



'Housewives and Architects': Marie-Elisabeth Lüders' Management of the New Architecture from Pot Lid to *Siedlung*

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In 1926, women's rights activist Marie-Elisabeth Lüders (1878-1966) gave a speech at the annual meeting of the German Institute for Norms (DIN), right after a talk by architect Walter Gropius (1883-1969), on 'norming and housing shortage'. Claiming the improvement of household regimes as essential for conquering the pressing post-WWI housing shortage and impending economic catastrophe, Lüders saw the mission at hand to be one of an 'urgent collaboration' between 'producers, traders, housewives and architects, one just like the DIN strives toward'. Her task list named the standardization of pots and pans alongside that of architectural elements such as doors, windows and stairs, rendering the improvement of the household (hence, of female labor) a decidedly architectural challenge – even necessity. As a founding member of the Reichsforschungsgesellschaft (a research committee for cost-efficient building) alongside Gropius, Lüders steered what became known as the modernist *Siedlung* into existence: not as architect, but as managerial expert. This article aims to extend the techno-scientific (and male) histories of both standardization and the New Architecture with a reframing of what constituted 'architectural elements' from the viewpoint of the very 'housewives' who shaped modern architecture from the pot-lid outward.



An “Unknown Army”: The Rise of Housewives as Experts

In her 1936 book, *Das unbekannte Heer* (The Unknown Army), Marie-Elisabeth Lüders (1878–1966) defined the fundamental shift that had occurred during WWI, when men left to fight on the front and women took over many formerly ‘male’ preserves (Fig. 1) (Lüders 1936). Lüders sketched a dramatic picture of the ‘women’s army’ in a steel foundry:

The red-hot wire rods rattled and hissed closer along the roller line. At its end, a platoon of most robust women in men’s clothes and leather aprons stood ready to catch them with mighty tongs. A tough grip, the sparking snake was caught and flew



Figure 1: Cover of Marie-Elisabeth Lüders, *Das unbekannte Heer* [The Unknown Army] (1936), displaying photographs of women working in factories during WWI.

to the next rattling track ... Calmly, women sailed back and forth between the dark scrap piles and glowing furnaces Earlier, the woman had sewn coats and jackets, hunched over the sewing machine, eyes on the presser foot, hands fixed on the fabric. Today, her gaze extends far and wide, stretching vast spaces, across great distances and slagheaps.¹ (Lüders 1936: 172–73)

Where the economic contribution of women had (at least in most histories) been limited mainly to the textile industry,² now they handled ‘red-hot wire rods’ and iron claws. Their scope had shifted from needlework to ironwork, from confined tasks and small-scale tools to ‘mighty tongs’. This change — a material process directly linked to the wartime reorganization of the female workforce — effectively redrew the limits of women’s expertise. For Lüders, women had not simply ventured into male territory, they had started to exercise supervision and control. Women were now mastering the glowing metal, forming a ‘platoon’, ready for anything that might come their way. But this physically taxing and dangerous work was not depicted as stressful or exhausting; rather, it was conducted ‘calmly’, despite the many risks involved. Women had conquered male domains, and they were doing just fine.

The only daughter of a Prussian government official, Lüders trained as a teacher before studying political science in Berlin. She enrolled in 1909, a year after Prussian universities were finally opened to female students, and was the first woman in Germany to receive a doctorate in political science. A founding member of the German Democratic Party (DDP), she was also among the first cohort of female representatives in the Weimar National Assembly in 1919 — one year after German women were granted the right to vote — and would continue her position in the Reichstag until 1930 (**Fig. 2**). For Lüders, these pursuits did not run counter to her activities as a self-proclaimed ‘housewife’. In fact, it was the knowledge, experience and tasks of the so-called housewives of 1920s Germany that informed her professional and political engagement. As Lüders made clear in an article from 1921, the ‘housewife’ had a distinct vocation (Lüders 1921). Moreover, rather than being a separate sphere, the ‘household’ (Haushalt) encompassed a specific expertise that she deemed instrumental to the economic make-up of the German nation-state. Thus, although she never studied architecture or planning, Lüders actively shaped the appearance and perception of modern architecture as a cofounder of the Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen (RfG), the German Reich Society for Economic Efficiency in Building and Housing (an institution financing the construction of housing estates), as the first female member of the Committee of German Engineers (VDI), as a committee member of the German Institute for Norms, as a legislator and as a collaborator of Walter Gropius (1883–1969) (**Fig. 3**).³



Figure 2: Vote of the penal law committee in the Reichstag, chaired by Prof. Dr. Wilhelm Kahl. Included in the photo are Prof. Dr. Wilhelm Kahl (Volkspartei) (middle); Justice Minister a.D. Erich Emminger (left); and Marie[-Elisabeth] Lüders (right). Photograph by Erich Salomon, 1930. Erich Salomon Archive, Berlinische Galerie.

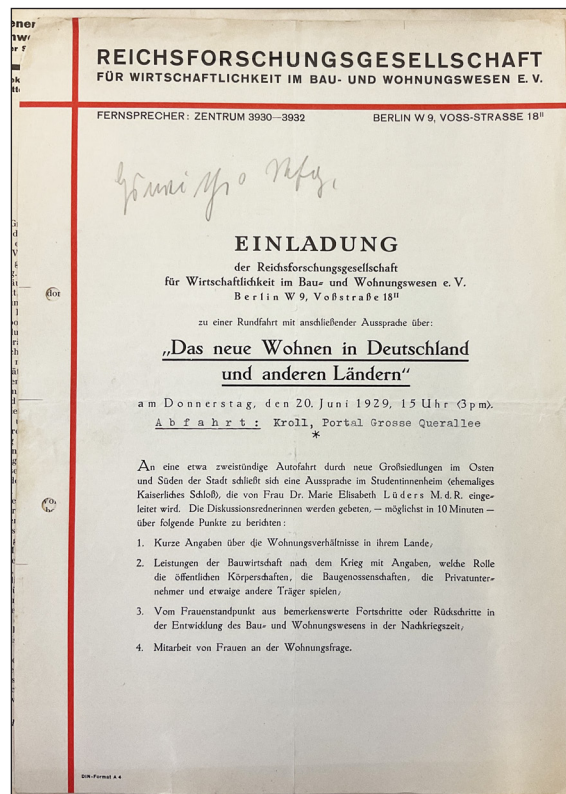


Figure 3: Invitation of the Reichsforschungsgesellschaft to experience ‘Das neue Wohnen’ [The New Housing], featuring Lüders as expert, 1929. Bundesarchiv BArch, N 1151/45, Reichsforschungsgesellschaft.

This essay will investigate how a growing recognition of the value of women's work — an equation of the experience of the (female) housewife with the expertise of the (mostly male) architect — came to play a formative role in the creation of modern architecture. The history of the kitchen is deeply embedded in that of women's movements, and the impact of Taylorism on modern architecture, the technologization of the domestic sphere, and modernism's drive toward rationalization have all been extensively studied (McLeod 1983; Hanisch and Widrich, 1999). As Susan Henderson details in her book *Building Culture*, many modern architects forged alliances with female experts: figures like the economist Erna Meyer and the architect Margarete Schütte-Lihotzky feature prominently in the literature on 'scientific management' (Henderson 2013: 143–202). In fact, accounts of the rationalization of the domestic mark the usual entry point for women into histories of modern architecture, which for a long time regarded architects and engineers, the vast majority of them men, as the sole experts in the field. Meyer became known as an expert on household reform, Schütte-Lihotzky primarily as a kitchen designer. What Lüders brought to the making of modern architecture was another kind of expertise: that of managerial supervision.

In the spirit of Lüders, this article sets out to reframe modern architecture's fascination with standardization and rationalization from the viewpoint of the household. It approaches domestic labor, not as a set of 'unprofessional' practices but as the seed for the reform of a devastated national economy. A re-evaluation of female work in a male-dominated society opened the way for 'laypeople' to become involved in the shaping of modern architecture. In turn, the domestic labor carried out by women and their expertise in managing 'household concerns' reshaped the male domain of architectural design. In Lüders' book, it was no longer just Gropius wielding his pencil but women like herself who were defining the lines of the new architecture.

The DIN: Rationalizing Architecture after WWI

The German Institute for Norms (DIN), founded by engineers and bureaucrats in 1917 to optimize the production of military equipment, soon turned its attention to architecture in the postwar period.⁴ Along with standardizing industrial production across different scales, the rapid construction of affordable mass housing for the population was seen as essential to the nation's economic recovery. The major obstacle to achieving this was the shortage of construction materials, such as timber and steel, resulting from reparation payments and the loss of industrial capacity. In this moment of crisis, standardization became a means to saving scarce resources. For instance, Waldemar Hellmich, the DIN's first director, repeatedly condemned wasteful construction practices as 'immoral', and architects such as Ludwig Hilberseimer argued against wasteful building practices (Hellmich [n.d.]; Hilberseimer 1927: 3). Architecture was

now decomposed into thousands of different parts — staircases, door handles, ceiling beams, window frames — each item regulated on a norm sheet that precisely prescribed the conditions for its mass production (Meister 2018). No element was thought to be too small, no savings too inconsequential.

As the DIN's standardization efforts expanded in the 1920s to take in more and more objects and professions, a group of 'housewives' entered the fray (Reicke 1984). Not just unpaid minders of children or housekeepers, these particular housewives were experts in spatial organization and ergonomics, decidedly upper middle class, well off and well educated. The DIN and the RfG, as well as various women's organizations, were organized as 'registered societies' (*eingetragene Vereine*) working for the 'greater good' of society.⁵ As others have noted, the early women's movements were decidedly class based (Nolan 1990). For women of the bourgeoisie, volunteer work for this kind of society became a path toward expertise and professional work. Lüders herself had worked full-time for five years as a volunteer 'house carer' (*Wohnungspflegerin*) in Charlottenburg before studying political science. For Lüders, such volunteer work was a building block of human society, inculcating a sense of responsibility. And anyone who dared to think of shirking that responsibility was warned that

then they may step outside the circle of civic society, they will no longer be 'alive' — they will merely exist as a number in the files of the local residents' registration office.⁶ (Lüders 1961: 15)

Volunteer work, then, was a moral and civic duty. But it also trained the women in administrative work, fundraising, managing finances, organizing committees, and teaching other volunteers — all abilities that would prove crucial in making modern architecture in Germany a success (and an icon that would later be exported around the world).

These housewives were also, it could be said, material feminists in the sense of Dolores Hayden's definition: they insisted on the immediate impact on women's lives of a redesign of their material working conditions (Hayden 1981). Lüders understood the improvement and standardization of the domestic realm as a means to reconfigure women's spatial, economic and political conditions. Herself a housewife and a professional, she saw the role of the housewife as extending beyond the household. Occupying two expert roles, that of domestic organizer and of established economist, she linked the *oikos* back to *oiko-nomia* in her work. For Lüders, the household run by housewives was not qualitatively different from the national scale of the economy run by politicians. Lüders had pushed for the 'recruitment of women' to increase Germany's

industrial production during the war. As she reflected in *Das unbekannte Heer*, ‘All thoughts and actions were directed toward a single purpose: the defense of the Vaterland ... the men with weapons — but [what about] us — the women?’ (Lüders 1936: 2).⁷ Now, with the war over, and Germany on course for a major economic depression, she saw the continued training and mass employment of women as essential for the country’s survival.

Where the Neues Bauen (New Architecture) aimed to give Germans a new home, the *Neue Haushalt* told them how to live most efficiently in it (Meyer 1932). In 1926, Lüders (1927) gave a speech, ‘Norming and Household’, at the annual meeting of the DIN, right after a talk called ‘Norming and the Housing Shortage’ by Walter Gropius (1927), an early collaborator of the institute, who was then working on his Dessau-Törten housing estate, conceived as a model for cost-effective mass housing based on standardized parts and industrial construction processes (Figs. 4 and 5).



Figure 4: Walter Gropius’s article ‘Normung und Wohnungsnot’ [Standardization and Housing Shortage] in *Technik und Wirtschaft* (1927: 8).

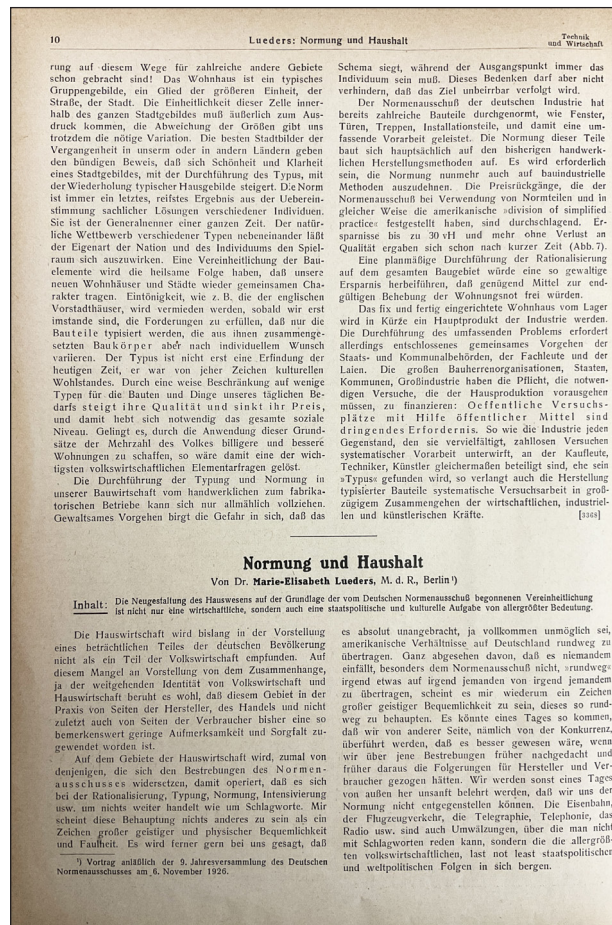


Figure 5: Marie-Elisabeth Lüders's article, 'Normung und Haushalt' [Standardization and Household], appears directly after Gropius's article in *Technik und Wirtschaft* (1927: 10).

For Lüders, the most prominent female member of the norm committee working with the German Engineering Association (VDI), it was just as important to establish DIN norms for pots and cookware as it was to standardize the construction elements — stairs, doors or windows — that Gropius had talked about. Household objects were not a separate sphere but an integral part of the larger focus on apartments (*Kleinwohnungen*) as a solution to the housing crisis. As she put it,

The simplification and improvement of the household starts with the apartment: the situation, arrangement and configuration of the rooms, but also the type of stairs, doors, windows, the equipping of the service spaces, particularly the kitchen ... To reach satisfactory solutions for all these tasks, we urgently need the kind of collaboration between producers, retailers, housewives and architects that DIN is trying to achieve.⁸ ('Jahresversammlung', 1926)

According to historian Nicholas Bullock, while architects like Bruno Taut called for the need of collaborative reform of German dwellings, it was Lüders who in 1926 urged the DIN to convene a committee on housing typologies (Typisierung der Wohngebäude) that actively bridged these two spheres: the design of household items and the making of architecture (Bullock 1988: 177, 184–185).

The reforms pursued by modern architects and the DIN related to both the built environment and the domestic life that took place within it. Soon after regulating the architectural elements itemized by Lüders, the DIN undertook to standardize household objects such as jars and cookware. Since it was not a government agency but depended on (largely voluntary) market compliance, it commissioned advertisements depicting its vision of a DIN-ordered universe. One ad showed a shelf with a diverse array of Weck jars, each with its own lid size; proclaiming ‘Unification saves Time and Money’, it demonstrated how the introduction of a new norm, where ‘one lid fits all’, would liberate the housewife from the hassle of going to several shops to find a suitable fit (Fig. 6) (Deutscher Normenausschuss 1927).



Figure 6: Advertisement for standardized Weck jars by the DIN [then NDI], 1926. Bundesarchiv BArch, N 1151/43.

The stories of the DIN and the modern Siedlung are often told as histories of men — engineers, architects and bureaucrats — standardizing objects, convening in committees and founding institutions, strategizing the systematization of the world. When women

enter the story, it is as contributors to what architectural history long categorized as ‘female’ domains: textile design, for example, or culinary skills, both located in the domestic sphere. The assumed gender separation of competence and authority was deployed by the men in power both discriminatorily, of course, but also strategically. While this separation was not necessarily contested by the women’s movement of early-1920s Germany, it was precisely the longstanding trust in women’s ‘spheres of competence’ that made them powerful players in the larger project of reforming the nation. The same influence can be seen behind the widespread take-up of Fordism and Taylorism, the success of which ‘gave engineers a new role in the organization and administration of larger industrial firms’ (Rabinbach 1990: 276). Male authors such as the German economist Friedrich von Gottl-Ottlilienfeld wrote glowing endorsements of Fordism and technological reason (1926), but the generation of architects who were contemporaries of Margaret Schütte-Lihotzky were influenced more by books such as *The New Housekeeping: Efficiency Studies in Home Management* (1913) and *Household Engineering: Scientific Management in the Home* (1919) by the American home economist Christine Frederick, which were quickly translated into German and found their counterpart in Erna Meyer’s bestselling volume, *Der neue Haushalt* (1926). Meyer even reviewed the model housing estates of the RfG in the organization’s own journal (Reichsforschungsgesellschaft 1929: 34; Frederick 1919a; Frederick 1919b; Meyer 1926). While (male) engineers seemed to draw the plans, it was women who could — albeit in very different ways — extend their reach beyond the expert audience.

As Mary Nolan notes, the ‘liberation’ of women seems to have provided the middle classes with scope to reform working class life — an approach that sometimes ‘conflicted with working class realities’ (Nolan 1990: 551). Susan Henderson links the increasing criticism of the women’s movement to its insistence on freeing the housewife from ‘drudgery’. Such liberation was contingent on the woman staying within her given domestic boundaries, where she would be ‘freed for brief moments through the application of techniques invented by authorities in the professional world’ — in other words, it was only a temporary respite (Henderson 2013: 159). Lüders, however, was less interested in giving women a break. Her ambitions went further:

Women should not be liberated from the scrub bucket and duster because they are lazy. They should be liberated from the burden and the ‘treacherous object’ in their housework to liberate intellectual, spiritual and cultural values and to enhance the fulfilment of their duties as mothers and citizens.⁹ (Lüders 1927: 11; Nolan 1990: 568)

Lüders was herself a product of the 19th-century *Bildungsbürgertum*, the educated upper middle class. As she saw it, the emancipatory potential of education could only

be fully realized by taking on new roles *outside* the household. In this context, the desired collaboration between ‘housewives and architects’ was ‘not just an economic, but a political and cultural task of the utmost importance’ (Lüders 1927: 10).¹⁰ It was imperative to find solutions, otherwise ‘culture will disappear in the scrub bucket and humanity will get caught up in the duster’ (‘Jahresversammlung’, 1926).¹¹

Rather than getting caught up in the duster, the goal of the expert housewife was to eliminate all the obstacles, unnecessary work and material excess that undermined those essential intellectual, spiritual and cultural values — and the nation’s economy. After all, for Lüders ‘home economics is macro-economics!’ (Lüders 1927: 13): ‘housewives’ were not just informed consumers of standardized goods (and therefore participants in the national economy), but culture-makers on a par with architects or politicians. Hence, their work was as important for the norm effort as that of the DIN engineers. While acknowledging that ‘up to now, a large part of the German population has not conceived of home economics as part of the national economy’, Lüders pushed the DIN’s agents to develop norms for homes not only in relation to architecture but in domestic terms (Lüders 1927: 10).¹² And the DIN followed up (Fig. 7). A report of a meeting on 5 March 1927 to discuss norms for the Kleinwohnung lists as participants ‘representatives of the architecture profession, housewife committees, furniture sellers, houseware stores and the furniture industry’ (‘Mitteilungen des Deutschen Werkbundes’ 1927).¹³



Figure 7: Advertisement for standardized cooking pots by the DIN [then DNA], 1928. Bundesarchiv BArch, N 1151/43.

The RfG: Managing the Modern Housing Estates

Lüders' contribution to reconfiguring domestic life in a time of economic and political crisis went beyond her involvement in the DIN's norming of parts. In 1927, together with the architects Walter Gropius and Otto Bartning, Lüders founded the influential Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen which, or RfG, aiming to foster economic efficiency in housing and the building industry (Fleckner 1993). An embodiment of the desired 'collaboration between housewives and architects', the institution helped to finance modernist icons such as the Weißenhofsiedlung in Stuttgart. Its scope reached across all scales: as Lüders put it, the RfG was founded to

investigate all elements that have a bearing on costs and rent; from road planning, utility connections, organization of the plan and the standardization of construction elements to the interior fittings and the various facilities that lighten the workload of the housewife and mother (laundry room, kindergarten, green spaces and play areas).¹⁴ (Lüders 1963: 114)

Addressing the Reichstag in 1927, Lüders raised the issue of the misuse of public funds and corruption in the development of some prototype housing estates. The RfG, she said, would exercise a much tighter control, 'closely observing the entire construction process'. In fact, she continued, 'I do not think it too bold to say that if we were only to calculate the actual building costs — [that is,] if everyone were to forgo their "silent shares" — then private capital would be in a position to re-engage with the housing market today' (Fleckner 1993: 28).¹⁵ To produce these new, efficient, family-friendly and corruption-free modern estates, the RfG would not commission the developments directly but would act as what we would now call a project manager (Reichsforschungsgesellschaft 1927).¹⁶ Approaching modernist mass housing from the viewpoint of managerial oversight — a key function of fundraising and volunteer work — Lüders was the one who connected the work of the architects with everyday reality by ensuring financial structures, timelines and a key focus. In this way, she formed the crucial link between designers and politics, between ideas and their translation into built form. But rather than acting as a distant patron — a fundraiser for a modernist pipe-dream — Lüders cooperated with the architects as much as they cooperated with her. As a public institution, the RfG's aim was to completely overhaul social housing, both its form and its financing, and it saw modern architecture as a means by which to realize this vision. The stated goals of the RfG were to

develop and disseminate economic forms of construction elements, apartments and houses, economic methods of site preparation, cost calculation, construction processes and, more generally, the highest possible economic efficiency in the housing and construction industry.¹⁷ (Reichsforschungsgesellschaft 1927)

To achieve this, Lüders secured funding — 10 million Reichsmark — from the Reichstag, which also granted the RfG tax benefits as an association (Verein) whose work was seen to be of ‘public utility’ (Fleckner 1993: 28).

Lüders would continue to stress the parallels between domestic labor and the construction industry, referring to households as ‘domestic businesses’ and pointing out the economic power of the ‘19 million housewives’ in the Weimar Republic. In a speech in 1928, reported in the journal of the Deutscher Städtetag (German Association of Cities and Towns), Lüders used ‘examples of the huge values transferred to domestic consumption and usage’ to emphasize ‘the immense importance of household economies for the construction industry and the national economy as a whole’. The report continues:

[Lüders] asked for homes that would fulfill their economic and cultural purpose, namely the economic running of the household and the physical, spiritual and emotional nurturing of the family. This requirement could only be satisfied if the apartments were consciously and intentionally built from the inside out, if the buildings were constructed and equipped from the usage of the apartment, ‘from the cooking pot to the facade’, so to speak.¹⁸ (Die Rationalisierung 1928: 531)

For Lüders, modern architecture was to be constructed *from the inside out*, in accordance with the needs of the family and the labor of women. As such, her modernism was centered around domestic labor. In contrast to more famous examples, such as Erna Meyer’s books, this domestic labor was not only defined ergonomically but was itself a determinant of the form of the architecture.

In its brief four-year existence, the RfG assessed and co-financed housing developments such as Gropius’s Dessau-Törten estate (350,800 Reichsmark in credits and subsidies) and the Weißenhofsiedlung in Stuttgart (150,000 Reichsmark) (Fleckner 1993: 52–53). It organized a ‘technical symposium’ to present research findings; speakers included Gropius, Bartning, Meyer and Schütte-Lihotzky, among many others. The RfG also published brochures detailing its recommendations for improving the efficiency of housing construction, always with the ideals of the affordable

Kleinwohnung and standardization through DIN norms in mind. However, the most ambitious project, intended to provide insight into the ‘entire building process’ (Fleckner 1993: 28), from the very first sketch to the final balancing of the books, was Spandau-Haselhorst, a prototype housing estate for 10,000 people. The competition for its design, which attracted 221 entries, was won by Gropius, an insider of sorts, in collaboration with Stephan Fischer. Gropius provided the essential plans and initially acted as head of the group of architects. However, the built scheme was, after much criticism, designed by Paul Mebes, Fred Forbát and Paul Emmerich (Fig. 8).

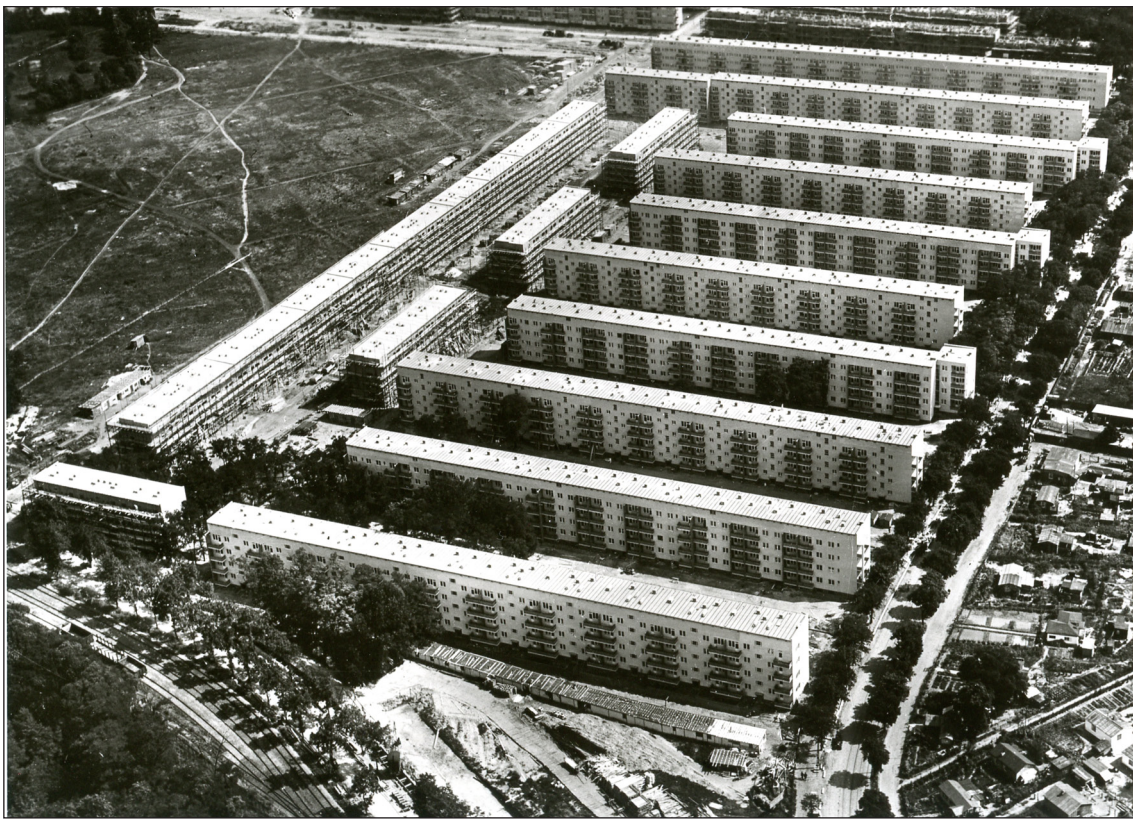


Figure 8: The ‘Reichsforschungssiedlung’ Haselhorst (here the section designed by Paul Mebes), under construction. Photographer unknown, undated [ca. 1931]. Architekturmuseum TUM.

Wanting to ensure the objectivity of the research, the RfG did not engage directly with the project as a client, but instead commissioned Heimag (Gemeinnützige Heimstätten AG) — a subsidiary of a company with experience in rationalized construction processes — to act as the developer. However, this splitting of responsibilities led to friction during the planning process. Even Bartning, a staunch supporter of the attempt to research the entire process of development, argued that this task was effectively made impossible

by the lack of direct oversight from the commissioning body. Heimag's financing models were also questioned by, among others, the architect Martin Wagner in his role as building commissioner (*Stadtbaurat*) of Berlin. RfG ended up canceling its contract with Heimag, and the firm went on to build the estate without supplying the research material that the RfG had hoped for (Fleckner 1993: 62). Even the advertisement for the project's development prospectus, featuring a collage by none other than László Moholy-Nagy, presented the project as a lush garden oasis without any hint of the modernist architecture that the RfG wanted to test (Fig. 9).



Figure 9: László Moholy-Nagy, cover design for Spandau-Haselhorst Housing Development Prospectus, about 1928–1929. Gelatin silver print, 42.7 × 49.4 cm. The J. Paul Getty Museum, Los Angeles. © Estate of László Moholy-Nagy/Artists Rights Society (ARS), New York.

Housewives: A Managerial Profession

Lüders was unconvinced by architects' attempts to resolve the housing crisis without the insights of the housewife. Disappointed at how the Haselhorst project had played out, she pinned some of the blame on the architects, and especially on Gropius, who

painfully combined ‘unfinished technical work with pompous art-speak and pushy salesmanship’ (Fleckner 1993: 61).¹⁹ It was unseemly, she thought, that Gropius should behave in this way when he held such a prominent role in the RfG and was actively engaged in building for the association. The ‘salesmanship’ she detected in Gropius was a far cry from the managerial expertise she attributed to the housewife.

But others had a different take on the travails of the RfG. In a 1929 issue of *Die Form*, Ludwig Hilberseimer leapt to the defense of the male architects:

Many women, Marie-Elisabeth Lüders among them, tend to blame the architects for the badly designed apartments. They forget that housing used to be a matter for [speculative developers] before the war ... It was only after the war that architects were called on to design housing.²⁰ (Hilberseimer 1929: 295)

While Hilberseimer did not dispute that there were problems — qualitative and quantitative — with postwar housing, he simply did not see how housewives could meaningfully contribute to its improvement. ‘After all’, he insisted, ‘housewives managed to live before the war without finding it necessary to address the damage done by speculative housing developments’ (Hilberseimer 1929: 295).²¹ As Hilberseimer saw it, the RfG had misconstrued its core purpose: rather than the construction of houses, the committee ought to be focusing on their *use*:

It is not the role of the RfG to build mass housing; rather, its role is to *test* new apartment floor plans for their usability, alongside the constructive, thermal, hygienic and spatial-economic issues; in that way, the experience of the inhabitants would build an important foundation for further work. For such experiments it is more practical to build a smaller number of apartments each year, but to make them as different from each other as possible.²² (Hilberseimer 1929: 295; emphasis mine)

In short, Hilberseimer was assigning to Lüders and her team at the RfG precisely the role that women still performed for architects (and historians) in the making of modern architecture: that of the housewife optimizing the use of the kitchen. In the process, he was inadvertently making her more responsible (read: to blame) for the RfG’s failings than his architect colleague Gropius. But instead of experimenting formally, Lüders wanted to experiment managerially, applying the oversight of that new female profession: the housewife. Rather than being limited to commissioning a housing project or optimizing domestic space, she saw the RfG’s task in terms of testing the entire building process, from the preparatory work of investigating users’ needs to the post-construction evaluation of the resources used (both financial and material).

So, who benefited most from the collaboration between this new female profession and the established male expert, the architect? Some say that architects only ventured into the domestic sphere in the wake of its post-WWI industrialization; others argue that, with the urgent need for affordable mass housing in the 1920s, the women's movement focused minds on the idea of the 'New Household', which architects then used as an opportunity to rationalize the domestic sphere — and housing as a whole (Bullock 1988: 190). In 1924, the architect Bruno Taut defined the collaboration between housewife and architect as 'the architect thinks, the housewife steers' (1924: 104).²³ While the catchy phrase has been criticized as dismissive, it has been interpreted by others as an indication of the housewife's influence on the shaping of the modernist mass housing (Bullock 1988: 177). I would argue, instead, that Taut's formulation points to an essential truth: the increasing influence of the housewife was to be gauged less in terms of conventional creative practice and more in terms of a managerial (literally, steering) function.

The New 'Insiders' of Modern Architecture

As historians of architecture have shown time and again, architecture is shaped not only by a diverse array of people but by financial streams and bureaucratic processes (Abramson 2016; Aggregate 2012; Stevens 2016). When read within that context, Lüders' attempt to liberate women 'from the mass of objects' and 'small household tasks' was intended to allow them to 'work on larger issues that go beyond the narrow frame of the house and the family' (Lüders 1927: 14).²⁴ For Lüders, seeing the micro-scale of the cooking pot as inherently linked to questions of national economy was key to bringing about societal and economic change. In fact, she claimed that

it is an abuse of women's power for family and state if we stay within our four walls, scrubbing and polishing, thinking with false pride 'my home, my world'. Instead, we should see our home *in the world*.²⁵ (Lüders 1927: 11; emphasis mine)

As Lüders saw it, the 'larger', more important role of women was to contribute their expertise to the conception and execution of modern architecture's forms and façades, and also, through this, to work toward the liberation of women as politically active, civic agents.

So, what were Lüders' real aims in joining the DIN and co-founding the RfG — and did the RfG indeed end in 'failure', as historian Sigurd Fleckner puts it in the subtitle of his account ('Entwicklung und Scheitern')? Lüders had suggested in 1929 that the RfG

should evolve into a research institute — a proposal that was ultimately declined — and the association was dissolved in 1931, only four years after its foundation. One of the reasons for its premature demise was undoubtedly historical contingency, as Fleckner explains: at a time of rising unemployment, it was no longer so essential to save labor resources (Fleckner 1993: 108). But while this may have diminished the urgency of the RfG's task, other organizations, such as the DIN, continued to thrive — and the DIN's whole remit was to conserve material and energy resources through rationalization. The magazine *Bauwelt* suggested a more mundane problem at the heart of the RfG: 'the conflict of interests, emblematic of contemporary economic life'. More precisely, the project had started with great gusto, but it was dominated by a handful of architects, and soon those who felt excluded from the work began to complain (Fleckner 1993: 111). One might see this as a problem of the privilege and aesthetic dominance of the so-called avant-garde. And yet the lack of formal experimentation was one of the areas, according to Hilberseimer, in which 'the RfG has completely failed. It has largely been satisfied with existing models and shied away from addressing new requirements and possibilities' (Hilberseimer 1929: 295).²⁶ Mass producing such 'existing models', however, did not yield the economic benefits Lüders and Gropius had hoped for. Just as the construction costs for the Dessau-Törten housing skyrocketed, so the costs for the appliances and fittings recommended by the RfG were not as affordable as Lüders had claimed.

The disconnect between an ideally planned future for the masses and the material and lived reality is an increasingly forceful strand in the narrative of modern architecture. In the case of the RfG, the misalignment of aesthetic promise and actual cost was perhaps also grounded in Lüders' own failure to grasp what 'affordable' might look like for the working class: as a bourgeois, well-educated woman, she planned for housewives of a different kind (Lüders 1927: 14; Lüders 1961: 5; Bullock 1988: 190). Lüders' story in modern architecture is not a simple narrative of radical rescue or long-overdue liberation. In fact, much of her approach was not aimed at fundamentally redefining women's roles (not least because, as was discussed above, women seemed to be doing just fine when it came to taking on new roles, as Lüders acknowledged); rather, it sought to recognize and scale up women's collective power. The aggregation of individual households would mean that every small change to the domestic sphere had a real effect on the national economy.

And yet, what Lüders really proposed — and brought into being — was the expansion of a field: the extension of the female gaze to oversee a male discipline. Lüders, one could say, did not just highlight a shift in women's expertise but reconfigured the whole sequence of designing modern architecture. For her, 'form followed function'

— only form, in this instance, was not an abstract functionalist aesthetic (which she criticized) but the very logic of a new domestic sphere that defined the architecture. By asking women to not only give form to kitchens but to shape housing developments and, ultimately, even the national economy, Lüders extended the role of the housewife. Beyond a 'new household' and through 'Neues Bauen', Lüders tilted a housewife's tasks, skills and duties toward a new understanding of domestic expertise: women were no longer simply inside, but *insiders*.

Notes

- ¹ 'Rasselnd und zischend sausten glühende Drahtschlangen auf der Walzenstrasse heran. Eine Kolonne kräftigster Frauen stand in Männerkleidung und Lederschurz fangbereit mit riesigen Zangen am Ende der Straße. Ein harter Griff, die funkensprühende Schlange war gepackt und flog mit einem mächtigen sicheren Schwung auf die nächste ratternde Bahn ... Die Frau segelte ruhig hin und her zwischen dunklen Schrottbergen und leuchtenden Ofengräbern. ... Früher nähte die Frau in dem schwebenden Haus Jacken und Mäntel, über die Maschine gebückt, die Augen auf den Tretfuß, die Hände an den Stoff gebannt. Heute gleitet ihr Blick hin und her über weite Räume, über lange Strecken und Halden.'
- ² In architectural history, this categorization became most evident (and later disputed) in relation to the Bauhaus weaving workshop, for example, and remained historiographically fixed until the early 1990s, when Sigrid Wortmann Weltge published *Bauhaus Textiles: Women Artists and the Weaving Workshop*. Since then, there have been monographs on the Bauhaus weaving workshop master Gunta Stölzl and an investigation of gender in the school by Anja Baumhoff. Virginia Gardner Troy's monograph on Anni Albers has examined the interest of Bauhaus weavers (and modern German artists generally) in ancient textile artifacts and techniques from South America. Most recently, T'ai Smith and Leah Dickerman have published on the Bauhaus weaving workshops, countering those assumptions. Anja Baumhoff, *The Gendered World of the Bauhaus: The Politics of Power at the Weimar Republic's Premier Art Institute, 1919-1932* (Frankfurt am Main: Peter Lang, 2001); T'ai Smith, *Bauhaus Weaving Theory: From Feminine Craft to Mode of Design* (Minneapolis: University of Minnesota Press, 2014); Monika Stadler, *Gunta Stölzl: Bauhaus Master* (New York: Hatje Cantz, 2009); Virginia Gardner Troy, *Anni Albers and Ancient American Textiles: From Bauhaus to Black Mountain* (Burlington, VT: Ashgate, 2002); Sigrid Wortmann Weltge, *Bauhaus Textiles: Women Artists and the Weaving Workshop*, new edition (London: Thames & Hudson, 1998).
- ³ The term 'collaborator' is an increasingly contested one for its downplaying of the agency and contributions of those who had worked with and for Gropius. For example, recent scholarship shows that Adolf Meyer and Carl Fieger, whom Gropius (and, for a long time, historians) called collaborators or employees, were crucial not just for drawing projects in the Atelier Gropius but for designing and conceptualizing them. Where Winfried Nerdinger still stresses Gropius's position as the master of his designs 'by verbal communication' (seeing how Gropius almost never drew himself), scholars like Bernd Polster and others are uncovering increasing evidence to the contrary. See Fiona MacCarthy, *Gropius: The Man Who Built the Bauhaus* (Cambridge: Harvard University Press, 2019); Winfried Nerdinger, *Walter Gropius: Architekt der Moderne 1883-1969* (Munich: C.H. Beck, 2019); Bernd Polster, *Walter Gropius: der Architekt seines Ruhms* (Munich: Carl Hanser, 2019).
- ⁴ After its founding in 1917 as Normenausschuß der deutschen Industrie, in 1926 this committee was named Deutscher Normenausschuß (DNA) and only later renamed Deutsches Institut für Normung (DIN). The latter is the far-better-known denomination and hence used throughout this piece. Conventionally Norm is translated into English as 'standard' for the name of the organization, but as I explain in this article, the association with 'norm' is crucial.
- ⁵ This was, of course, not just a female construct: the DIN Institute, for example, was (and still is) a 'Verein' and consisted of almost exclusively men. But overall, volunteer work was a female occupation.
- ⁶ '[dann] stell sich ein jeder außerhalb des Kreises der bürgerlichen Gemeinschaft, er 'lebt' nicht mehr – er ist nur noch eine Nummer in der Kartei des Einwohnermeldeamtes.'
- ⁷ 'Alles Denken, Wollen und Handeln hatte nur ein Ziel: Verteidigung des Vaterlandes ... Die Männer mit der Waffe – und wir – die Frauen?'
- ⁸ 'Die Vereinfachung und Verbesserung des Haushalts beginnt bei der Wohnung: Lage, Einteilung und Gestaltung der Räume, Art der Treppen, Türen und Fenster, Ausgestaltung der Wirtschaftsräume, vor allem der Küche. ... Zu befriedigenden Lösungen aller dieser Aufgaben ist Zusammenarbeit zwischen Erzeugern, Händlern, Hausfrauen und Architekten, wie sie der Normenausschuß erstrebt, dringend erforderlich.'
- ⁹ 'Die Frauen sollen nicht aus Faulheit vom Scheuereimer und Staubtuch frei werden, sie sollen frei werden von der Last und "Tücke des Objekts" in der Hauswirtschaft, um des Freiwerdens geistiger, seelischer, kultureller Werte, um der erhöhten Erfüllung mütterlicher und staatsbürgerlicher Pflichten willen'. Translation Nolan's.
- ¹⁰ 'Die Neugestaltung des Hauswesens auf der Grundlage der vom Deutschen Normenausschuß [sic] begonnenen Vereinheitlichung ist nicht nur eine wirtschaftliche, sondern auch eine staatspolitische und kulturelle Aufgabe von allergrößter Bedeutung.'
- ¹¹ 'Sonst versinkt Kultur im Scheuereimer und Menschentum verfängt sich im Staubtuch.'

- ¹² 'Die Hauswirtschaft wird bislang in der Vorstellung eines beträchtlichen Teiles der deutschen Bevölkerung nicht als ein Teil der Volkswirtschaft empfunden.'
- ¹³ 'Vertretern der Architektenschaft, der Hausfrauenverbände, der Möbelhändler, Haushaltungsgeschäfte und Möbelindustrie.'
- ¹⁴ 'Diese sollte alle für die Preis- und Mietgestaltung irgendwie maßgeblichen Elemente untersuchen; beginnend bei der Straßenführung, den Anliegerkosten, der Grundrißgestaltung und der Normung von Bauteilen bis hin zur Innenausstattung und verschiedenen, die Arbeit der Hausfrau und Mutter erleichternden Anlagen (Waschhaus, Kindergarten, Grün- und Spielflächen).'
- ¹⁵ 'Wenn wir uns hier einmal gemeinsam mit dem RAM zusammentun, um durch die genaue Beobachtung des ganzen Bauvorgangs, des verwendeten Materials, der Vorkalkulation, der Nachkalkulation, der Preisgestaltung für die Mieten und für alles, was mit dem ganzen Bau zusammenhängt, einwandfreie Unterlagen herauszukriegen, so glaube ich, es wird keine zu kühne Behauptung sein, daß, wenn wirklich nur die tatsächlichen Baukosten aufgerechnet werden, die entstanden sind, auch heute schon das Privatkapital im weiten Maße in der Lage wäre, sich wieder auf dem Wohnungsmarkt zu betätigen, wenn jeder auf "stille Verdienste" verzichtet.'
- ¹⁶ 'Die RfG tritt nicht selbst als Bauherr oder Bauunternehmer auf.'
- ¹⁷ 'wirtschaftliche Formen von Bauteilen, Wohnungen und Wohnhäusern, wirtschaftliche Verfahren für Geländeerschließung, Kostenberechnung, Bauausführung, überhaupt die höchste Wirtschaftlichkeit im Bau- und Wohnungswesen zu ermitteln und zu verbreiten.'
- ¹⁸ 'Die Rednerin betonte die engen, bisher meist übersehenen Zusammenhänge zwischen Haus- und Bauwirtschaft und knüpfte an die Tatsache an, dass die von der Bauwirtschaft zu errichtenden Wohnungen den Arbeitsplatz für die materielle Bedürfnisbefriedigungen der Menschen und der Schauplatz auch für den kulturellen und ideellen Inhalt des Familienlebens sein sollen und dass in ihnen 19 Millionen Hausfrauen für 12 Millionen hauswirtschaftlicher Betriebe diesen Forderungen gerecht werden sollen ... Sie verlangte, dass die zu errichtenden Wohnbauten den einfachen praktischen Forderungen entsprechen, die zu Erfüllung der wirtschaftlichen und kulturellen Wohnfunktion notwendig sind, d.h. zur wirtschaftlichen Führung des Haushalts und zur körperlichen, geistigen und seelischen Pflege der Familie. Dieser Forderung kann nur genügt werden, wenn endlich bewusst und gewollt von innen nach außen gebaut wird, wenn die Bauten aus dem Verwendungszweck der Wohnung heraus konstruiert und ausgestatte werden, sozusagen "Vom Kochtopf zur Fassade".'
- ¹⁹ 'unreife technische Arbeiten mit volltönenden künstlerischen Redewendungen und einer recht weitgehenden Geschäftstüchtigkeit in peinlicher Weise verbanden.'
- ²⁰ 'Mit Maria Elisabeth Lüders sind viele Frauen sehr geneigt, die Architekten für die schlechten Wohnungen verantwortlich zu machen. Sie vergessen, daß der Wohnungsbau vor dem Kriege eine Spekulationsangelegenheit ... Erst in der Nachkriegszeit wurden die Architekten zum Wohnungsbau herangezogen.'
- ²¹ 'Außerdem lebten die Hausfrauen ja auch schon vor dem Kriege, ohne daß sie es damals für nötig fanden, sich um die mit dem Spekulationswohnungsbau zusammenhängenden Schäden zu kümmern.'
- ²² 'Es ist nicht Aufgabe der Reichsforschungsgesellschaft, in großem Ausmaß Wohnungen zu bauen, ihre Aufgabe ist vielmehr neben konstruktiven, wärmetechnischen, hygienischen und raumwirtschaftlichen Problemen neue Wohnungsgrundrisse auf ihre Brauchbarkeit hin auszuprobieren, wobei die Erfahrungen der Bewohner dieser Wohnungen eine wichtige Grundlage für die Weiterarbeit bilden. Für diese Versuche ist es praktischer, jährlich weniger aber dafür möglichst verschiedenartige Wohnungen bauen zu lassen.'
- ²³ 'Der Architekt denkt — die Hausfrau lenkt.'
- ²⁴ 'Befreien wollen wir die Frauen von der Masse der Objekte, um den Menschen besser dienen zu können ... Befreiung vom Kleinen im Haushalt zum Zweck der Arbeit im Großen auch über den engsten Rahmen des Hauses und der Familie hinaus.'
- ²⁵ 'Nicht weil wir aus dem Hause hinausdrängen aus Abneigung gegen das Haus und die Hauswirtschaft, sondern weil wir meinen, daß es 'mißbrauchte Frauenkraft' für Familie und Staat ist, wenn wir scheuernd und putzend auf die vier Wände beschränkt bleiben mit dem mißverstandenen Stolz 'Mein Haus, meine Welt', anstatt auch in der Welt unser Haus zu sehen. Dazu aber müssen wir weit mehr als heute von dem Hause befreit werden.'
- ²⁶ 'Das ist einer der Punkte, wo die Reichsforschungsgesellschaft vollkommen versagt hat. Man begnügte sich im wesentlichen [sic] mit dem Bestehenden und scheute sich vor einer Auseinandersetzung mit neuen Forderungen und Möglichkeiten.'

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The author has no competing interests to declare.

References

Unpublished Sources

Hellmich, W. [n.d.]. Verschwendung in der Wirtschaft. Unpublished lecture. Berlin: DIN Archive.

Published Sources

Abramson, DM. 2016. *Obsolescence: An Architectural History*. Chicago: University of Chicago Press. DOI: <https://doi.org/10.7208/chicago/9780226313597.001.0001>

Aggregate. 2012. *Governing by Design: Architecture, Economy, and Politics in the Twentieth Century*. Pittsburgh: University of Pittsburgh Press.

Baumhoff, A. 2001. *The Gendered World of the Bauhaus: The Politics of Power at the Weimar Republic's Premier Art Institute, 1919–1932*. Frankfurt am Main: Peter Lang.

Bullock, N. 1988. First the Kitchen: Then the Façade. *Journal of Design History*, 1: 177–92. DOI: <https://doi.org/10.1093/jdh/1.3-4.177>

Deutscher Normenausschuss. 1927. *Die Deutsche Normung: Stand der Arbeiten Frühjahr 1927*. Berlin: Deutscher Normenausschuss.

Die Rationalisierung der Bau- und Wohnungswirtschaft. 1928. *Mitteilungen des Deutschen Städtetages*: 529–33.

Fleckner, S. 1993. *Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen 1927–1931: Entwicklung und Scheitern*. Thesis (PhD), Technische Hochschule Aachen.

Frederick, C. 1919a. *Household Engineering: Scientific Management in the Home*. Chicago: American School of Home Economics.

Frederick, C. 1919b. *The New Housekeeping: Efficiency Studies in Home Management*. New York: Doubleday, Page & Co.

Gottl-Ottlilienfeld, F von. 1926. *Fordismus; über Industrie und technische Vernunft*. Jena: Fischer.

Gropius, W. 1927. Normung und Wohnungsnot. *Technik und Wirtschaft: Zeitschrift für Wirtschaftskultur*: 7–10.

- Hanisch, R., Widrich, M.** 1999. Architektur der Küche. In: Miklautz, E, Lachmayer, H, and Eisendle, R (eds.), *Die Küche: zur Geschichte eines architektonischen, sozialen und imaginativen Raums*. Wien: Böhlau Verlag. pp. 17–48.
- Hayden, D.** 1981. *The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities*. Cambridge: MIT Press.
- Henderson, SR.** 2013. *Building Culture: Ernst May and the New Frankfurt am Main Initiative, 1926–1931*. New York: Lang. DOI: <https://doi.org/10.1093/gerhis/ghu070>
- Hilberseimer, L.** 1927. *Großstadtarchitektur*. Stuttgart: Hoffmann.
- Hilberseimer, L.** 1929. Städtebau und Wohnungsbau auf der Technischen Tagung der Reichsforschungsgesellschaft. *Die Form* [Deutscher Werkbund]: 294–296.
- Jahresversammlung.** 1926. *NDI Mitteilungen*: 1108.
- Lüders, M-E.** 1921. Hat die Hausfrau einen Beruf? *Die Frau*, 28: 129–136.
- Lüders, M-E.** 1927. Normung und Haushalt. *Technik und Wirtschaft: Zeitschrift für Wirtschaftskultur*: 10–14.
- Lüders, M-E.** 1936. *Das unbekannte Heer; Frauen kämpfen für Deutschland, 1914–1918*. Berlin: ES Mittler & Sohn.
- Lüders, M-E.** 1961. *Die Frau im modernen demokratischen Staat*. Bochum: Schacht.
- Lüders, M-E.** 1963. *Fürchte dich nicht: persönliches und politisches aus mehr als 80 Jahren 1878–1962*. Köln: Westdeutscher Verlag. DOI: <https://doi.org/10.1007/978-3-322-98441-8>
- MacCarthy, F.** 2019. *Gropius: The Man Who Built the Bauhaus*. Cambridge: Harvard University Press. DOI: <https://doi.org/10.4159/9780674239890>
- McLeod, M.** 1983. 'Architecture or Revolution': Taylorism, Technocracy, and Social Change. *Art Journal*, 43: 132–47. DOI: <https://doi.org/10.2307/776649>
- Meister, A-M.** 2018. From Form to Norm: Systems and Values in German Design circa 1922, 1936, 1953. Thesis (PhD), Princeton University.
- Meyer, E.** 1926. *Der neue Haushalt: ein Wegweiser zu wirtschaftlicher Hausführung*. Stuttgart: Franckh.
- Mitteilungen des Deutschen Werkbundes.** 1927. *Die Form* [Deutscher Werkbund] [unpaginated].
- Nerdinger, W.** 2019. *Walter Gropius: Architekt der Moderne 1883–1969*. Munich: CH Beck. DOI: <https://doi.org/10.17104/9783406741333>
- Nolan, M.** 1990. 'Housework Made Easy': The Taylorized Housewife in Weimar Germany's Rationalized Economy. *Feminist Studies*, 16: 549–77. DOI: <https://doi.org/10.2307/3178019>
- Polster, B.** 2019. *Walter Gropius: der Architekt seines Ruhms*. Munich: Carl Hanser Verlag.
- Rabinbach, A.** 1990. *The Human Motor: Energy, Fatigue, and the Origins of Modernity*. New York: Basic Books.
- Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen [Preprint].** 1927. *Mitteilungen des Deutschen Städtetages*.

- Reichsforschungsgesellschaft für Wirtschaftlichkeit im Bau- und Wohnungswesen.** 1929. Auswertung der Versuchssiedlungen in hauswirtschaftlicher Hinsicht. *2 Jahre Bauforschung*: 34.
- Reicke, I.** 1984. *Die großen Frauen der Weimarer Republik: Erlebnisse im 'Berliner Frühling'*. Freiburg im Breisgau: Herder.
- Smith, T.** 2014. *Bauhaus Weaving Theory: From Feminine Craft to Mode of Design*. Minneapolis: University of Minnesota Press. DOI: <https://doi.org/10.5749/minnesota/9780816687237.001.0001>
- Stadler, M.** 2009. *Gunta Stözl: Bauhaus Master*. New York: Hatje Cantz Verlag.
- Stevens, S.** 2016. *Developing Expertise: Architecture and Real Estate in Metropolitan America*. New Haven: Yale University Press.
- Taut, B.** 1924. *Die neue Wohnung. Die Frau als Schöpferin*. Leipzig: Klinkhardt & Biermann.
- Troy, VG.** 2002. *Anni Albers and Ancient American Textiles: From Bauhaus to Black Mountain*. Burlington, VT: Ashgate.
- Weltge-Wortmann, S, and Weltge, S.** 1998. *Bauhaus Textiles: Women Artists and the Weaving Workshop*. London: Thames & Hudson Ltd.

