Demonstrating Care: American Farm Kitchens and Home Economy

We open with six staged kitchen photos. **[fig. 1]** These have clearly been taken for demonstration purposes, but just what is being demonstrated here? At first glance, the kitchens look neat but unspectacular, a world apart from the streamlined glories of the mid-century technokitchen. But, if we look more closely at the details (the pull-out boards, that meat grinder!), we glimpse something else: an alternative version of modernity, emerging from rural rather than urban or suburban lives, stressing thrift, self build, home production and adaptation. And, at the heart of this alternative modernity, lies an engaged, active consumer and designs centered on the female body economy.

This page of photos comes from a 1947 study of kitchen cabinets produced at Oregon State College conducted by professor of home economics, Maud Wilson.[1] Wilson was a prolific researcher in the home economics field and farm kitchen rationalization had long been one of her specialties. While rationalization now tends to be associated with prefabrication and mass production à la Frankfurt Kitchen, in the context of American university-based home economists' engagement with farm families and homes, it resulted in another approach: a strategy more akin to mass customization. While recommending standardized principles and minimum dimensions to reduce cost and material waste, farm women, with the help of family members or other home carpenters, were encouraged to adapt these plans and equipment to fit their own bodies, routines and spaces.

This approach originated in close studies of rural communities. In 1938, Maud Wilson had worked with fourteen farm-owning families in Willamette Valley Oregon: "cooperators" were visited four to nine times, lists made of what they stored in kitchens and the activities that took place there. How many people typically sat down for meals? How many miles were travelled each year to make common dishes? How much canning was done annually? (A formidable 387 quarts.)[2] Although we should not assume that farm women were oppressed drudges – they themselves rejected such a view – Wilson's study confirms their labor was not easy. The centralized services available to middle-class urbanites were not typically available to even better-off farm women, who lived on farms of 20 to 300 acres and cared for extended households. They hauled wood and water.[3] They did their own canning, butchering, churning, preserving, baking, cooking, cleaning, childcare and laundering, as well as gardening and tending poultry for additional income.

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1 Maud Wilson, "Considerations in Planning Kitchen Cabinets," *Oregon State Agricultural Experiment Station* 445 (November 1947): 442.

2 See Maud Wilson, "The Willamette Valley Farm Kitchen," Oregon State Agricultural Experiment Station Bulletin 356 (August 1938): 11.

3 As of 1930, 85 per cent of farmhouses still did not have running water or electricity; only 37 per cent had refrigerators; 60 per cent had wood stoves. As late as 1947, Wilson still did not assume readers had electricity, piped hot and cold water or a refrigerator, though she predicted these would arrive 'eventually'. Wilson, "Considerations in Planning Kitchen Cabinets," 19.

Increasingly influenced by industrial engineering, university-based home economists sought to ease housework and rationalize domestic workspaces from the 1910s on. Their engagement with farm communities, however, inflected their advice in specific ways. First, they saw that isolated spaces like Frankfurt Kitchen would never do for multitasking farm women: instead, they promoted "living kitchens" with compact work spaces inserted into existing large rooms hosting activities such as dining and children's play. Second, even though they advocated the use of labor-saving devices, home economists were aware that cash-strapped farm families only made improvements piecemeal as resources allowed. Rather than wait for total readymade solutions, they thus exhorted farm families to take matters into their own hands. Simple hacks to enhance an existing kitchen's serviceability might include repurposing washstands to act as mix centers, setting ranges and sinks up on blocks, or reorganizing existing equipment for better workflow. To reduce trips and "kitchen mileage", home economists also encouraged families to build inexpensive movable furnishings of all kinds, such as step-saving dinner trolleys and wheeled work tables. **[fig. 2]**

Wilson's farmhouse kitchen studies were a more systematic response to these conditions. Based on her 1938 study of farm women's routines, earlier research and home engineering principles, Wilson devised rules, equipment prototypes and plan variations for the refurbishment of cooperator kitchens. **[fig. 3]** These were publicized through her landmark bulletin, "The Willamette Valley Farm Kitchen," and further refined in later bulletins such as our 1947 example. Although Wilson rationalized plans and standardized cabinet dimensions with input from agricultural engineers, these were offered as possible, not final, solutions. As the opening photos highlight, her primary aim was to share good design principles with remodelling farm owners to inform their adaptations. **[See fig. 1]** Our seated worker, for instance, demonstrates the well-established "sit when you can" principle drawn from fatigue studies.[4] But how to account for the rather crazy proliferation of pull-out boards, slotted into base cabinets? In addition to pastry and food chopping boards, we now have lap boards and even standing boards, which allow women to step up to reach upper cabinets. The kitchen seems equal parts lab and climbing frame.

Even if they appear excessive, multi-level pull-out boards had a distinct rationale in Wilson's work. They helped ensure workers would find a work surface at the correct height for the job – a height that allowed them to hold upper arms naturally while working and raise them with as little strain as possible. For six decades, home economists home would teach women how to measure their own heights and reaches for kitchen cabinet planning. **[fig. 4]** Yet pull-out boards did not only match height; they gave flexibility of use, potentially allowing many intricate kitchen operations to be accommodated.[5] These included dozens of actions – wash, scrub, pare, sift, roll, knead, beat, pat, spread, scrape et cetera – each requiring varying degrees of physicality, positions and tools. The variety of domestic operations meant no single height would ever suit all uses:

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[4] Lillian M. Gilbreth, *The Home-maker and her Job* (1927; New York: D. Appleton-Century Company, Inc., 1938), p. 129.

[5] Wilson lists "flexibility in use" as one of her key considerations in planning kitchens. See Wilson, "Considerations in Planning Kitchen Cabinets," 12.

performance differed according to many factors, including worker ability, handedness, and sightedness. The home economists' commitment to fit a wide range of users and uses explains why they never liked streamlined commercial kitchens with uniform counters of 36" (the industry standard) and always urged the inclusion of less fixed features such as trolleys and our pull-out boards.[6]

There is much more to say about home economics kitchens and their research-derived principles, which became astonishingly detailed in the postwar period. But the pull-out boards alone begin to tell the story of a different and less top-down mode of engaging modernity which was not governed by advanced technology, mass production or consumption. Rather it was driven by a situated and detailed knowledge of the exigencies of use, labor and care, specifically that involved in female homemaking. As opposed to the glamorized and gadget-filled vision of housewifery circulated in the mass media, home economists insisted on treating homemaking as *work* with physical and psychological costs and rewards for productive farm women. Their attention to female bodies and routines meant they highlighted how life cycles, ageing, infirmity, even wearing bifocals, could impact home environments at a time when such concerns were not even blips on the radar of architectural modernism.

That this distinct – and let us not forget, female-led – mode of practice has not been recognized is also easy to understand. These designs don't *look* modern, at least in terms of the established modernist canon. Yet even the most canonic projects retain residual traces of other possible modernisms: in an important parallel study to this one, Sophie Hochhäusl points to the hay box, a type of fireless cooker, located to the right of the Frankfurt Kitchen's gas stove, but rarely photographed or exhibited with lid open.[7] Through the hay box, Hochhäusl traces a less familiar genealogy for the Frankfurt Kitchen, re-enmeshing it in discourses of wartime scarcity, self-help building movements and alternative technologies, reminding us of a road not taken in the evolution of European modernism. Similarly, I argue that pull-out boards lead us back to a resourceful and cooperative female-centered form of modernity in America. University-based home economists standardized construction and design principles, but in turning these over to remodeling farm owners for customization, they went beyond prescription, opening the kitchen to differentiated bodies, flexible uses, and unanticipated adaptations.

(captions follow on next page!)

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6 Sigfried Giedion noted the 36" height of a commercial kitchen counter became the industry standard in 1945. Sigfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History* (New York: Oxford University Press, 1948), p. 616, fn. 185.

7 Sophie Hochhäusl, "From Vienna to Frankfurt Inside Core-House Type 7: A History of Scarcity through the Modern Kitchen," *Architectural Histories* 1, no. 1 (2013): Art. 24. DOI: http://doi.org/10.5334/ah.aq A photo of the Frankfurt Kitchen hay box, lid open, is on p. 12.

CAPTIONS:

Fig. 1 "Placement and use of pull-out boards." From Maud Wilson, "Considerations in Planning Kitchen Cabinets," *Oregon State Agricultural Experiment Station Bulletin* 445 (November 1947): 42. https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/k0698788d

Fig. 2 A step-saving dinner-wagon "can be made by any one who knows how to handle tools at all". From Leah D. Widtsoe, 'Labor Saving Devices for the Farm Home,' *Utah Agricultural College Experiment Station Circular* 7 (June 1912): 61. https://digitalcommons.usu.edu/uaes_circulars/6/

Fig. 3 Designs for movable work tables (a-c) and table for seated work (d). From Maud Wilson, "The Willamette Valley Farm Kitchen," *Oregon State Agricultural Experiment Station Bulletin* 356 (August 1938): 15 https://ir.library.oregonstate.edu/concern/administrative_report_or_publications/1g05fb948

Fig. 4 Marjorie Knoll teaches home economics student to measure her work curve, n.d., New York State College of Home Economics records, #23-2-749, Box 77, Folder 25. Courtesy: Division of Rare and Manuscript Collections, Cornell University Library.