To investigate the nature of this fragility, we first examined career structure across the entirety of the CENTRIC/CineAF period (1964-2021), measuring duration and continuity

<sup>48</sup> A. Alacovska, D. O'Brien, "Genres and Inequality in the Creative Industries", *European Journal of Cultural Studies*, 24, 3 (2021): 639-657.

in four professions – DoP, editing, direction, and screenwriting (tab. 5). For duration, we considered two indicators: the “1-shot rate” (intended as the percentage of directors that released only a single film throughout their career) and the “career span”, calculated as the number of years between the first and the last recorded film projects. We excluded “active” professionals, who have had a feature released within the last 5 years, from our calculation.

Table 5 - *Career Dynamics Summary. 1964-2021*

PROFESSION	ATTRIBUTED GENDER	TOTAL %	% 1-SHOT	CAREER SPAN AVG.	F/M CAREER DELTA	CAREER GAP avg years	F/M GAP DELTA
DOP	F	4%	23%	9,35	-33,2%	4,72	+8,7%
	M	96%	6%	14,27		4,34	
EDITING	F	30%	10%	11,62	-10,6%	5,01	+3,7%
	M	70%	9%	14,25		4,83	
DIRECTION	F	8%	22%	11,60	-23,9%	7,04	+28,7%
	M	92%	9%	15,16		5,47	
SCREEN WRITING	F	13%	14%	10,97	-15%	5,87	+5,7%
	M	87%	8%	13,60		5,55	

Source: CENTRIC/CineAF.Università Cattolica-Ministero della Cultura.

The resulting data shows that 22% of female directors produced a single film in their career, against 9% of male directors. Concerning career span, women professionals consistently show shorter careers than men, a discrepancy that peaks with cinematographers, who have careers that last 33% fewer years on average compared to their male colleagues; the value is 23,9% for directors.

Regarding career continuity, we measured average gaps, that is, the number of years between consecutive films. Again, our data shows that the gaps between films produced by women professionals are consistently higher, peaking at 28,7% for directors, about three times as much as the next profession (cinematographer) with an 8,7% delta. The interpretation of these data points requires more qualitative work, focusing on the biographies of women professionals; we can speculate that factors such as work/life balance, on top of exclusionary industry norms, play a role in this increased discontinuity. It must also be underscored that our data consider only the cinema industry, intended as the production of feature-length works that received permission for distribution; it does not, therefore, take into account that professional continuity could be secured by work in other areas of the audiovisual sector. Since that option obviously applies to all professionals regardless of gender, it would still not explain the substantial and systemic gender gap across professions evident in our data.

What appears certain is that throughout the history of Italian cinema, women in authorial or above-the-line professions have been fewer in number, have had shorter careers, and have worked with less continuity.

#### 4. CONCLUSIONS AND A NOTE ON METHODOLOGY

Our analysis of the occupational dynamics of the female workforce in the contemporary Italian cinema industry has shown a slight increase in the presence of women, as well as a perdurance of the structural weaknesses that hinder female professional growth in many areas of modern economies. These can be summed up as follows: a) an inverse relationship between presence in a professional category and the resources and responsibilities it entails; b) a shorter, more discontinuous career path resulting in a greater vulnerability.

The impact of the biggest exogenous stressor in a generation, the Covid-19 pandemic, appears to have had little influence on the gendered dynamics of the Italian cinema industry. This can be read as an unexpectedly positive fact, given the increased vulnerability female professionals tend to face during social and economic crises<sup>49</sup>. Instead, the overall number of women kept increasing. At the same time, the policy interventions introduced in 2017 by the new Film Law, which benefit women-led film projects' funding applications, appear to have barely moved the needle in the short time since they came into effect: the percentage of women-led films that received state production funds rose by 1% between 2018 and 2020<sup>50</sup>. While, thus, some small positive signs of improvement are recorded, the deep structures that fuel the gender gap in films appear untouched. To reiterate, increasing the number of female professionals, or "adding," is not enough. The risk, mentioned in many studies, is to build a cosmetic equality that hides deeper imbalances and injustices<sup>51</sup>, including the complete lack of family/work balance policies – which should be key concerns regardless of gender.

Finally, this work forces us to reckon with a methodological challenge that big data-driven analyses like ours face. Our project relies upon data collated from private sources, such as online databases, and public ones, such as ministerial documents, which has shown (through our collaborative editing experiment) non-zero levels of unreliability. Until national and supra-national institutions establish a protocol for the interoperability of data that would allow for the creation of a granular database of creative works, we will struggle with data quality in any analysis of the occupational dynamics of these sectors. At the same time, when the focus of the analysis is as complex and politically sensitive as gender, the difficulties (and related costs of collation and verification) multiply. However questionable or essentialist, the fact that quantized conceptualizations of gender work well with the structure and function of relational databases makes them all that more difficult to restructure. This is true both *upstream*, at the level of the design of those databases, as well as *downstream*, at the level of data aggregation and interpretation where analyses such as ours operate. More flexible, accurate conceptualizations of gender increase the costs of both processes, either at the data collection or verification phases, possibly leading to the point of grinding analyses to a halt if resources are not sufficient.

We do not currently have good solutions for these problems, although discussions are thankfully ongoing<sup>52</sup>. For instance, if nonbinary gender identities are lumped under

<sup>49</sup> On the gendered impacts of Covid-19, see World Economic Forum, Gender Gap Report, 2022. <https://www.weforum.org/reports/global-gender-gap-report-2022/>; accessed on October 15, 2022.

<sup>50</sup> Valutazione di Impatto, 2022, p. 147.

<sup>51</sup> S. Ahmed, *Living a Feminist Life*, Durham: Duke University Press, 2017, 102. This point is also put forward in Marta Rocchi's article in this issue, "Women's Labour in TV Series Production: A Comparative Analysis of Italian Generalist TV and Pay Platforms (2016-2019)".

<sup>52</sup> See, for example, the conference "Beyond the binary variable: feminist quantitative analyses of gendered inequalities", whose programme is freely available on YouTube (FemQuant, CRSSH, University of Cambridge, 2021).

a “third” category, we fall back into quantized essentialism, simply adding a further column to the databases and analyses. If they are expressed using specialized categories (possibly emerging from lower-level descriptors), which would require a direct input from the professional to be correctly assigned, they would fully acknowledge self-identification but would risk becoming impractical on a large scale. Or, again, nonbinary identities could be downright excluded from databases: such is the current approach of the totality of the online databases that CENTRIC relies upon<sup>53</sup>. As we advocate for the collection of more inclusive gender data, we might also take into account Judith Lorber’s argument, made in her recent *New gender paradox*<sup>54</sup>: that in order to eliminate gender inequality we need to both dismantle the gender binary but also to strategically insist on it when it is functional in demonstrating inequalities that derive precisely from the persistence of a structural binarist view at the institutional level. In such cases, including our analysis of the screen industries, where the assumption of binarism is used to produce hierarchies of professional value, data collection in binarist terms can be strategically useful in order “to identify where formal gender inequality exists and to bring hidden discriminatory practices to light”<sup>55</sup>.

This article, then, and the data on which it is based, still read gender dynamics outside a necessary intersectional perspective. Here, too, the application of a data-driven approach comes up against complex issues relating to the supply of data, their management and protection, and the ethical and political implications of attributing intersectional variables to individuals on a large scale: possible, for example, for variables such as age, very complex for variables such as ethnicity, almost impossible for variables such as disability and/or chronic illness.

In order to address the risks that contributions to the research on gender inequalities in the creative industries face – to be reduced, ignored, underfunded, individually unsustainable and so on – analyses have to integrate multiple data streams, most of which were designed long before the current debates brought to the fore a new set of challenges. The stimulating and urgent methodological questions they pose can only be solved at the intersection between social sciences, philosophy, computer sciences *and the lived experiences of professionals themselves*.

<sup>53</sup> Similar conversations have barely started on other, even more complex issues, such as the attribution of gender identities to professionals who are no longer alive (C. Morgan, “Their-stories: Interrogating Gender Identities of the Past”, 2nd What Is and How to Do LGBT History Conference, 2015).

<sup>54</sup> J. Lorber, *The New Gender Paradox. Fragmentation and Persistence of the Binary*, New York: John Wiley & Sons, 2021 (Italian translation, *Oltre il gender*, Bologna: il Mulino, 2022).

<sup>55</sup> *Ibid.*, Chapter 3, conclusion.