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Gas in the Italian Kitchen between the Belle Époque and Fascism

Abstract

The relation between gender and energy within the domestic space is an extremely interesting subject from a historiographical point of view. This article explores the case of Italy during the years of fascism, a historical period of great change from both a socioeconomic and technological standpoint. It clearly shows the slow pace of both modernization and women's emancipation.

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INTRODUCTION

1 The case of Italy shows that the relation between gender and energy in the domestic space constitutes an extremely fertile historiographical field that remains little explored. Historical research has most often concentrated on each of these fronts, with interesting results, albeit ones that never intersect. On the one hand, there is no shortage of research on urban services and gas. They have now attained maturity, although they remain limited to a small circle of historians specializing in energy-related subjects, and more specifically gas-related ones. Similarly, historical studies on the domestic space have already attained a broad level of knowledge, thanks largely to historians of architecture and sociologists. On the other hand, gender studies has expanded greatly in recent years, although this did not lead to its intersection with energy-related topics. There is subsequently considerable room for pursuing new avenues of research emphasizing the role of women and gender distinctions in the use of everyday services such as gas.

2 In the early twentieth century, due to the major economic and social transformations that characterized the Western world, the private home became an important focal point for technological innovation. The home was transformed, enabling the use of energy resources as well as the information flows distributed by increasingly differentiated network technologies. Whether it was mentalities, systems of representation, or the values associated with consumption and the kitchen,¹ all aspects of the domestic space

¹ See especially, *La casalinga riflessiva. La cucina razionale come mito domestico negli anni '20 e '30* (Roma: Multigrafica Editrice, 1983); Annalisa Avon, “La casa all’italiana: moderno, ragione e tradizione nell’organizzazione dello spazio domestico dal 1927 al 1930”, in Giulio Ernesti (dir.), *La costruzione dell’utopia. Architetti e urbanisti nell’Italia fascista* (Roma: Edizioni Lavoro, 1988), 47-66; Marco Romanelli-Marta Laudani-Luca Vercelloni, *Gli spazi del cucinare. Appunti per una storia italiana 1928-1957. La cucina secondo Driade: case e sistemi, miti, modelli e tendenze della cucina domestica* (Milano: Electa Elemond, 1990); Luisella Ceretta, *Le donne e la cucina fra le due guerre. Assennatezza e risparmio, consigli di ieri utili anche oggi* (Torino: Susalibri, 2010); Imma Forino, *La cucina. Storia culturale di un luogo domestico* (Torino: Einaudi, 2019); Anna

were profoundly influenced by the sociotechnical framework, as well as the systems put into practice by those who used them. The diffusion of material cultures connected to energies and their new uses was thus directly involved in defining gender roles. The case of gas in Italy offers topics of great interest for such an approach.

THE SERVICES REVOLUTION

3 Italian urban infrastructure and services underwent a profound phase of change during the period referred to as the “Età giolittiana,” from the beginning of the century until World War I. Mass society expressed a series of new needs, especially in connection with urban life. Cities began to change appearance around the mid-nineteenth century, when extensions and renovations modified spaces and functions. Consumption that a few years earlier was considered as the privilege of the few became potentially accessible to all. The gradual improvement of living conditions genuinely benefited a large portion of the population².

4 At the end of the process that began in the 1880s, a new concept of public service appeared during the first fifteen years of the century, crowning the profound transformations that cities underwent during this long period. Urbanization engendered new hygienic and energy-related questions. Demographic increase was another challenge, with the expansion of an increasingly dense urban transportation network being one of its effects. In response,

Giannetti, *Storia della cucina. Architettura e pratiche sociali* (Milano: Jouvence, 2019).

² *La città che cambia. Infrastrutture urbane e servizi tecnici a rete in Italia fra '800 e '900*, Andrea Giuntini (dir.), “Ricerche storiche”, 2000; Andrea Giuntini, *La modernizzazione delle infrastrutture e dei servizi urbani in Italia. Temi, risultati e obiettivi della ricerca*, in Carlo G. Lacaia (dir.), *Scienza tecnica e modernizzazione in Italia fra Otto e Novecento* (Milano: Franco Angeli, 2000), 67-81; Andrea Giuntini, *I tecnici e il Municipio. Gli ingegneri e i servizi urbani a rete in Italia fra la fine del XIX e l’inizio del XX secolo*, in Sergio Zaninelli-Mario Taccolini (dir.), *Società italiana degli storici dell’economia, Il lavoro come fattore produttivo e come risorsa nella storia economica italiana. Atti del convegno di studi, Roma 24 novembre 2000* (Milano: Vita e Pensiero, 2002), 371-383.

municipalities conceived new forms of administration. They henceforth had to consider the highly different interests of citizens in order to manage increasing social complexity. The technical innovations born during the Second Industrial Revolution fostered the consideration of a new culture of hygiene.

- 5 By changing lifestyles, urban population growth brought changes to most political sensibilities, as did the way public opinion formed, and perceptions regarding the role of public authorities. Citizens began expressing higher expectations. This was especially true of collective requests for new public services. Municipalities at the time were confronted with issues that they had never addressed on this scale. This was not exclusively an Italian problem, but a European one. Numerous similarities influenced a new definition of the role of public authorities.
- 6 In this shifting context, women became the protagonists of the family and domestic space, assuming a complementary role to that of men. New social demand stimulated the technicians and administrators of energy companies in particular, few of whom were women. It prompted the development of collective systems that led to a profound change in the organization of everyday life and the consumption of public services. This translated into change for all services, from the oldest, such as drinking water supply, to the most advanced establishments from a technological standpoint, such as telecommunications. From transportation to drinking water, sewers to waste removal, and gas to electricity networks, the study of networks, from which the concept of the “networked city” derives, finds a key application. Ultimately, the policies connected to the technical services of networks represented extremely important urban administration tools, such that for a long time they stood in for urban planning programs. A similar challenge required a governing elite better prepared for the responsibilities of municipalities, one that relied on increased technical expertise. A greater awareness regarding the needs of citizens became one of the essential characteristics of these new technicians and administrators.

THE GAS INDUSTRY, BETWEEN THE BEGINNINGS OF ELECTRICITY AND NEW USES

The maturity of the gas industry—which for Italy coincided with the time of political unification—translated into definitive technological and economic consolidation, with higher profits for private companies.³ Demand for public lighting on the part of small, medium-sized, and large cities, as well as the acceptance of private individuals to be connected to gas, considerably increased beginning in the 1860s. This firstly explains the tremendous success of private gas companies. At the same time, the process seeking to create oligopolies, which was already underway, intensified. Everywhere companies that were less resilient gradually disappeared in favor of the arrival of financially more powerful groups within the Italian industrial landscape, almost all foreign. Between mergers, incorporations, and increasing capital, gas companies of the time clearly expanded in power, and asserted themselves with respect to other industrial sectors. Creating adequate means of production to meet market demand was accompanied by increasingly functional economic organization for production and distribution. Associated with a significant drop in the cost of coal supplies, this development was behind the enormous success of gas companies.

The gas industry underwent profound change from the 1880s onward. The conflict with electricity pushed it toward a massive reorientation of uses. By gradually pulling out of the lighting sector—which was for the most part public in mid-sized and large cities—gas entered the homes of Europeans and changed their everyday lives through a number of thoroughly innovative experiments. This phase coincided with the arrival of the formidable competitor that

³ Giorgio Bigatti-Andrea, Giuntini-Amilcare, Mantegazza-Claudia Rotondi, *L'acqua e il gas in Italia. La storia dei servizi a rete, delle aziende pubbliche e della Federgasacqua* (Milano: Franco Angeli, 1997); Andrea Giuntini, “La parabola del gas in Italia dal carbone al metano dalle origini ottocentesche ad oggi. Aspetti economici, tecnologici e finanziari in chiave comparativa”, *Transportes, Servicios y Telecomunicaciones*, n°16, 2009, 38-60.

was electricity within energy competition, with gas already representing the past, and electricity characterizing a future marked by new forms of energy. With respect to the gas industry, the conservative quota strategy—which emphasized reducing overall costs and selective investment seeking to reduce direct costs rather than increase market share—characterized the final two decades of the nineteenth century. The cost structure, which for a long time penalized electricity, allowed the gas sector to stay afloat, thereby slowing its decline, which would otherwise have been much more rapid. The struggle between the two energies played out within the domestic setting, with the help of innovative advertising campaigns directed, for the first time, at women, the central figure in the kitchen, and ultimately the primary decision maker.

9 The challenge posed by electricity prompted gas companies to support research in this sector. This became a commercial objective when the rising price of high-rank coal necessitated low-cost production that could face up to this new competition. It was better to abandon the rivalry from the standpoint of lighting power, and instead concentrate on heating value, as was the case with the invention of the incandescent gas mantle by Karl Auer von Welsbach (1858-1929) in 1885.

10 The future of gas, as people still said with hope and confidence at the time, could reside exclusively in the administration of a leaner gas—obtained by mixing in water gas, or by fueling it with benzene vapors—that was not entirely derived from the distillation of more costly coal. Produced according to the strictest possible criteria in terms of cost and hence final price, this gas opened up new markets. It was at this time, during the 1890s, that research and experiments increased with success, in both the heating and cooking sectors. Commercial policy was oriented toward a widespread penetration of the domestic space, in search of new clients able to provide adequate outlets for production. Detailed knowledge of market structure and the use of advertising became fundamental factors in the attempt of gas companies to halt their inexorable decline.

THE BEGINNINGS OF GAS IN THE KITCHEN

The habit of cooking with gas, the diffusion of stoves, gas refrigeration—the first gas refrigerator was put on the market in 1926 in the United States—and iron all proceeded more slowly in Italy compared to other European countries. In the early twentieth century, the private homes of the middle and more affluent classes became the focal point for major innovation efforts. The kitchen in particular, where women were increasingly sovereign due to a notable drop in domestic staff, served as a magnet for technological innovation, beginning with cooking food.⁴ 11

The adoption of gas in the kitchen was neither quick nor linear, as it had to overcome a certain reluctance on the part of public opinion with respect to the abandonment of old habits. According to numerous consumers, the taste of dishes cooked with gas was not satisfactory. The fear of explosions was another curb to their use. The difficulties of introducing gas in the kitchen also stemmed from the belief that the heat needed to cook could only be obtained by solid fuels. Until the beginning of the fascist period in the 1920s, the competitors to gas remained coal and wood. It was only later that electricity began to compete with gas. The difficulty of regulating the flame was another obstacle, which was later overcome by the creation of new burners in which the quantity of gas escaping varied depending on the opening or closing of the hole. 12

The introduction of a new technology in the everyday space is always a delicate moment, for it impacts established habits, values, and practices, established as a cultural identity of sorts. Stoves and kitchens were among the first technical tools of the modern era to function with the help of buttons, levers, and switches. The new balances that resulted from using this appliance, in addition to the new spatial and temporal limitation defined by the technology, 13

⁴ Maristella Casciato, “L’abitazione e gli spazi domestici”, in Piero Melograni (dir.), *La famiglia italiana dall’Ottocento a oggi* (Roma-Bari: Editori Laterza, 1988), 525-587.

were not always positively received, for they destabilized the social order. The mentality of the time, the systems of representation, beliefs, and thoughts—along with bodily aspects and needs—were profoundly influenced by this new socio-technical framework.

14 During this first phase, which essentially covered the first twenty years of the century, some key advantages were nevertheless identified for the domestic use of gas. Advertising campaigns, which reached increasingly broad swaths of the population, provided exposure. Aside from lower costs, the discourse emphasized that gas polluted much less than coal. For example, during this era of spreading hygiene, the greater cleanliness of premises made possible by gas represented a significant advantage. An influential scientific popularizer such as Paolo Mantegazza, who introduced hygiene-related issues in Italy, played a decisive role with his widely diffused publications. Gas took up less space compared to coal, which required a large accumulation in the kitchen or other rooms of the home, and it also offered greater continuity of use. Old kitchens were built out of refractory soil, and were very cumbersome. Appliances had to be placed near a wall, and never moved after installation. They emitted soot and ash, which deposited onto the walls and floorboards. During use, they produced great heat loss, which transformed the kitchen—generally a large room in which preparing meals was not the only activity—into a place where the entire family gathered to spend long hours, thereby saving heating costs.

15 Despite the difficulties mentioned above, in the early years of the twentieth century the domestic uses of gas developed considerably throughout Europe, including Italy. A machinist metamorphosis of the family home gradually unfolded. Research and experiments increased with success, and the habit of cooking with gas initially occurred in communal settings—hospitals, schools, barracks, penitentiary institutions, and later in homes. Beginning with a law from 1903, the municipalization of public services—a development that primarily involved Central and Northern Italy—influenced the spread of gas use.

Municipalization, which was designed to regulate all potential municipal services and place them under municipal management, was the result of a highly complex political process, and was decisive in the gas sector, leading to higher consumption thanks to a gradually overabundant supply, as well as a differentiation of uses thanks to lower rates⁵.

In addition to the beginnings of commercial strategies seeking a fine-grained penetration in search of new clients via the modern use of advertising, the system of production also had to quickly adapt, as Italy was emerging from a backward situation in this respect. For a long time, given the inability of national gas producers to meet new needs in gas stoves, imports were predominant, especially from Great Britain. It was only later that Italian industry proved capable of bringing to market enough quality products to meet growing demand.

At the same time, scientific information developed thanks to the publication of specialized books and magazines, as well as the release of popular information that targeted women in particular. The book by the director of the gas workshop in Pisa and Bologna—Goffredo Wobbe, author of the guide on gas interchangeability—already offered in 1890 a complete panorama of opportunities in Italian kitchens. Wobbe presented news from the German world, to which he belonged. His book was clearly aimed at operators in the sector, but the booklet—a translation of the work by the German gas industry representative Franz Schaefer, published in 1897 and reprinted in 1913—clearly spoke to a broad audience that also included less affluent classes. In practice, it inaugurated propaganda in favor of the domestic use of gas, providing detailed and enthusiastic illustrations of its benefits. With a typical language borrowed from the popular science manuals of the late nineteenth century,

⁵ Aldo Berselli-Franco Della Peruta-Angelo Varni (dir.), *La municipalizzazione nell'area padana. Storia ed esperienze a confronto* (Milano: Franco Angeli, 1988); Andrea Giuntini, "Il cammino della municipalizzazione dei servizi pubblici locali dalla legge del 1903 alle Multiutilities", *La finanza locale in Italia. Rapporto 2010* (Milano: Franco Angeli, 2010), 205-226.

the book addressed a female audience, which had already been the target of the first advertisements promoting the introduction of gas before the end of the nineteenth century⁶.

- 18 The role of Giulia Ferraris Tamburini also emerged quite early on. In 1898, she published a home maintenance manual for women in which she defended the use of gas in the kitchen due to its modernity, efficiency, and hygiene, while hiding the potential risks involved in the novelty:

“If it is a gas stove, one must ensure that there is a lot of draft, for as demonstrated by Dr. Arnozan, appliances of this type often provoke degradations in the health of cooks, who are exposed to headaches, insatiable thirst, anemia, and other very serious disorders due to the products of gas combustion not sucked up by the chimney.”⁷

- 19 The first specialized magazine devoted to gas was published in 1902. Directed by Vittorio Calzavara, *Il Gaz* was a fairly technical publication, albeit one that also included early advertising communication. The magazine became the precursor of an innovative vision that included the use of gas in the kitchen. In general, the novelty of gas in the kitchen was presented as a sustainable consumer product representing an indispensable domestic modernity. In the initial phase, information could only be addressed to the wealthiest social circles of the center and north of the peninsula, who could understand the sense of the change and afford the required expenses. However, the potential public slowly broadened.

⁶ Goffredo Wobbe, *Nessuna casa senza gas. L'uso del gaz a scopi di cucina, di riscaldamento ed industriali. Con 56 disegni di apparecchi provati ed una istruzione concernente il modo di adoperarli. Come altresì l'indicazione del rispettivo consumo di gaz* (Pisa: Enrico Spoerri, 1890).

⁷ “Se la cucina è a gas, si curi che esista un forte tiraggio, giacché il dottore Arnozan ha provato essere le cucine a gas spesso dannose alla salute delle cuoche, le quali, a cagione dei prodotti della combustione del gas non aspirati dal camino, vanno soggette a mal di capo, a sete inestinguibile; all'anemia e ad altri gravissimi disturbi” (Giulia Ferraris Tamburini, *Come devo governare la Mia casa? Libro per la famiglia* (Milano: Ulrico Hoepli, 1898), 112).

AFTER WORLD WORLD WAR I

The situation evolved radically after 1918, and with the rise to power of Fascism in 1922. The new regime placed the family at the center of society, and amplified the domestic role of women through propaganda. Their chores nevertheless changed. Despite being subordinate in the family construction of the regime, they played an innovative role. They managed the household's budget, making daily choices in verifying provisions and managing the gradual mechanization of the home, and hence technology. Tasked with new responsibilities, women became the guardians of consumption.⁸

In spite of its undeniable male chauvinist characteristics, the futurist movement was subversive even with respect to its everyday philosophy, opening new prospects of expression and existence for women with regard to originality, authenticity, impulsivity, and self-confidence. Between the 1910s and 1930s, certain experiences of women's liberation appeared, primarily involving the urban classes and members of the bourgeoisie. As a result, in this respect it was a step forward for women, who shifted from a disqualifying ancestral obligation to total management responsibility over a crucial room in the home. The representation of gender changed: women's know-how no longer exclusively referred to the ability to cook, but also included new and more progressive functions, which were expressed in connection with an innovative technological environment. Women, especially those from more affluent social backgrounds, assumed the role of consumers, and as such became the target of marketing campaigns by companies in the sector.

⁸ Victoria de Grazia, *Le donne nel regime fascista* (Venezia: Marsilio, 1993); Helga Dittrich-Johansen, “La “donna nuova” di Mussolini tra evasione e consumismo”, *Studi storici*, 3, 1995, 811-843; Mariuccia Salvati, “Tra pubblico e privato: gli spazi delle donne negli anni Trenta”, *Studi storici*, 3, 1997, 3, 669-692; Fiorenza Tarozzi, “Padrona di casa, buona massaia, cuoca, casalinga, consumatrice. Donne e alimentazione tra pubblico e privato”, in Alberto Capatti-Alberto De Bernardi-Angelo Varni (dir.), *L'alimentazione* (Torino: Giulio Einaudi editore, 1998), 647-679; Katrin Cosseta, *Ragione e sentimento dell'abitare. La casa e l'architettura nel pensiero femminile tra le due guerre* (Milano: Franco Angeli, 2000).

22 The creation in 1926 of the *Ente Nazionale per l'Organizzazione Scientifica del Lavoro* (ENIOS) enabled the first experiments of scientific management to also be applied in the kitchen. This involved scientific housekeeping, mentioned for the first time in the books of Maria Gasca Diez, the author who translated the text written by the American journalist Christine Frederick, a precursor and founding document that was published in 1913, and that inaugurated a new era⁹. These publications were exclusively intended for a female public. The governing of the kitchen, seen as the source of an efficient rationality, became a component of a feminist lifestyle, gradually and belatedly developing throughout the peninsula.

“In the domestic space, imperfection, irrationality, and wasted time still reign like a dead weight, shackling women who could today take wing without altering their femininity, and who as women could make their great contribution to the national economy and the prosperity of the people, provided they can successfully perfect the family.”¹⁰

23 Driven by the concept of rationalism, the scientific organization of labor transitioned from the fields of industrial production to the domestic sphere of everyday work, dictating the patterns of domestic life and redefining the role and image of women within a perspective of reconciliation between modernity and practicality. One of the primary Italian architectural magazines of the time clearly captured this change:

⁹ Maria Gasca Diez, *Cucine di ieri e cucine di domani* (Roma: Enios, 1927); Christine Frederick, *La donna e la casa. Il taylorismo nella vita domestica. Libro destinato a tutte le donne d'Italia, per facilitar loro i lavori della casa* (Torino: Sit, 1927).

¹⁰ “Incombe ancora, come peso morto, sulla azienda domestica, l'imperfetto, l'irrazionale, il perditempo, incatenando al piede la donna che oggi potrebbe pure spiccare il proprio volo nella vita moderna senza snaturare la sua femminilità, e, mantenendosi donna, portare il più ampio contributo all'economia nazionale, alla prosperità del popolo, solo che riesca a perfezionare la famiglia” (Maria Gasca Diez “Introduzione” Paulette Bernège, *Come debbo organizzare la mia casa* (Torino: SIT, 1928), VII).

“The modern woman, who also has interests of a spiritual order, who practices sports, who takes care of her person, and who in many cases is alone or only has part-time help, must assume all household chores, and should firstly equip the kitchen so as to save previously wasted time and effort, as though it were the most natural thing in the world. (...) The kitchen should only have tools and appliances that serve a genuine purpose; they should be placed so they can be used with no effort.”¹¹

Frederick, who compared the kitchen to a factory, proposed reducing the space between the two sides of the kitchen during the preparatory steps for meals, concentrating the most useful equipment in order to always have it within reach, conveniently adjusting the height of countertops depending on the task at hand, and ensuring steady lighting and ventilation of the environment, among other ideas. Small and easier to manage, the kitchen enabled the gradual liberation of women from their historical role, in which they stuck to what for centuries represented the space of reference for the whole house, introducing a compartmentalization that was different than the rhythms and needs of everyday life. Gas allowed women to have more free time during the day, and to have other more satisfying activities not necessarily connected to domestic tasks. This evolution also explains the favor with which the use of gas in the kitchen received from women, for whom this previously unknown comfort was especially beneficial. The domestic space modified women's role, especially that of the middle class, in which the empiricism transmitted over generations was replaced for the first time by a cooking method that drew on the technological knowledge engendered by the use of gas.

¹¹ “La donna moderna, che ha pure interessi spirituali, che coltiva lo sport, che cura la propria persona e in molti casi deve assumersi da sola o con un mezzo servizio tutti i valori casalinghi, deve in primo luogo attrezzare la cucina in modo da risparmiare tempo e fatica, che finora si sprecavano, come se ciò fosse la cosa più naturale del mondo. (...) La cucina non deve contenere che quegli oggetti, che servono al suo vero scopo; questi oggetti devono essere disposti in modo da poterli sfruttare senza sforzo superfluo.” (*Domus*, Agosto 1937, 30).

- 25 Between 1927 and 1930, projects for rationalizing domestic behavior and defining a national style emerged. The transformation began with the improvement of hygienic conditions, which the use of gas fostered by eliminating the soot and heat loss produced by the combustion of solid matter. The criteria of functionality and division of labor enabled new cooking systems to eliminate the storage and cutting up of fuels, their transportation, lighting, and supplying, in addition to cleaning the stove and ashes. Thanks to a more precise regulation of the flame, propaganda based itself on the lesser dispersion of heat, as well as the better taste and nutritional properties of food. Cooking with gas promoted the birth of new wholesome food habits, which also impacted bodies, leading to a new ideal of beauty for women, who wanted to feel agile, slender, and light. The kitchen became a specialized space used exclusively to prepare meals: order and cleanliness reigned, the copper of cookware was replaced by stainless steel, nickel, and aluminum; the scale and clock to check cooking time became symbols of a new era, in which women abandoned the empiricism of the past and adopted habits based on a greater degree of organization, exactly like a workplace outside the home. All of this was particularly appreciated by middle-class and more affluent women.
- 26 Costs were also lowered thanks to the standardized production of stoves and kitchens equipped with enameled iron structures with smooth tops and linear volumes. Cleaned of soot, the kitchen went from being black to white, assuming a heretofore unknown scale and spirit. While the adoption of coating materials provided luminosity to the room, the presence of enameled stoves and appliances led to the creation of new working surfaces. With the arrival of gas, the kitchen changed spatial position within the house, transforming from a meeting place to a place of passage. Cooking became a simple assembly of foods, with an innovative vision of rationalization for operations and domestic work. Supplying a source of constant heat methodically governed culinary operations at each step.
- The prototype of the modern kitchen, rationally designed in its dimensions and in the arrangement of available tools, originated in Germany. As part of an affordable public housing program, in 1926 the architect Grete Lihotzky created a kitchen model that would become famous throughout the world as “the Frankfurt kitchen.” This kitchen measured approximately six and a half square meters compared to the thirteen of the normal bourgeois kitchens of the period. Esthetic considerations combined with the two primary concerns of hygiene and economy:
- “The kitchen is nothing more than a laboratory, and it would be easier to work there if it was considered and laid out as such. It should look like a pharmacy (...). The cupboards on the walls should have glass doors and the spices (...) should be placed in glass jars, each with its own label, like in a pharmacy (...). We believe the kitchen as a living room corresponds to a mediocre lifestyle, for that is where peelings and leftovers end up.”¹²
- Architectural journals and fashion magazines of the time became attentive observers of the technical and esthetic evolution underway, underscoring that the protagonist of this transition was the woman. In August 1928, the year that the most prestigious Italian architectural magazine *Domus* was created, it published the first article in Italy describing the ideal appearance that a modern kitchen should have. The modernity of the scenario once again stood in contrast to the effect of old blackened walls.
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¹² “La cucina altro non è che un laboratorio e sarebbe molto più facile lavorarci se fosse considerata e attrezzata come tale. Deve assomigliare ad una farmacia (...) gli armadi a muro devono avere ante di vetro, e tutte le spezie (...) dovrebbero stare in vasi di vetro, ognuno con la sua etichetta, proprio come in una farmacia (...). La cucina soggiorno era ai nostri occhi un modello di vita deterioro perché (...) le bucce, i resti, tutto finiva nel soggiorno” (Marco Romanelli-Marta Laudani-Luca Vercelloni, *Gli spazi del cucinare. Appunti per una storia italiana 1928-1957. La cucina secondo Driade: case e sistemi, miti, modelli e tendenze della cucina domestica* (Milano: Electa Elemond, 1990), 108).

“The kitchen should be luminous and bright: when coal and wood were used for cooking food, this was very difficult because the ceiling and walls easily turned black, and somewhat darker paints were preferred. Now that gas and electricity are commonly used, the kitchen can be very clean: up to a certain height—approximately two meters—the walls will be covered with easily washable white tiles; the upper part and ceiling will be plastered, or better yet painted with oil paint: it goes without saying that the few pieces of furniture will be painted white, and their tops will be marble. The ground should be covered in tiles or linoleum. We will thus have a kitchen that is very different than the large and black kitchens of our great-grandparents, and thanks to its cleanliness and whiteness, it will on the contrary be a room that is hygienic and esthetic.”¹³

29 The following year, the same magazine also provided advice for the materials to be used:

“The floor of the kitchen is covered in hexagonal tiles of pink sandstone: the walls will be covered up to a height of 1m60 with ivory-colored ceramic tiles, the upper part of the walls is covered with a pearl gray primer and painting. The ceiling is white (...). The stove is electric. The hood to extract vapors is made of aluminum and unalterable glass. The faucet and sink for washing vegetables are made of porcelain. The table is placed in front of a window to have as much light as possible: the tabletop is in green stone from the Roya valley, polished and

¹³ “La cucina deve essere luminosa e chiara: quando si adoperavano per la cottura delle vivande il carbone e la legna ciò era assai difficile perché il soffitto e le pareti si annerivano facilmente e si preferiva allora tenere tutte le tinte di un tono un po’ basso. Ora il gas e l’elettricità che sono entrati nell’uso comune fanno sì che la cucina può essere tenuta pulitissima: le pareti sino ad una certa altezza, circa due metri, saranno coperte di piastrelle bianche facilmente lavabili, la parte superiore e il soffitto intonacati o meglio dipinti con colori ad olio: inutile dire che i pochi mobili saranno verniciati in bianco, e i loro piani in marmo. Il pavimento dovrà essere in piastrelle o in linoleum. Avremo così una cucina che sarà ben lungi dalle grandi, nere e nomadi cucine dei nostri bisnonni e sarà invece per la sua nettezza ed il suo candore un locale igienico ed estetico (...)” (“Una cucina moderna”, *Domus*, agosto 1928, 38-39).

acid-resistant; below, the storage for cooking utensils is closed with sliding doors; similarly, the cupboards with shelves on the inside also have sliding doors. All of these elements have a structure made of soft wood, and are coated in pearl gray plywood.”¹⁴

The new context welcomed women rather than forcing them to work, creating conditions that reduced fatigue and increased satisfaction. By supposing that she had the adequate cultural background, the woman became the intermediary figure between the new technology and the house. Gas became a vehicle of modernity and change once the old habits of the past were overcome. The task of directing the esthetic and cultural transition of the home fell to women. This was not reserved only for the rich. Important changes also occurred in large communal spaces, hotels, and schools, where large gas stoves were tested.¹⁵ They took place in the north and center of the country, albeit with considerable differences between cities and the countryside, plains and mountains.

THE 1930S

During the 1930s, the canons of Italian society changed, including with respect to the role of women. Consent for the fascist regime proceeded via an improvement in the living conditions of citizens, with novelties in the kitchen

¹⁴ “Il pavimento della cucina è in piastrelle esagonali di grès rosso: le pareti sono rivestite fino a 1.60 dal pavimento con piastrelle di ceramica color avorio, la parte superiore delle pareti è liscia a gesso e verniciata a smalto grigio perla. Il soffitto è bianco (...) L’apparecchio della cucina è elettrico. La sovrastante cappa per l’aspirazione dei vapori, in alluminio e vetro inalterabili. (...) La fontanella e la vaschetta per il lavaggio delle verdure, sono in porcellana. Il tavolo è disposto davanti alla finestra in modo da godere la massima luce: il piano è in pietra verde di Val Roya levigata non intaccabile dagli acidi; i piani inferiori per deposito utensili della cucina sono chiusi da sportelli scorrevoli; pure le mensole di servizio sono scorrevoli. La struttura di questi mobili consiste in una armatura di legno dolce e rivestimenti in compensato verniciato a smalto grigio perla” (“Cucina di oggi e cucina di domani”, *Domus*, dicembre 1929, 53).

¹⁵ “Osservazioni sulle grandi cucine a gas”, *L’industria del gas e degli acquedotti*, 2, 1928, 13-16; “La grande cucina a gas”, *Acqua e gas*, 9, 1929, 194-199.

contributing in this regard. During that decade, there was stiff competition between gas and electricity in Italian homes, and especially in kitchens. The diffusion of electric stoves raised serious difficulties for its gas competitors. On a new front, the challenge between gas and electricity, which had already existed in the final decades of the nineteenth century in the lighting sector, emerged in connection with domestic uses. The kitchen became a battlefield in the name of a new modernity. The issue also had a political dimension, as the fascist regime had a favorable view of replacing gas with electricity, due to the good relations established from the beginning between industrial actors in the electric industrial sector and Mussolini. Electricity bore the label of Italian products, during a period characterized by great restrictions on consumption and by nationalism exacerbated to the point of autarky, whereas gas required importing coal. The country's political and economic evolution during the 1930s found an occasional counterpoint in the role played by an energy source deemed functional to the autarkic-nationalist ideology. Public and private institutions encouraged the gas industry as a whole, and they also raised awareness among the population regarding the use of a new and available electric technology. During autarky, the choice of what food to buy became a political act, as for the first time women were called on to play a national role by supporting the regime's economic policies—an innovative role within a traditionalist context. Unprecedented and more advanced social models emerged for women from the small bourgeoisie and urban working world. An emancipated woman such as Amalia Moretti Foggia (1872-1947) became famous in the 1930s and 1940s, under the pen-name Petronilla, for her cookbooks designed to have Italians cook frugally during those times of economic crisis.

32 During those years, an effective response from the gas industry, which was incapable of positioning itself in a relation of technological parity with respect to electricity, came with the search for natural gas and its early use. While it was put in place primarily after World War II, in the

late 1930s the use of natural gas nevertheless raised the fascist regime's hopes of achieving the dream of energy independence. The most important moment was the creation of the *Agenzia generale italiana petroli* (Agip) in 1926, with a view to having the company conduct explorations between Emilia and Tuscany, as well as in the Po Valley. The first methane that was produced was compressed into cylinders, with domestic consumption being among the planned uses.

33 Competition between gas and electricity translated not only into a gradual reduction of gas rates, but also into advertising campaigns targeting women, who were seen as the subjects who ultimately made the choice between gas and electricity. New and increasingly elegant types of gas stoves were produced during the decade. Until the early 1930s, the gas stove was a hybrid appliance, a cross between a low cupboard and a stove; they were also functional and affordable, in order to attract women's eye. The Italian industry in the sector acquired increasing know-how: in its 1934 catalog, the famous Triplex company presented four dual gas-coal stove models "for cooking and heating the premises." New products appeared regularly in the final years in the columns of magazines specializing in gas, with the arguments between the two industrial groups being reproduced there.

34 The rational use of gas became dominant in the context of autarky. It was also discussed on the territorial scale with the spread of initiatives of diffusion and propaganda—often organized jointly with the major appliance producers Triplex and Fargas—ranging from conferences to gas cooking competitions reserved exclusively for women. Designed to explain the technical functioning of appliances, calls for proposals sought to demonstrate that using gas in the kitchen with very modern appliances could provide excellent yields in terms of consumption. Up to fifty women participated in these initiatives, and competing using the same appliances, for which the victorious women left comments:

“The victors will be the contestants who consume the least gas, with cooking time not being taken into account.”¹⁶

35 Sales advertising played an essential role in the gas stove sector with respect to the techniques adopted: promotional messages in newspapers and magazines, propaganda campaigns, and local initiatives helped put gas in the limelight, making it a protagonist in Mussolini’s increasingly intense patriotic appeal. With gas stoves, a lifestyle was being sold in the brochures, professional’s magazines, home decorating magazines, and publications intended for women. The tone of the commentary was invariably the following:

“The ingenious fabrication of ovens reduces the woman’s work in the home to the simple manipulation of a button located on the oven door. Depending on the position of the button—‘Pastry’ or ‘Rotisserie’—the burners used are horizontal or vertical.”¹⁷

36 Reductions and incentives, such as free installation for pipes, were characteristic of the decade before entry in the war. Innovative price lists were made available to families, highlighting special rates with photographs and detailed technical descriptions of various models, which provided both explanations on technical functioning and advice on new recipes and cooking time. “Fiammetta la Triplex per tutti” (Fiammetta, the Triplex for everyone), a gas stove with three burners and an oven, was a common sight in Italian kitchens thanks to its price of 390 lire in 1935, a sum equivalent to more than 50% of a laborer’s monthly salary. In the booklet provided by Triplex, its numerous advantages were listed

¹⁶ “Vincitrici saranno le concorrenti che avranno consumato il minor quantitativo di gas, mentre il periodo di tempo impiegato per la cottura non verrà preso in nessuna considerazione” [editor’s note: source not indicated by the author].

¹⁷ “L’ingegnosa costruzione dei forni riduce il lavoro della massaia al semplice spostamento di un bottone di comando posto sotto la portina del forno. Secondo che si sposti questo bottone sulla posizione ‘Pasticceria’ o ‘Rosticceria’, i becchi vengono a trovarsi orizzontali oppure verticali.” (*La fortuna in casa. Triplex. Fornelli, cucine, scaldabagni a gas*, Milano: Stabilimento grafico Ripalta, 1937, 3).

in a paragraph entitled: *The exact placement of containers, procedures for cooking ingredients more effectively and economically.*

The layout of the kitchen was of the greatest importance to reducing waste of all kinds, including time and the woman’s movements and gestures within an increasingly ordered environment:

“The stove provides the most ingenious advantage for a rational and ordered arrangement of foods and for the maximal use of space (...), everything is studied with maximal precision considering the various requirements of the service with the maximum of convenience, necessary conditions for the required savings in work time.”¹⁸

All of this of course reduced women’s obligations in the kitchen, as the supply of a constant source of heat made it possible to cook quickly without constant checking. Cooking became a process that could be divided into a number of phases: organizing the tools to be used, preparing the food, serving, and cleaning. A kitchen model was therefore established in which the linear cupboard-sink-stove-table sequence was compacted onto the same level:

“In general, the kitchen should be seen as a place where the housewife, during the course of her work, is not concerned about getting things dirty, in other words where cleaning can be performed often, thoroughly, and easily.”¹⁹

¹⁸ “La cucina presenta le più ingegnose risorse per la razionale e ordinata disposizione degli alimenti e per la massima utilizzazione dello spazio (...) il tutto studiato con la massima cura per le svariate esigenze del servizio e la massima praticità, condizioni necessarie per la voluta economia di lavoro e di tempo” Enrico A. Griffini, *Costruzione razionale della casa. La teoria dell’abitazione. Nuovi sistemi costruttivi* (Milano: Hoepli, 1933, 42).

¹⁹ “Da un punto di vista generale è opportuno considerare la cucina come un locale dove la massaia, durante il suo lavoro, non abbia preoccupazione di sporcare, dove cioè la pulizia possa essere fatta frequentemente, radicalmente e con la massima facilità” (“Non dimentichiamo la cucina”, *Domus*, maggio 1944, 185-188).

39 This also denoted a global evolution of the leading architectural models, which took definitive form beginning in the 1950s, but drew great enthusiasm as early as this decade:

“With respect to the esthetic and technical—or more simply architectural—problem of organizing a home, whether small or large, the part reserved for services occupies an important place from the esthetic and technical point of view (...) for services, just like all other spaces in the home, obtaining a certain “degree” of convenience, a technical and functional perfection, is a necessary condition—albeit insufficient if an esthetic appearance is not also present—to create a home that is truly coherent with the spiritual and moral manner of the modern man.”²⁰

CONCLUSION

Combining energy and gender provides an interesting observation point for Italian kitchens during a historical period of major change, from both a socioeconomic and technological standpoint. This brief study has shown that the emancipatory role played by gas use in the kitchen with respect to women’s condition, during a period when women’s role changed significantly in society, and in spite of the presence of a political logic designating her as an angel in the house. The continuation of this history—the time of the economic boom, definitive modernization, and a new prosperity for the country—constitutes an interesting field of research, one that is important due to its numerous and various implications. 40

20 “Nel problema estetico e tecnico, o più semplicemente architettonico, dell’organizzazione di un alloggio, grande o piccolo che sia, la parte destinata ai servizi entra con un suo peso, estetico e tecnico (...) anche per i servizi, come per tutti gli altri elementi dell’abitazione, il raggiungere un certo ‘grado’ di praticità, una perfezione tecnica e funzionale, è condizione necessaria, ma non sufficiente, se con essa non si raggiunge anche un valore estetico, a creare un’abitazione che sia veramente coerente al mondo spirituale e morale dell’uomo moderno” (“I servizi della casa. La cucina”, *Domus*, gennaio 1939, 56-59).

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