



H\Y' "bXi ghf]U' F Yj c' i h]cb'' ]b' h\Y' < ca Y. ' < ci g\ c' X' HYW bc`c[ m' UbX' GcWU' 7\ Ub[ Y' ]b' h\Y' &\$h\ 7Ybhi f m

5 i h\ cf fjt' F i h\ 'GWk Uf hn' 7ck Ub

Gci fW. 'HYW bc`c[ m' UbX' 7i 'hi fYz' J c' "' %+z' B c"' %z' f\ Ub"z' % +\* lz' dd"' % &

Di V' ]g\ YX' Vm' H\Y' > c\ bg' < cd\_ ]bg' l b]j Yf g]hm' Df Ygg' cb' VY\ UZ' cZ' h\Y' GcWYhm' Zcf' h\Y' < ]ghcf m cZ' HYW bc`c[ m

GhU' Y' l F @' <http://www.jstor.org/stable/3103251>

5 VVggYX. ' % # \$, # & \$ \$, ' % . \$'

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=jhup>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

---

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# *The "Industrial Revolution" in the Home: Household Technology and Social Change in the 20th Century*

RUTH SCHWARTZ COWAN

When we think about the interaction between technology and society, we tend to think in fairly grandiose terms: massive computers invading the workplace, railroad tracks cutting through vast wildernesses, armies of woman and children toiling in the mills. These grand visions have blinded us to an important and rather peculiar technological revolution which has been going on right under our noses: the technological revolution in the home. This revolution has transformed the conduct of our daily lives, but in somewhat unexpected ways. The industrialization of the home was a process very different from the industrialization of other means of production, and the impact of that process was neither what we have been led to believe it was nor what students of the other industrial revolutions would have been led to predict.

\* \* \*

Some years ago sociologists of the functionalist school formulated an explanation of the impact of industrial technology on the modern family. Although that explanation was not empirically verified, it has become almost universally accepted.<sup>1</sup> Despite some differences in emphasis, the basic tenets of the traditional interpretation can be roughly summarized as follows:

Before industrialization the family was the basic social unit. Most families were rural, large, and self-sustaining; they produced and processed almost everything that was needed for their own support and for trading in the marketplace, while at the same time perform-

DR. COWAN, associate professor of history at the State University of New York at Stony Brook, is currently engaged in further research on the development of household technology and its impact upon women. This paper is based upon a presentation by Dr. Cowan at SHOT's 1973 annual meeting in San Francisco.

<sup>1</sup>For some classic statements of the standard view, see W. F. Ogburn and M. F. Nimkoff, *Technology and the Changing Family* (Cambridge, Mass., 1955); Robert F. Winch, *The Modern Family* (New York, 1952); and William J. Goode, *The Family* (Englewood Cliffs, N.J., 1964).

ing a host of other functions ranging from mutual protection to entertainment. In these preindustrial families women (adult women, that is) had a lot to do, and their time was almost entirely absorbed by household tasks. Under industrialization the family is much less important. The household is no longer the focus of production; production for the marketplace and production for sustenance have been removed to other locations. Families are smaller and they are urban rather than rural. The number of social functions they perform is much reduced, until almost all that remains is consumption, socialization of small children, and tension management. As their functions diminished, families became atomized; the social bonds that had held them together were loosened. In these postindustrial families women have very little to do, and the tasks with which they fill their time have lost the social utility that they once possessed. Modern women are in trouble, the analysis goes, because modern families are in trouble; and modern families are in trouble because industrial technology has either eliminated or eased almost all their former functions, but modern ideologies have not kept pace with the change. The results of this time lag are several: some women suffer from role anxiety, others land in the divorce courts, some enter the labor market, and others take to burning their brassieres and demanding liberation.

This sociological analysis is a cultural artifact of vast importance. Many Americans believe that it is true and act upon that belief in various ways: some hope to reestablish family solidarity by relearning lost productive crafts—baking bread, tending a vegetable garden—others dismiss the women's liberation movement as "simply a bunch of affluent housewives who have nothing better to do with their time." As disparate as they may seem, these reactions have a common ideological source—the standard sociological analysis of the impact of technological change on family life.

As a theory this functionalist approach has much to recommend it, but at present we have very little evidence to back it up. Family history is an infant discipline, and what evidence it has produced in recent years does not lend credence to the standard view.<sup>2</sup> Phillippe Ariès has shown, for example, that in France the ideal of the small nuclear family predates industrialization by more than a century.<sup>3</sup> Historical demographers working on data from English and French families have been surprised to find that most families were quite small and

<sup>2</sup>This point is made by Peter Laslett in "The Comparative History of Household and Family," in *The American Family in Social Historical Perspective*, ed. Michael Gordon (New York, 1973), pp. 28–29.

<sup>3</sup>Phillippe Ariès, *Centuries of Childhood: A Social History of Family Life* (New York, 1960).

that several generations did not ordinarily reside together; the extended family, which is supposed to have been the rule in preindustrial societies, did not occur in colonial New England either.<sup>4</sup> Rural English families routinely employed domestic servants, and even very small English villages had their butchers and bakers and candlestick makers; all these persons must have eased some of the chores that would otherwise have been the housewife's burden.<sup>5</sup> Preindustrial housewives no doubt had much with which to occupy their time, but we may have reason to wonder whether there was quite as much pressure on them as sociological orthodoxy has led us to suppose. The large rural family that was sufficient unto itself back there on the prairies may have been limited to the prairies—or it may never have existed at all (except, that is, in the reveries of sociologists).

Even if all the empirical evidence were to mesh with the functionalist theory, the theory would still have problems, because its logical structure is rather weak. Comparing the average farm family in 1750 (assuming that you knew what that family was like) with the average urban family in 1950 in order to discover the significant social changes that had occurred is an exercise rather like comparing apples with oranges; the differences between the fruits may have nothing to do with the differences in their evolution. Transferring the analogy to the case at hand, what we really need to know is the difference, say, between an urban laboring family of 1750 and an urban laboring family 100 and then 200 years later, or the difference between the rural nonfarm middle classes in all three centuries, or the difference between the urban rich yesterday and today. Surely in each of these cases the analyses will look very different from what we have been led to expect. As a guess we might find that for the urban laboring families the changes have been precisely the opposite of what the model predicted; that is, that their family structure is much firmer today than it was in centuries past. Similarly, for the rural nonfarm middle class the results might be equally surprising; we might find that married women of that class rarely did any housework at all in 1890 because they had farm girls as servants, whereas in 1950 they bore the full brunt of the work themselves. I could go on, but the point is, I hope, clear: in order to verify or falsify the functionalist theory, it will be necessary to know more than we presently do about the impact of industrialization on families of similar classes and geographical locations.

\* \* \*

<sup>4</sup>See Laslett, pp. 20–24; and Philip J. Greven, "Family Structure in Seventeenth Century Andover, Massachusetts," *William and Mary Quarterly* 23 (1966): 234–56.

<sup>5</sup>Peter Laslett, *The World We Have Lost* (New York, 1965), *passim*.

With this problem in mind I have, for the purposes of this initial study, deliberately limited myself to one kind of technological change affecting one aspect of family life in only one of the many social classes of families that might have been considered. What happened, I asked, to middle-class American women when the implements with which they did their everyday household work changed? Did the technological change in household appliances have any effect upon the structure of American households, or upon the ideologies that governed the behavior of American women, or upon the functions that families needed to perform? Middle-class American women were defined as actual or potential readers of the better-quality women's magazines, such as the *Ladies' Home Journal*, *American Home*, *Parents' Magazine*, *Good Housekeeping*, and *McCall's*.<sup>6</sup> Nonfictional material (articles and advertisements) in those magazines was used as a partial indicator of some of the technological and social changes that were occurring.

The *Ladies' Home Journal* has been in continuous publication since 1886. A casual survey of the nonfiction in the *Journal* yields the immediate impression that that decade between the end of World War I and the beginning of the depression witnessed the most drastic changes in patterns of household work. Statistical data bear out this impression. Before 1918, for example, illustrations of homes lit by gaslight could still be found in the *Journal*; by 1928 gaslight had disappeared. In 1917 only one-quarter (24.3 percent) of the dwellings in the United States had been electrified, but by 1920 this figure had doubled (47.4 percent—for rural nonfarm and urban dwellings), and by 1930 it had risen to four-fifths percent.<sup>7</sup> If electrification had meant simply the change from gas or oil lamps to electric lights, the changes in the housewife's routines might not have been very great (except for eliminating the chore of cleaning and filling oil lamps);

<sup>6</sup>For purposes of historical inquiry, this definition of middle-class status corresponds to a sociological reality, although it is not, admittedly, very rigorous. Our contemporary experience confirms that there are class differences reflected in magazines, and this situation seems to have existed in the past as well. On this issue see Robert S. Lynd and Helen M. Lynd, *Middletown: A Study in Contemporary American Culture* (New York, 1929), pp. 240–44, where the marked difference in magazines subscribed to by the business-class wives as opposed to the working-class wives is discussed; Salme Steinberg, "Reformer in the Marketplace: E. W. Bok and *The Ladies Home Journal*" (Ph.D. diss., Johns Hopkins University, 1973), where the conscious attempt of the publisher to attract a middle-class audience is discussed; and Lee Rainwater et al., *Workingman's Wife* (New York, 1959), which was commissioned by the publisher of working-class women's magazines in an attempt to understand the attitudinal differences between working-class and middle-class women.

<sup>7</sup>*Historical Statistics of the United States, Colonial Times to 1957* (Washington, D.C., 1960), p. 510.

but changes in lighting were the least of the changes that electrification implied. Small electric appliances followed quickly on the heels of the electric light, and some of those augured much more profound changes in the housewife's routine.

Ironing, for example, had traditionally been one of the most dreadful household chores, especially in warm weather when the kitchen stove had to be kept hot for the better part of the day; irons were heavy and they had to be returned to the stove frequently to be reheated. Electric irons eased a good part of this burden.<sup>8</sup> They were relatively inexpensive and very quickly replaced their predecessors; advertisements for electric irons first began to appear in the ladies' magazines after the war, and by the end of the decade the old flatiron had disappeared; by 1929 a survey of 100 Ford employees revealed that ninety-eight of them had the new electric irons in their homes.<sup>9</sup>

Data on the diffusion of electric washing machines are somewhat harder to come by; but it is clear from the advertisements in the magazines, particularly advertisements for laundry soap, that by the middle of the 1920s those machines could be found in a significant number of homes. The washing machine is depicted just about as frequently as the laundry tub by the middle of the 1920s; in 1929, forty-nine out of those 100 Ford workers had the machines in their homes. The washing machines did not drastically reduce the time that had to be spent on household laundry, as they did not go through their cycles automatically and did not spin dry; the housewife had to stand guard, stopping and starting the machine at appropriate times, adding soap, sometimes attaching the drain pipes, and putting the clothes through the wringer manually. The machines did, however, reduce a good part of the drudgery that once had been associated with washday, and this was a matter of no small consequence.<sup>10</sup> Soap powders appeared on the market in the early 1920s, thus eliminating the need to scrape and boil bars of laundry soap.<sup>11</sup> By the end of the

<sup>8</sup>The gas iron, which was available to women whose homes were supplied with natural gas, was an earlier improvement on the old-fashioned flatiron, but this kind of iron is so rarely mentioned in the sources that I used for this survey that I am unable to determine the extent of its diffusion.

<sup>9</sup>Hazel Kyrk, *Economic Problems of the Family* (New York, 1933), p. 368, reporting a study in *Monthly Labor Review* 30 (1930): 1209-52.

<sup>10</sup>Although this point seems intuitively obvious, there is some evidence that it may not be true. Studies of energy expenditure during housework have indicated that by far the greatest effort is expended in hauling and lifting the wet wash, tasks which were not eliminated by the introduction of washing machines. In addition, if the introduction of the machines served to increase the total amount of wash that was done by the housewife, this would tend to cancel the energy-saving effects of the machines themselves.

<sup>11</sup>Rinso was the first granulated soap; it came on the market in 1918. Lux Flakes had been available since 1906; however it was not intended to be a general laundry product

1920s Blue Monday must have been considerably less blue for some housewives—and probably considerably less “Monday,” for with an electric iron, a washing machine, and a hot water heater, there was no reason to limit the washing to just one day of the week.

Like the routines of washing the laundry, the routines of personal hygiene must have been transformed for many households during the 1920s—the years of the bathroom mania.<sup>12</sup> More and more bathrooms were built in older homes, and new homes began to include them as a matter of course. Before the war most bathroom fixtures (tubs, sinks, and toilets) were made out of porcelain by hand; each bathroom was custom-made for the house in which it was installed. After the war industrialization descended upon the bathroom industry; cast iron enamelware went into mass production and fittings were standardized. In 1921 the dollar value of the production of enameled sanitary fixtures was \$2.4 million, the same as it had been in 1915. By 1923, just two years later, that figure had doubled to \$4.8 million; it rose again, to \$5.1 million, in 1925.<sup>13</sup> The first recessed, double-shell cast iron enameled bathtub was put on the market in the early 1920s. A decade later the standard American bathroom had achieved its standard American form: the recessed tub, plus tiled floors and walls, brass plumbing, a single-unit toilet, an enameled sink, and a medicine chest, all set into a small room which was very often 5 feet square.<sup>14</sup> The bathroom evolved more quickly than any other room of the house; its standardized form was accomplished in just over a decade.

Along with bathrooms came modernized systems for heating hot water: 61 percent of the homes in Zanesville, Ohio, had indoor plumbing with centrally heated water by 1926, and 83 percent of the homes valued over \$2,000 in Muncie, Indiana, had hot and cold running

---

but rather one for laundering delicate fabrics. “Lever Brothers,” *Fortune* 26 (November 1940): 95.

<sup>12</sup>I take this account, and the term, from Lynd and Lynd, p. 97. Obviously, there were many American homes that had bathrooms before the 1920s, particularly urban row houses, and I have found no way of determining whether the increases of the 1920s were more marked than in previous decades. The rural situation was quite different from the urban; the President’s Conference on Home Building and Home Ownership reported that in the late 1920s, 71 percent of the urban families surveyed had bathrooms, but only 33 percent of the rural families did (John M. Gries and James Ford, eds., *Homemaking, Home Furnishing and Information Services*, President’s Conference on Home Building and Home Ownership, vol. 10 [Washington, D.C., 1932], p. 13).

<sup>13</sup>The data above come from Siegfried Giedion, *Mechanization Takes Command* (New York, 1948), pp. 685–703.

<sup>14</sup>For a description of the standard bathroom see Helen Sprackling, “The Modern Bathroom,” *Parents’ Magazine* 8 (February 1933): 25.

water by 1935.<sup>15</sup> These figures may not be typical of small American cities (or even large American cities) at those times, but they do jibe with the impression that one gets from the magazines: after 1918 references to hot water heated on the kitchen range, either for laundering or for bathing, become increasingly difficult to find.

Similarly, during the 1920s many homes were outfitted with central heating; in Muncie most of the homes of the business class had basement heating in 1924; by 1935 Federal Emergency Relief Administration data for the city indicated that only 22.4 percent of the dwellings valued over \$2,000 were still heated by a kitchen stove.<sup>16</sup> What all these changes meant in terms of new habits for the average housewife is somewhat hard to calculate; changes there must have been, but it is difficult to know whether those changes produced an overall saving of labor and/or time. Some chores were eliminated—hauling water, heating water on the stove, maintaining the kitchen fire—but other chores were added—most notably the chore of keeping yet another room scrupulously clean.

It is not, however, difficult to be certain about the changing habits that were associated with the new American kitchen—a kitchen from which the coal stove had disappeared. In Muncie in 1924, cooking with gas was done in two out of three homes; in 1935 only 5 percent of the homes valued over \$2,000 still had coal or wood stoves for cooking.<sup>17</sup> After 1918 advertisements for coal and wood stoves disappeared from the *Ladies' Home Journal*; stove manufacturers purveyed only their gas, oil, or electric models. Articles giving advice to homemakers on how to deal with the trials and tribulations of starting, stoking, and maintaining a coal or a wood fire also disappeared. Thus it seems a safe assumption that most middle-class homes had switched to the new method of cooking by the time the depression began. The change in routine that was predicated on the change from coal or wood to gas or oil was profound; aside from the elimination of such chores as loading the fuel and removing the ashes, the new stoves were much easier to light, maintain, and regulate (even when they did not have thermostats, as the earliest models did not).<sup>18</sup> Kitchens were, in addition, much easier to clean when they did not have coal dust regularly tracked through them; one writer in the *Ladies'*

<sup>15</sup>Zanesville, Ohio and Thirty-six Other American Cities (New York, 1927), p. 65. Also see Robert S. Lynd and Helen M. Lynd, *Middletown in Transition* (New York, 1936), p. 537. Middletown is Muncie, Indiana.

<sup>16</sup>Lynd and Lynd, *Middletown*, p. 96, and *Middletown in Transition*, p. 539.

<sup>17</sup>Lynd and Lynd, *Middletown*, p. 98, and *Middletown in Transition*, p. 562.

<sup>18</sup>On the advantages of the new stoves, see *Boston Cooking School Cookbook* (Boston, 1916), pp. 15–20; and Russell Lynes, *The Domesticated Americans* (New York, 1957), pp. 119–20.



*Home Journal* estimated that kitchen cleaning was reduced by one-half when coal stoves were eliminated.<sup>19</sup>

Along with new stoves came new foodstuffs and new dietary habits. Canned foods had been on the market since the middle of the 19th century, but they did not become an appreciable part of the standard middle-class diet until the 1920s—if the recipes given in cookbooks and in women’s magazines are a reliable guide. By 1918 the variety of foods available in cans had been considerably expanded from the peas, corn, and succotash of the 19th century; an American housewife with sufficient means could have purchased almost any fruit or vegetable and quite a surprising array of ready-made meals in a can—from Heinz’s spaghetti in meat sauce to Purity Cross’s lobster à la Newburg. By the middle of the 1920s home canning was becoming a lost art. Canning recipes were relegated to the back pages of the women’s magazines; the business-class wives of Muncie reported that, while their mothers had once spent the better part of the summer and fall canning, they themselves rarely put up anything, except an occasional jelly or batch of tomatoes.<sup>20</sup> In part this was also due to changes in the technology of marketing food; increased use of refrigerated railroad cars during this period meant that fresh fruits and vegetables were in the markets all year round at reasonable prices.<sup>21</sup> By the early 1920s convenience foods were also appearing on American tables: cold breakfast cereals, pancake mixes, bouillon cubes, and packaged desserts could be found. Wartime shortages accustomed Americans to eating much lighter meals than they had previously been wont to do; and as fewer family members were taking all their meals at home (businessmen started to eat lunch in restaurants downtown, and factories and schools began installing cafeterias), there was simply less cooking to be done, and what there was of it was easier to do.<sup>22</sup>

\* \* \*

Many of the changes just described—from hand power to electric power, from coal and wood to gas and oil as fuels for cooking, from one-room heating to central heating, from pumping water to running water—are enormous technological changes. Changes of a similar dimension, either in the fundamental technology of an industry, in the diffusion of that technology, or in the routines of workers, would have long since been labeled an “industrial revolution.” The change from the laundry tub to the washing machine is no less profound than

<sup>19</sup>“How to Save Coal While Cooking,” *Ladies’ Home Journal* 25 (January 1908): 44.

<sup>20</sup>Lynd and Lynd, *Middletown*, p. 156.

<sup>21</sup>*Ibid.*; see also “Safeway Stores,” *Fortune* 26 (October 1940): 60.

<sup>22</sup>Lynd and Lynd, *Middletown*, pp. 134–35 and 153–54.

the change from the hand loom to the power loom; the change from pumping water to turning on a water faucet is no less destructive of traditional habits than the change from manual to electric calculating. It seems odd to speak of an "industrial revolution" connected with housework, odd because we are talking about the technology of such homely things, and odd because we are not accustomed to thinking of housewives as a labor force or of housework as an economic commodity—but despite this oddity, I think the term is altogether appropriate.

In this case other questions come immediately to mind, questions that we do not hesitate to ask, say, about textile workers in Britain in the early 19th century, but we have never thought to ask about housewives in America in the 20th century. What happened to this particular work force when the technology of its work was revolutionized? Did structural changes occur? Were new jobs created for which new skills were required? Can we discern new ideologies that influenced the behavior of the workers?

The answer to all of these questions, surprisingly enough, seems to be yes. There were marked structural changes in the work force, changes that increased the work load and the job description of the workers that remained. New jobs were created for which new skills were required; these jobs were not physically burdensome, but they may have taken up as much time as the jobs they had replaced. New ideologies were also created, ideologies which reinforced new behavioral patterns, patterns that we might not have been led to expect if we had followed the sociologists' model to the letter. Middle-class housewives, the women who must have first felt the impact of the new household technology, were not flocking into the divorce courts or the labor market or the forums of political protest in the years immediately after the revolution in their work. What they were doing was sterilizing baby bottles, shepherding their children to dancing classes and music lessons, planning nutritious meals, shopping for new clothes, studying child psychology, and hand stitching color-coordinated curtains—all of which chores (and others like them) the standard sociological model has apparently not provided for.

The significant change in the structure of the household labor force was the disappearance of paid and unpaid servants (unmarried daughters, maiden aunts, and grandparents fall in the latter category) as household workers—and the imposition of the entire job on the housewife herself. Leaving aside for a moment the question of which was cause and which effect (did the disappearance of the servant create a demand for the new technology, or did the new technology make the servant obsolete?), the phenomenon itself is relatively easy

to document. Before World War I, when illustrators in the women's magazines depicted women doing housework, the women were very often servants. When the lady of the house was drawn, she was often the person being served, or she was supervising the serving, or she was adding an elegant finishing touch to the work. Nursemaids diapered babies, seamstresses pinned up hems, waitresses served meals, laundresses did the wash, and cooks did the cooking. By the end of the 1920s the servants had disappeared from those illustrations; all those jobs were being done by housewives—elegantly manicured and coiffed, to be sure, but housewives nonetheless (compare figs. 1 and 2).

If we are tempted to suppose that illustrations in advertisements are not a reliable indicator of structural changes of this sort, we can corroborate the changes in other ways. Apparently, the illustrators really did know whereof they drew. Statistically the number of persons throughout the country employed in household service dropped from 1,851,000 in 1910 to 1,411,000 in 1920, while the number of households enumerated in the census rose from 20.3 million to 24.4 million.<sup>23</sup> In Indiana the ratio of households to servants increased from 13.5/1 in 1890 to 30.5/1 in 1920, and in the country as a whole the number of paid domestic servants per 1,000 population dropped from 98.9 in 1900 to 58.0 in 1920.<sup>24</sup> The business-class housewives of Muncie reported that they employed approximately one-half as many woman-hours of domestic service as their mothers had done.<sup>25</sup>

In case we are tempted to doubt these statistics (and indeed statistics about household labor are particularly unreliable, as the labor is often transient, part-time, or simply unreported), we can turn to articles on the servant problem, the disappearance of unpaid family workers, the design of kitchens, or to architectural drawings for houses. All of this evidence reiterates the same point: qualified servants were difficult to find; their wages had risen and their numbers fallen; houses were being designed without maid's rooms; daughters and unmarried aunts were finding jobs downtown; kitchens were being designed for housewives, not for servants.<sup>26</sup> The first home with a

<sup>23</sup>*Historical Statistics*, pp. 16 and 77.

<sup>24</sup>For Indiana data, see Lynd and Lynd, *Middletown*, p. 169. For national data, see D. L. Kaplan and M. Claire Casey, *Occupational Trends in the United States, 1900–1950*, U.S. Bureau of the Census Working Paper no. 5 (Washington, D.C., 1958), table 6. The extreme drop in numbers of servants between 1910 and 1920 also lends credence to the notion that this demographic factor stimulated the industrial revolution in housework.

<sup>25</sup>Lynd and Lynd, *Middletown*, p. 169.

<sup>26</sup>On the disappearance of maiden aunts, unmarried daughters, and grandparents, see Lynd and Lynd, *Middletown*, pp. 25, 99, and 110; Edward Bok, "Editorial," *American Home* 1 (October 1928): 15; "How to Buy Life Insurance," *Ladies' Home Journal* 45



"All of us at home use Lux exclusively for gloves, blouses and anything else we just wash separately. Much better than the usual scrubbing and scouring with harsh soaps—save on the market!"  
—Miss J. C. Walter (Chicago), Ill.



# The things you'd never put in the family laundry

YES, it's beginning to look dusky around the edges of the cuff and along the roll of the collar. Your precious new Georgette—you'd never dream of putting it in with the general laundry.

Your silk underwear, silk stockings, white satin collars—how they discolor, or yellow—how the threads break and grow weak when they are washed in the family laundry.

If only you knew, the heartless laundress would not rub the life and the softness out of your dainty things!

You cannot afford to have your nicest things go so fast.

You, yourself, with a fraction of the energy you once spent hating the laundress, can now gently rinse the dirt out of your finest things—take them from the pure Lux suds soft and gleaming, and new!

The secret? No ruinous rubbing of a cake of soap on fine fabrics! No rubbing again to get the soap and the dirt out. Just the gentle, tender cleansing with pure Lux suds that frail things must have to keep them unharmed.

### No ruinous rubbing of fine fabrics

Lux is the most modern form of soap. There is nothing else like it. Lux comes in wonderful, delicate white flakes—pure and transparent. They dissolve instantly in hot water. You whisk them into the richest, softest lather that loosens all the dirt—leaves the finest silk fabric clean and new—not a fiber roughened or torn or weakened in any way.

Write for free booklet and simple Lux directions for laundering. Learn how easy it is to launder perfectly the most delicate fabrics.

Be sure to get your package of Lux today. Your grocer, druggist or department store has it—Lever Bros. Co., Dept. A2, Cambridge, Mass.



"I had Lux done and shied the dirtiest of washes. I would not be without it. I like it so much."  
—Mrs. Connel, New York



# LUX

These things need never be spoiled by washing. Try washing them the Lux way.

- |   |                                     |                           |
|---|-------------------------------------|---------------------------|
| Georgette and<br>Chiffon de Chine         | Lace Jabots                         | Baby's Washings           |
| Bric-a-brac and Evening<br>Silk Underwear | Washable Satin<br>Collars and Cuffs | Children's<br>Fine Linens |
| Lace Collars                              | Handkerchiefs                       | Silk Stockings            |
| Fine Table Linens                         | Spinet Cases                        | Washable Gloves           |
|   |                                     | Fine Corsets              |

Lux is so pure that it will not harm anything that pure water alone will not injure.

### To wash silk blouses

Whisk a tablespoonful of Lux into a thick lather in half a bowlful of boiling or very hot water. Add cold water until lukewarm, then put in blouse. Dip your blouse through the lather and wring gently. Place it about in the sink—do not rub. Rinse three times in clean, lukewarm water. Squeeze the water out—do not wring. Dry in the shade. When ready to press with a warm

FIG. 1.—The housewife as manager. (*Ladies' Home Journal*, April 1918. Courtesy of Lever Brothers Co.)

# NEW! *Beads of Soap*

## banish washday drudgery

*Super Suds dissolves quicker . . .  
works faster . . . rinses out easier*

HERE is a way to wash clothes that's faster . . . easier . . . better. Saves one rinsing. Gets clothes whiter. A revolutionary discovery that brings you soap in the form of tissue-thin beads—the fastest-working form of soap ever made.

*First bar soap—then chips  
. . . now Super Suds*

Years ago women had only bar soap. How hard it was to rub the clothes with the soap and to rinse out those clinging soap particles.

Next came chips. Many women changed to this form of soap because it could be stirred into a cleansing solution. But clothes and dishes had to be rinsed very carefully in order to get rid of the undissolved soap.

Now comes Super Suds, and women are changing to it by thousands in preference to all other forms of soap because it dissolves twice as fast as any soap they have ever seen before.

Super Suds is not a chip . . . not a powder . . . but a remarkable new form of soap in tiny hollow beads, so thin that they burst into suds the instant they touch water.

Four times as thin as chips, Super Suds

is the thinnest soap made.

In this new soap women have discovered two distinct advantages.

First, Super Suds is so thin it dissolves instantly . . . saves time and trouble.

Second, Super Suds dissolves completely . . . no undissolved soap to leave spots on clothes or film on dishes. Women like Super Suds because it does the work faster and better than other forms of soap.

Super Suds is simply wonderful for dishes. It makes them sparkle and glisten like jewels, and yet you never even touch a dish towel. Just give them a quick hot rinse—and let them drain!

Already thousands of progressive women have been delighted with Super Suds. Won't you try it today? Just say "Super Suds" and your grocer will hand you the biggest box of soap you have ever seen for ten cents!

*An Octagon Soap Product. Every box of Super Suds carries a premium coupon, our discount to you!*

A PATENTED PROCESS. Super Suds is made by a process covered by multiple patents. Product formula and advertising owned by E. J. Leavelle Patent No. 1,931,421; 1,796,745; 1,808,955; 1,814,644; and Patent No. 1,671,748



*Wash dishes the new scientific way—with Super Suds. Glasses and other glass. Clean wash to writing.*

*No water—no undissolved soap—no chance of soap spots or hot-iron stains. Super Suds is just best for washing machines too.*



The BIGGEST box of soap on the market for 10¢

FIG. 2.—The housewife as laundress. (*Ladies' Home Journal*, August 1928. Courtesy of Colgate-Palmolive-Peet.)

kitchen that was not an entirely separate room was designed by Frank Lloyd Wright in 1934.<sup>27</sup> In 1937 Emily Post invented a new character for her etiquette books: Mrs. Three-in-One, the woman who is her own cook, waitress, and hostess.<sup>28</sup> There must have been many new Mrs. Three-in-Ones abroad in the land during the 1920s.

As the number of household assistants declined, the number of household tasks increased. The middle-class housewife was expected to demonstrate competence at several tasks that previously had not been in her purview or had not existed at all. Child care is the most obvious example. The average housewife had fewer children than her mother had had, but she was expected to do things for her children that her mother would never have dreamed of doing: to prepare their special infant formulas, sterilize their bottles, weigh them every day, see to it that they ate nutritionally balanced meals, keep them isolated and confined when they had even the slightest illness, consult with their teachers frequently, and chauffeur them to dancing lessons, music lessons, and evening parties.<sup>29</sup> There was very little Freudianism in this new attitude toward child care: mothers were not spending more time and effort on their children because they feared the psychological trauma of separation, but because competent nursemaids could not be found, and the new theories of child care required constant attention from well-informed persons—persons who were willing and able to read about the latest discoveries in nutrition, in the control of contagious diseases, or in the techniques of behavioral psychology. These persons simply had to be their mothers.

Consumption of economic goods provides another example of the housewife's expanded job description; like child care, the new tasks associated with consumption were not necessarily physically burdensome, but they were time consuming, and they required the acquisi-

---

(March 1928): 35. The house plans appeared every month in *American Home*, which began publication in 1928. On kitchen design, see Giedion, pp. 603–21; "Editorial," *Ladies' Home Journal* 45 (April 1928): 36; advertisement for Hoosier kitchen cabinets, *Ladies' Home Journal* 45 (April 1928): 117. Articles on servant problems include "The Vanishing Servant Girl," *Ladies' Home Journal* 35 (May 1918): 48; "Housework, Then and Now," *American Home* 8 (June 1932): 128; "The Servant Problem," *Fortune* 24 (March 1938): 80–84; and *Report of the YWCA Commission on Domestic Service* (Los Angeles, 1915).

<sup>27</sup>Giedion, p. 619. Wright's new kitchen was installed in the Malcolm Willey House, Minneapolis.

<sup>28</sup>Emily Post, *Etiquette: The Blue Book of Social Usage*, 5th ed. rev. (New York, 1937), p. 823.

<sup>29</sup>This analysis is based upon various child-care articles that appeared during the period in the *Ladies' Home Journal*, *American Home*, and *Parents' Magazine*. See also Lynd and Lynd, *Middletown*, chap. 11.

tion of new skills.<sup>30</sup> Home economists and the editors of women's magazines tried to teach housewives to spend their money wisely. The present generation of housewives, it was argued, had been reared by mothers who did not ordinarily shop for things like clothing, bed linens, or towels; consequently modern housewives did not know how to shop and would have to be taught. Furthermore, their mothers had not been accustomed to the wide variety of goods that were now available in the modern marketplace; the new housewives had to be taught not just to be consumers, but to be informed consumers.<sup>31</sup> Several contemporary observers believed that shopping and shopping wisely were occupying increasing amounts of housewives' time.<sup>32</sup>

Several of these contemporary observers also believed that standards of household care changed during the decade of the 1920s.<sup>33</sup> The discovery of the "household germ" led to almost fetishistic concern about the cleanliness of the home. The amount and frequency of laundering probably increased, as bed linen and underwear were changed more often, children's clothes were made increasingly out of washable fabrics, and men's shirts no longer had replaceable collars and cuffs.<sup>34</sup> Unfortunately all these changes in standards are difficult to document, being changes in the things that people regard as so insignificant as to be unworthy of comment; the improvement in standards seems a likely possibility, but not something that can be proved.

In any event we do have various time studies which demonstrate somewhat surprisingly that housewives with conveniences were spending just as much time on household duties as were housewives without them—or, to put it another way, housework, like so many

<sup>30</sup>John Kenneth Galbraith has remarked upon the advent of woman as consumer in *Economics and the Public Purpose* (Boston, 1973), pp. 29–37.

<sup>31</sup>There was a sharp reduction in the number of patterns for home sewing offered by the women's magazines during the 1920s; the patterns were replaced by articles on "what is available in the shops this season." On consumer education see, for example, "How to Buy Towels," *Ladies' Home Journal* 45 (February 1928): 134; "Buying Table Linen," *Ladies' Home Journal* 45 (March 1928): 43; and "When the Bride Goes Shopping," *American Home* 1 (January 1928): 370.

<sup>32</sup>See, for example, Lynd and Lynd, *Middletown*, pp. 176 and 196; and Margaret G. Reid, *Economics of Household Production* (New York, 1934), chap. 13.

<sup>33</sup>See Reid, pp. 64–68; and Kyrk, p. 98.

<sup>34</sup>See advertisement for Cleanliness Institute—"Self-respect thrives on soap and water," *Ladies' Home Journal* 45 (February 1928): 107. On changing bed linen, see "When the Bride Goes Shopping," *American Home* 1 (January 1928): 370. On laundering children's clothes, see, "Making a Layette," *Ladies' Home Journal* 45 (January 1928): 20; and Josephine Baker, "The Youngest Generation," *Ladies' Home Journal* 45 (March 1928): 185.

other types of work, expands to fill the time available.<sup>35</sup> A study comparing the time spent per week in housework by 288 farm families and 154 town families in Oregon in 1928 revealed 61 hours spent by farm wives and 63.4 hours by town wives; in 1929 a U.S. Department of Agriculture study of families in various states produced almost identical results.<sup>36</sup> Surely if the standard sociological model were valid, housewives in towns, where presumably the benefits of specialization and electrification were most likely to be available, should have been spending far less time at their work than their rural sisters. However, just after World War II economists at Bryn Mawr College reported the same phenomenon: 60.55 hours spent by farm housewives, 78.35 hours by women in small cities, 80.57 hours by women in large ones—precisely the reverse of the results that were expected.<sup>37</sup> A recent survey of time studies conducted between 1920 and 1970 concludes that the time spent on housework by nonemployed housewives has remained remarkably constant throughout the period.<sup>38</sup> All these results point in the same direction: mechanization of the household meant that time expended on some jobs decreased, but also that new jobs were substituted, and in some cases—notably laundering—time expenditures for old jobs increased because of higher standards. The advantages of mechanization may be somewhat more dubious than they seem at first glance.

\* \* \*

As the job of the housewife changed, the connected ideologies also changed; there was a clearly perceptible difference in the attitudes that women brought to housework before and after World War I.<sup>39</sup>

<sup>35</sup>This point is also discussed at length in my paper "What Did Labor-saving Devices Really Save?" (unpublished).

<sup>36</sup>As reported in Lyrk, p. 51.

<sup>37</sup>Bryn Mawr College Department of Social Economy, *Women During the War and After* (Philadelphia, 1945); and Ethel Goldwater, "Woman's Place," *Commentary* 4 (December 1947): 578–85.

<sup>38</sup>JoAnn Vanek, "Keeping Busy: Time Spent in Housework, United States, 1920–1970" (Ph.D. diss., University of Michigan, 1973). Vanek reports an average of 53 hours per week over the whole period. This figure is significantly lower than the figures reported above, because each time study of housework has been done on a different basis, including different activities under the aegis of housework, and using different methods of reporting time expenditures; the Bryn Mawr and Oregon studies are useful for the comparative figures that they report internally, but they cannot easily be compared with each other.

<sup>39</sup>This analysis is based upon my reading of the middle-class women's magazines between 1918 and 1930. For detailed documentation see my paper "Two Washes in the Morning and a Bridge Party at Night: The American Housewife between the Wars," *Women's Studies* (in press). It is quite possible that the appearance of guilt as a strong



Before the war the trials of doing housework in a servantless home were discussed and they were regarded as just that—trials, necessary chores that had to be got through until a qualified servant could be found. After the war, housework changed: it was no longer a trial and a chore, but something quite different—an emotional “trip.” Laundering was not just laundering, but an expression of love; the housewife who truly loved her family would protect them from the embarrassment of tattletale gray. Feeding the family was not just feeding the family, but a way to express the housewife’s artistic inclinations and a way to encourage feelings of family loyalty and affection. Diapering the baby was not just diapering, but a time to build the baby’s sense of security and love for the mother. Cleaning the bathroom sink was not just cleaning, but an exercise of protective maternal instincts, providing a way for the housewife to keep her family safe from disease. Tasks of this emotional magnitude could not possibly be delegated to servants, even assuming that qualified servants could be found.

Women who failed at these new household tasks were bound to feel guilt about their failure. If I had to choose one word to characterize the temper of the women’s magazines during the 1920s, it would be “guilt.” Readers of the better-quality women’s magazines are portrayed as feeling guilty a good lot of the time, and when they are not guilty they are embarrassed: guilty if their infants have not gained enough weight, embarrassed if their drains are clogged, guilty if their children go to school in soiled clothes, guilty if all the germs behind the bathroom sink are not eradicated, guilty if they fail to notice the first signs of an oncoming cold, embarrassed if accused of having body odor, guilty if their sons go to school without good breakfasts, guilty if their daughters are unpopular because of old-fashioned, or unironed, or—heaven forbid—dirty dresses (see figs. 3 and 4). In earlier times women were made to feel guilty if they abandoned their children or were too free with their affections. In the years after World War I, American women were made to feel guilty about sending their children to school in scuffed shoes. Between the two kinds of guilt there is a world of difference.

\* \* \*

Let us return for a moment to the sociological model with which this essay began. The model predicts that changing patterns of

---

element in advertising is more the result of new techniques developed by the advertising industry than the result of attitudinal changes in the audience—a possibility that I had not considered when doing the initial research for this paper. See A. Michael McMahon, “An American Courtship: Psychologists and Advertising Theory in the Progressive Era,” *American Studies* 13 (1972): 5–18.



## Don't fool yourself

Since halitosis never announces itself, to the victim, you simply cannot know when you have it.

## Are you unpopular with your own children?

Make sure that you don't have halitosis. It is inexcusable. And unnecessary.

Some mothers blame everything but halitosis (unpleasant breath) when children show resentment or lack of affection.

More often than you would imagine, however, halitosis is at fault. Children are quick to resent it.

Intelligent people realize that as a result of modern habits halitosis is very common and that anyone may have it, and yet be ignorant of the fact.

Realizing this, they eliminate any risk of offending, by the systematic use of Listerine in the mouth. Every morning. Every night. And between times when necessary, especially before meeting people. Keep a bottle handy in home and office for this purpose.

Listerine checks halitosis instantly. Being antiseptic, it strikes at its commonest cause—fermentation in the oral cavity. Then, being a powerful deodorant, it destroys the odors themselves.

If you have any doubt of Listerine's power to deodorize, make this test: Rub a slice of onion on your hand. Then apply Listerine clear. Immediately, every trace of onion odor is gone. Lambert Pharmaceutical Company, St. Louis, Mo.

### INTENDED FOR MEN but try and keep the women away

Have you tried the new LISTERINE SHAVING CREAM? Keeps your face marvelously cool long after shaving. Incidentally, women think rather highly of it as a shampoo.

# LISTERINE

—the safe antiseptic

FIG. 3.—Sources of housewifely guilt: the good mother smells sweet. (*Ladies' Home Journal*, August 1928. Courtesy of Warner-Lambert, Inc.)



## His first love

Mother—radiant and youthful, with the charm of that schoolgirl complexion. This simple daily rule is known to thousands:

Youth is charm, and youth lost is charm lost, as every woman instinctively realizes.

To keep youth, keep the skin clean and the pores open. Banish artificial ways in skin care. Natural ways are best.

Use soap, but be sure it is a soap made basically for use on the face. Others may prove harsh. That is why, largely on expert advice, women the world over choose Palmolive for facial use.

**WHAT** mother's heart but quickens at her small son's adoration? What, in life, is sweeter than those worshipful eyes that follow every move and hang on every word?

Keep that devotion, mother! Hold that love. Always be, to him, the beautiful princess of fairy book delight. And above all else, keep youth, keep beauty as your most priceless asset.

That schoolgirl complexion is synonymous with natural charm, today. And thousands of women, in keeping that schoolgirl complexion, are holding their youth through the thirties, into the forties and beyond . . .

*This daily rule in skin care that countless thousands know*

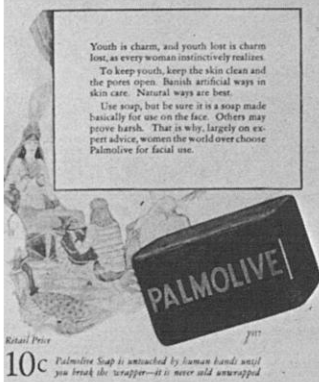
Keeping the skin cleansed, the pores open, with a pure beauty soap—a soap made for one purpose only, and that to guard the skin—is the important thing to know. That is Nature's beauty secret.

Wash your face gently with soothing Palmolive Soap, massaging its balmy lather softly into the skin. Rinse thoroughly, first with warm water, then with cold. If your skin is inclined to be dry, apply a touch of good cold cream—that is all. Do this regularly, and particularly in the evening. Use powder and rouge if you wish. But never leave them on over night. They clog the pores, often enlarge them. Blackheads and disfigurements often follow. They must be washed away.

*Avoid this mistake*

Do not use ordinary soaps in the treatment given above. Do not think any green soap, or one represented as of olive and palm oils, is the same as Palmolive.

And it costs but 10¢ the 'cake! So little that millions let it do for their bodies what it does for their faces. Obtain a cake today, then note the amazing difference one week makes. The Palmolive-Peet Company, Chicago, Illinois.



Retail Price

10c

*Palmolive Soap is unattached by human hands until you break the wrapper—it is never sold unwrapped*

PALMOLIVE RADIO HOUR—Broadcast every Friday night—from 10 to 11 p. m., eastern time; 9 to 10 p. m., central time—over station WJAF and 31 stations associated with The National Broadcasting Company.

KEEP THAT SCHOOLGIRL COMPLEXION

FIG. 4.—Sources of housewifely guilt: the good mother must be beautiful. (*Ladies' Home Journal*, July 1928. Courtesy of Colgate-Palmolive-Peet.)

household work will be correlated with at least two striking indicators of social change: the divorce rate and the rate of married women's labor force participation. That correlation may indeed exist, but it certainly is not reflected in the women's magazines of the 1920s and 1930s: divorce and full-time paid employment were not part of the life-style or the life pattern of the middle-class housewife as she was idealized in her magazines.

There were social changes attendant upon the introduction of modern technology into the home, but they were not the changes that the traditional functionalist model predicts; on this point a close analysis of the statistical data corroborates the impression conveyed in the magazines. The divorce rate was indeed rising during the years between the wars, but it was not rising nearly so fast for the middle and upper classes (who had, presumably, easier access to the new technology) as it was for the lower classes. By almost every gauge of socioeconomic status—income, prestige of husband's work, education—the divorce rate is higher for persons lower on the socioeconomic scale—and this is a phenomenon that has been constant over time.<sup>40</sup>

The supposed connection between improved household technology and married women's labor force participation seems just as dubious, and on the same grounds. The single socioeconomic factor which correlates most strongly (in cross-sectional studies) with married women's employment is husband's income, and the correlation is strongly negative; the higher his income, the less likely it will be that she is working.<sup>41</sup> Women's labor force participation increased during the 1920s but this increase was due to the influx of single women into the force. Married women's participation increased slightly during those years, but that increase was largely in factory labor—precisely the kind of work that middle-class women (who were, again, much more likely to have labor-saving devices at home) were least likely to do.<sup>42</sup> If there were a necessary connection between the improvement of household technology and either of these two social indicators, we would expect the data to be precisely the reverse of what in fact has occurred: women in the higher social classes should have fewer func-

<sup>40</sup>For a summary of the literature on differential divorce rates, see Winch, p. 706; and William J. Goode, *After Divorce* (New York, 1956) p. 44. The earliest papers demonstrating this differential rate appeared in 1927, 1935, and 1939.

<sup>41</sup>For a summary of the literature on married women's labor force participation, see Juanita Kreps, *Sex in the Marketplace: American Women at Work* (Baltimore, 1971), pp. 19–24.

<sup>42</sup>Valerie Kincaid Oppenheimer, *The Female Labor Force in the United States*, Population Monograph Series, no. 5 (Berkeley, 1970), pp. 1–15; and Lynd and Lynd, *Middletown*, pp. 124–27.

tions at home and should therefore be more (rather than less) likely to seek paid employment or divorce.

Thus for middle-class American housewives between the wars, the social changes that we can document are not the social changes that the functionalist model predicts; rather than changes in divorce or patterns of paid employment, we find changes in the structure of the work force, in its skills, and in its ideology. These social changes were concomitant with a series of technological changes in the equipment that was used to do the work. What is the relationship between these two series of phenomena? Is it possible to demonstrate causality or the direction of that causality? Was the decline in the number of households employing servants a cause or an effect of the mechanization of those households? Both are, after all, equally possible. The declining supply of household servants, as well as their rising wages, may have stimulated a demand for new appliances at the same time that the acquisition of new appliances may have made householders less inclined to employ the laborers who were on the market. Are there any techniques available to the historian to help us answer these questions?

\* \* \*

In order to establish causality, we need to find a connecting link between the two sets of phenomena, a mechanism that, in real life, could have made the causality work. In this case a connecting link, an intervening agent between the social and the technological changes, comes immediately to mind: the advertiser—by which term I mean a combination of the manufacturer of the new goods, the advertising agent who promoted the goods, and the periodical that published the promotion. All the new devices and new foodstuffs that were being offered to American households were being manufactured and marketed by large companies which had considerable amounts of capital invested in their production: General Electric, Procter & Gamble, General Foods, Lever Brothers, Frigidaire, Campbell's, Del Monte, American Can, Atlantic & Pacific Tea—these were all well-established firms by the time the household revolution began, and they were all in a position to pay for national advertising campaigns to promote their new products and services. And pay they did; one reason for the expanding size and number of women's magazines in the 1920s was, no doubt, the expansion in revenues from available advertisers.<sup>43</sup>

Those national advertising campaigns were likely to have been powerful stimulators of the social changes that occurred in the

<sup>43</sup>On the expanding size, number, and influence of women's magazines during the 1920s, see Lynd and Lynd, *Middletown*, pp. 150 and 240–44.

household labor force; the advertisers probably did not initiate the changes, but they certainly encouraged them. Most of the advertising campaigns manifestly worked, so they must have touched upon areas of real concern for American housewives. Appliance ads specifically suggested that the acquisition of one gadget or another would make it possible to fire the maid, spend more time with the children, or have the afternoon free for shopping.<sup>44</sup> Similarly, many advertisements played upon the embarrassment and guilt which were now associated with household work. Ralston, Cream of Wheat, and Ovaltine were not themselves responsible for the compulsive practice of weighing infants and children repeatedly (after every meal for newborns, every day in infancy, every week later on), but the manufacturers certainly did not stint on capitalizing upon the guilt that women apparently felt if their offspring did not gain the required amounts of weight.<sup>45</sup> And yet again, many of the earliest attempts to spread "wise" consumer practices were undertaken by large corporations and the magazines that desired their advertising: mail-order shopping guides, "product-testing" services, pseudoinformative pamphlets, and other such promotional devices were all techniques for urging the housewife to buy new things under the guise of training her in her role as skilled consumer.<sup>46</sup>

Thus the advertisers could well be called the "ideologues" of the 1920s, encouraging certain very specific social changes—as ideologues are wont to do. Not surprisingly, the changes that occurred were precisely the ones that would gladden the hearts and fatten the purses of the advertisers; fewer household servants meant a greater demand for labor and timesaving devices; more household tasks for women meant more and more specialized products that they would need to buy; more guilt and embarrassment about their failure to succeed at their work meant a greater likelihood that they would buy the products that were intended to minimize that failure. Happy,

<sup>44</sup>See, for example, the advertising campaigns of General Electric and Hotpoint from 1918 through the rest of the decade of the 1920s; both campaigns stressed the likelihood that electric appliances would become a thrifty replacement for domestic servants.

<sup>45</sup>The practice of carefully observing children's weight was initiated by medical authorities, national and local governments, and social welfare agencies, as part of the campaign to improve child health which began about the time of World War I.

<sup>46</sup>These practices were ubiquitous, *American Home*, for example, which was published by Doubleday, assisted its advertisers by publishing a list of informative pamphlets that readers could obtain; devoting half a page to an index of its advertisers; specifically naming manufacturer's and list prices in articles about products and services; allotting almost one-quarter of the magazine to a mail-order shopping guide which was not (at least ostensibly) paid advertisement; and as part of its editorial policy, urging its readers to buy new goods.

full-time housewives in intact families spend a lot of money to maintain their households; divorced women and working women do not. The advertisers may not have created the image of the ideal American housewife that dominated the 1920s—the woman who cheerfully and skillfully set about making everyone in her family perfectly happy and perfectly healthy—but they certainly helped to perpetuate it.

The role of the advertiser as connecting link between social change and technological change is at this juncture simply a hypothesis, with nothing much more to recommend it than an argument from plausibility. Further research may serve to test the hypothesis, but testing it may not settle the question of which was cause and which effect—if that question can ever be settled definitively in historical work. What seems most likely in this case, as in so many others, is that cause and effect are not separable, that there is a dynamic interaction between the social changes that married women were experiencing and the technological changes that were occurring in their homes. Viewed this way, the disappearance of competent servants becomes one of the factors that stimulated the mechanization of homes, and this mechanization of homes becomes a factor (though by no means the only one) in the disappearance of servants. Similarly, the emotionalization of housework becomes both cause and effect of the mechanization of that work; and the expansion of time spent on new tasks becomes both cause and effect of the introduction of time-saving devices. For example the social pressure to spend more time in child care may have led to a decision to purchase the devices; once purchased, the devices could indeed have been used to save time—although often they were not.

\* \* \*

If one holds the question of causality in abeyance, the example of household work still has some useful lessons to teach about the general problem of technology and social change. The standard sociological model for the impact of modern technology on family life clearly needs some revision: at least for middle-class nonrural American families in the 20th century, the social changes were not the ones that the standard model predicts. In these families the functions of at least one member, the housewife, have increased rather than decreased; and the dissolution of family life has not in fact occurred.

Our standard notions about what happens to a work force under the pressure of technological change may also need revision. When industries become mechanized and rationalized, we expect certain general changes in the work force to occur: its structure becomes more highly differentiated, individual workers become more

specialized, managerial functions increase, and the emotional context of the work disappears. On all four counts our expectations are reversed with regard to household work. The work force became less rather than more differentiated as domestic servants, unmarried daughters, maiden aunts, and grandparents left the household and as chores which had once been performed by commercial agencies (laundries, delivery services, milkmen) were delegated to the housewife. The individual workers also became less specialized; the new housewife was now responsible for every aspect of life in her household, from scrubbing the bathroom floor to keeping abreast of the latest literature in child psychology.

The housewife is just about the only unspecialized worker left in America—a veritable jame-of-all-trades at a time when the jacks-of-all-trades have disappeared. As her work became generalized the housewife was also proletarianized: formerly she was ideally the manager of several other subordinate workers; now she was idealized as the manager and the worker combined. Her managerial functions have not entirely disappeared, but they have certainly diminished and have been replaced by simple manual labor; the middle-class, fairly well educated housewife ceased to be a personnel manager and became, instead, a chauffeur, charwoman, and short-order cook. The implications of this phenomenon, the proletarianization of a work force that had previously seen itself as predominantly managerial, deserve to be explored at greater length than is possible here, because I suspect that they will explain certain aspects of the women's liberation movement of the 1960s and 1970s which have previously eluded explanation: why, for example, the movement's greatest strength lies in social and economic groups who seem, on the surface at least, to need it least—women who are white, well-educated, and middle-class.

Finally, instead of desensitizing the emotions that were connected with household work, the industrial revolution in the home seems to have heightened the emotional context of the work, until a woman's sense of self-worth became a function of her success at arranging bits of fruit to form a clown's face in a gelatin salad. That pervasive social illness, which Betty Friedan characterized as "the problem that has no name," arose not among workers who found that their labor brought no emotional satisfaction, but among workers who found that their work was invested with emotional weight far out of proportion to its own inherent value: "How long," a friend of mine is fond of asking, "can we continue to believe that we will have orgasms while waxing the kitchen floor?"