

## The Contemporary Fitted Kitchen

### Object, Space, and Sign

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Key to the development of the modern kitchen and to many of the continued ideas about what the kitchen means was the American home economist and household engineer Christine Frederick (1883-1970). Sponsored by the *Ladies' Home Journal*, Frederick capitalised on the interest in home economics at the turn of the century and through her experiments following Frederick Taylor's investigations into scientific management, sought to rationalise the kitchen layout in order that optimum domestic efficiency could be achieved.

In Frederick's 1913 plans for the Efficient Kitchen, domestic 'work' was reduced to two basic procedures: preparation and clearing away. To enable this, the kitchen components (stove, sink, and work surfaces) were laid out in a continuous, horizontal row like stations in a factory assembly line. The notion of efficiency has continued to dominate the forms and layout designs of contemporary kitchens that actually preclude preparing or cooking anything more complex than a single-dish meal, because to do any more, and then clear away, in both Frederick's kitchen and in the contemporary fitted kitchen, would 'make a mess' and spoil the kitchen's efficient appearance.

The success of Frederick's ideas about the form and layout of ideal kitchens that she espoused lay in her ability to use the media to promote both her ideas and herself as an expert.<sup>1</sup> Frederick's *New Housekeeping* (1913) was translated into German in 1921 by Irene Witte and the ideas expressed in it were well-received by the avant-garde, including the Munich economist Dr. Erna Meyer (1890-1975) who incorporated many of Frederick's ideas into her own best-selling *Der neue Haushalt* (*The New Household*, 1926).

Figure 1 (facing page): The highly reflective surfaces of the fitted kitchens in showrooms allow the consumer to 'see themselves', while advertising copy encourages consumers to imagine themselves occupying and owning the kitchen. Image courtesy of IKEA.co.uk.



Meyer's use of Frederick's ideas was fundamental to the development of some of the kitchens in the Weissenhofsiedlung in Stuttgart, the housing development designed by the leading architects of the Modern Movement for the 1927 *Die Wohnung (The Home)* exhibition organised by the Deutscher Werkbund.<sup>2</sup> Subsequently, the issues first raised by Frederick were applied to the Frankfurt Kitchen, designed in 1926-1927 by Margarete Schutte-Lihotzky (1897-2000).

The Frankfurt Kitchen has featured in major museum exhibitions such as the V&A *Modernism* exhibition (6 April–23 July 2006) and was the highlight exhibit in the MOMA, NY *Counter Space: Design and the Modern Kitchen* exhibition (15 September 2010–2 May 2011). This kitchen, one of some 10,000 originally installed in Frankfurt apartments, became the model from which contemporary fitted kitchens continue to draw their aesthetic. When re-contextualised in a museum display, the historical and cultural significance of the kitchen is highlighted, but as installations in such exhibitions where they can only be observed but not entered or used, the kitchen becomes an object upon which we can only gaze as a re-presentation of past ideas and only imagine their ability to function.

The Modernist kitchen emerged when the home was under scrutiny and question by designers, theorists, and social critics. Such scrutiny and questioning about the home continues today, but what the kitchen is, and what it means today, continues largely to be articulated according to a narrow range of beliefs and values: that it is functional and efficient, that it is the site of productive activity, and that it is the 'heart of the home'.

It is easy to overlook the fact that the Frankfurt Kitchen, when presented to spectators in museum displays, doesn't actually work, and nor do the kitchen tableaux or mock-ups used in retail showrooms at the luxury end of the market by manufacturers such as Bulthaup and Poggenpohl, in the mass-marketers' showrooms such as IKEA and B&Q, or in the developers' show houses. But unlike the museum, it is at least possible to enter into and interact with these 'showroom dummies', albeit in a limited manner. This interaction however consists largely of meaningless activities such

as standing at counters and sinks; opening and closing empty cupboards and drawers, and stroking surfaces, all of which are visibly smooth.

No kitchen, even when wired, plumbed and piped, functions on its own: it requires the presence of the cook. Despite claims that are continuously circulated by manufacturers, advertisers, and texts (whether academic or coffee table, lifestyle design books), no kitchen can ever be efficient in itself. Contemporary fitted kitchens may look functional, but their actual role in contemporary homes is less to do with the efficient production and consumption of food and is more concerned with their symbolic value(s). That the fitted kitchen that 'doesn't work' retains its prestige value in a culture beset by fuel and food poverty (as well as 'spatial poverty') makes it a pure fetish and the ritual routines and practices that surround the fitted kitchen give it its fetishistic character.<sup>3</sup>

Like the museum kitchen, the contemporary British fitted kitchen as an object and in media representations is also a signifier of a number of ideas about the home, of productive work, of consumption, and increasingly, of leisure. In his discussion of the styling of kitchen appliances such as Kenwood and Braun domestic food mixers, Adrian Forty (2010) makes an important point: by the mid-1950s, when appliances began to be purchased by people who spent a large part of their lives working in factories, the industrial appearance of domestic appliances not only 'militated against notions of the home as a separate place from work, but also made housework look disturbingly like real work, a comparison that everyone was anxious to avoid'.<sup>4</sup>

It might be argued that today, it is not only the comparison with work that manufacturers and consumers wish to avoid, but increasingly real work itself. With the emergence of post-Fordist consumption as production or what Alvin Toffler (1980) termed 'prosumption', and the trend toward (or at least the encouragement of) unpaid, rather than paid labour, contemporary forms of production now involve all aspects of social life and the once-clear demarcation between labour (real work) and the rest of life (which in the past we would have labelled as leisure) becomes in-

creasingly harder to sustain.<sup>5</sup> The prosumer activities now undertaken in the contemporary fitted kitchen largely consist of assembling dishes from pre-prepared selections provided by food manufacturers. Yet, the fitted kitchen continues to be designed and marketed to appear to be functional, rational, and efficient when in reality, it is an expensive, high-tech object and space that is 'over-designed' and 'over-sized' for the majority of the activities that now constitute 'cooking'. The contemporary fitted kitchen has arguably less to do with actual function or efficiency in the production and consumption of food, and more to do with the consumption of the fitted kitchen itself.

In its original context of a Frankfurt apartment, the kitchen may have 'worked' and the window offered some view to the outside. In the museum, however, the kitchen is perpetually lit during the museum's opening times, and the window now offers views to the inside. The Frankfurt Kitchen is here reduced to a sign, a collection of ideas about Modernism's triumphs and the notion of good design, and the idea of the kitchen and what it has come to signify: modern, Westernised, technologically advanced, civilised, and importantly, permanently settled rather than nomadic, transient, or homeless.<sup>6</sup>

The Frankfurt Kitchen was highly significant in the collective imagination of its time. Like Frederick had done before, Schutte-Lihotzky with the help of Ernst May, Frankfurt's chief city planning officer, used the media to sell a 'new Frankfurt' to its inhabitants.<sup>7</sup> The Frankfurt Kitchen was the most widely publicised of the German model kitchens and effectively sold consumers the idea of the new, modern, rational, and functional kitchen. Through a range of media, the consumer was made familiar with what were to become the standard forms of the majority of fitted kitchens: pre-fabricated, standardized, modular, built-in, continuous height furniture that concealed the 'contents' behind solid doors, allowing the outward-facing surfaces to be smooth, continuous, and unblemished. In turn, the Frankfurt Kitchen shaped the behaviour and attitudes about the kitchen as an object, a space, and as a signifier of meanings that nearly one hundred years later, the contemporary media continues to reiterate.

In the presentation of contemporary fitted kitchens in advertising, the way the kitchen looks dominates. When kitchens are presented to us as media signs they are largely presented as static and 'pure' spaces, and are described in the advertising copy almost exclusively in terms of their visual appearance: do they look futuristic or elegant, traditional or spectacular? The word vision is reiterated and phrases such as 'vision of the future' or 'visionary design' confine design to the sense of sight so it is enough that the kitchen is seen. To be visible is function enough.

At both the V&A *Modernism* and the MOMA *Counter Space* exhibitions, a great number of visitors photographed both the Frankfurt Kitchen and themselves or friends against the backdrop of the kitchen. In so doing, spectators figuratively inserted themselves into the kitchen, making it possible for them to go beyond imagining how they would look in the space to seeing how they do look in the space (Fig. 2). Whether in showroom mock-ups or in media representations such as advertisements, this 'insertion of the self', or imagining how one would look in a fitted kitchen, is part of the consumption of the fitted kitchen. It is aided by the reflective materials used in contemporary fitted kitchens: shining glass and laminates, steel, polished marble, and wood that allow the consumer to see themselves in the kitchen, and through advertising copy that encourages the consumer to imagine how they would look, and how they appear to others, in the kitchen (Fig. 1).

Artfully lit, the kitchens in the media appear 'effortless' as well as apparently occupying an enormous amount of space, presenting the reader with an imaginary yet desirable lifestyle in which the contemporary fitted kitchen assumes meanings beyond the merely functional. While the actual kitchens represented in the media and in manufacturers marketing material may differ in price, all are photographed at their most 'pristine' moment and any extraneous matter (including people and food) is often excluded and replaced by static, measured, museum-style displays and still-lives of glassware and ceramics (Fig. 3). Baudrillard's (1998) claim that 'the humans of the age of affluence are surrounded not so much by other human beings [...] but by objects' may go some way in explaining the



absence of people from many contemporary advertising and editorial images that depict today's fitted kitchens.<sup>8</sup>

The two tasks that Frederick identified as work in the kitchen have continued to dominate the thinking about and designing of the kitchen in the 20<sup>th</sup> century. Reinforced by advertising messages and with the advent of more widespread, industrial food production displacing many of the earlier tasks done in the kitchen, these ideas were no doubt accepted as logical. Today, the food industry allows us to 'cook' by simply reheating pre-prepared food, but the contemporary fitted kitchen continues to reiterate the earlier notions of efficiency and 'functionality' even though the materials of, technologies in, and scale of many contemporary fitted kitchens make them over-specified for just two tasks. The amount of space, materials, and technologies on display in four kitchens in a recent Heinz television advert appear in excess of what is actually required to heat up a portion of microwaveable 'snap pot' baked beans.<sup>9</sup>

In the UK and Europe (except for Switzerland), the 60 cm-wide unit is the standard size for oven and fridge/freezer housings in fitted kitchens.<sup>10</sup> This European Norm (EN 1116) is based on an earlier German standard ISO norm of the 10 cm grid. Neither norm however has any relationship to human bodily dimensions or indeed to any kitchen tasks to be performed: the norms represent purely mathematical solutions to achieve economic efficiency in the production of fitted kitchen units. Less costly kitchen essentials like cutlery trays and kitchen recycling bins are all designed and manufactured to fit into the standard norm. Consequently, even where a fitted kitchen has been custom made, the individual units will be based on standard industry norms. Any difference is in style, appearance, surface materials, and in their modes of representation: the underlying forms of all the kitchens remain the same and the materials used for the surface skin of the contemporary fitted kitchen are as Baudrillard claimed 'gratuitous under a cover of functionality' and whose ostentatious use of materi-

*Figure 2 (facing page, top): The view into Schutte-Lihotzky's kitchen on display at the Museum of Modern Art, New York. Image courtesy of Gloria Graham-Sollecito, [kitchensforliving.net](http://kitchensforliving.net).*

*Figure 3 (facing page, bottom): Pristine and empty, people and food are largely excluded in representations of contemporary fitted kitchens (except for mono-foods that are themselves colour-coordinated). In their place are museum style displays and still-lives of glassware and ceramics. Image courtesy of IKEA.co.uk.*

als such as granites, stone, marble, woods, and metal (or even simply in the appearance of use in the form of veneers and laminates), become the signs of value that are accrued to the owner of the kitchen.<sup>11</sup>

Part of Modernist minimalism, the ‘truth to materials’, absence of ornamentation justified as functional, and ‘less is more’ of Mies van der Rohe’s aesthetic, have continued in the design of contemporary fitted kitchens where material properties (in both real and simulated form) are presented for sensual effect rather than functional use. The aim is not to create the Modernist higher spiritual, physical, and aesthetic experience, but a higher sense of luxury in, as Jameson (1988) contends, ‘The complacent play of historical allusion’.<sup>12</sup> Steininger’s *Heart of Gold* kitchen styled by Martin Steininger and Michael Paar is fabricated out of modular, pre-cast concrete units (Fig. 4). The brutalist material is now a sign of a ‘new luxury’ and is marketed as having a ‘tough and puristic outside with a glamorous inside’.<sup>13</sup> This ‘heart of gold’ as the ‘heart of the home’ is made out of one of the cheapest materials, but is one of the most expensive fitted kitchens on the market today: units are made to measure, albeit on the planning grid that is the industry norm, and start at €25,000 per unit. Despite being concrete, it is no tougher (clients are advised not to place wine or any other stain-forming items on the surface) and no more functional than any other kitchen.

Baudrillard’s object-as-fetish is further consolidated by the care instructions for worktop surfaces given by manufacturers at all ends of the market. These care instructions betray the surfaces’ lack of functionality: despite the solid appearance of granite, stone, marble, wood, metal, and cast concrete, all the kitchen materials demand no hot pans or dishes to be placed on the surfaces, require no oil or water spills (or wet dishes) to be left, and no chopping or slicing directly on the surface. Instead, frequent washing with warm water and mild detergent, oiling of solid woods, and buffing and polishing of the surface are required to keep it looking shiny and gleaming. Although perceived as signs of quality and of functionality, the actual functionality of the kitchen’s material is compromised by use.



Figure 4: The once-brutalist material, cast concrete, is now a sign of new luxury. The *Heart of Gold* kitchen range designed by Martin Steininger and Martin Paar is one of the most expensive on the market today. Image courtesy of steininger.designers.

Just as in Frederick's and Schutte-Lihotzky's kitchens, at both ends of the market, the removal of work in the fitted kitchen (and in its representations) continues. To actually use the fitted kitchen means to spoil its pristine appearance of being 'ready to work'. Instead of work, there is the illusion of work with the functional aesthetic while advertising copy reinforces the idea of 'no work' in its use of language: Homebase's *Malvern* country style kitchen offers the purchaser 'style with minimum effort', while the *Monza Latte* kitchen offers the (problematic) option of 'handleless effect handles'.<sup>14</sup> Function is merely an aesthetic and efficiency merely a myth, but both are influential ideologies that are continuously reinforced by the images of contemporary fitted kitchens circulated by the media.

Between the kitchen as a physical object and what the kitchen 'means' is the space in which the kitchen is located. Thinking about space has long been dominated by ideas of physical, measurable space. As such, it is not surprising that it is an aspect that is rarely examined beyond the historical development of the open plan kitchen or in interior design books showing 'optimum' spatial organizations of forms in U, L, and galley kitchen layouts and ideal worktop counter heights based on early time and motion studies. This spatial organization, worked out logically in relation to notions of efficiency in time and motion established in the early 20<sup>th</sup> century and that became part of the Modernist aesthetic, has itself become 'naturalized', what David Harvey (1990) terms a 'realised myth'.<sup>15</sup>

Devised by Otl Aicher in the early 1980s, the island kitchen is one of the most desired forms and spaces by consumers. In essence, the island is a kitchen table with 'knobs on', and is no more functional than any other kitchen. While it occupies a significantly greater spatial footprint, this is not space required for work or actual cooking: the space is needed in front of the island so that the kitchen itself can be seen along with its owners to occupy a large space. The owner can then become part of the visual spectacle itself: just like the professional TV chef who addresses the audience directly to camera, while additional cameras to the right, left, and above the island record the cooking process itself. The kitchen

island for the domestic consumer means that they, as chef, are always the focal point. The open-plan kitchen panopticon that the housewife once occupied and through which she observed the rest of her household is now reversed; the island kitchen's occupant is the subject of other's gaze, and just like on television, the island kitchen's owner is the star of their own show. Cooking is transformed into a performance: Rita Mielke (2004) writes that Boffi's *Grand Chef* and *Factory* are kitchens that 'build the stage on which passionate professionals show off their cooking skills. All you need are the spectators to applaud the show by eating and drinking'.<sup>16</sup> The Bulthaupt *b3* kitchen advertising image is a rare representation of a kitchen actually inhabited, albeit by children who pose and play, but don't actually cook or eat in the cavernous 'performance space' created by the island kitchen (Fig. 5).

Where rationality shaped the Modernist kitchen space, the contemporary kitchen is now shaped by the desire for more space. The contemporary fitted kitchen requires a much greater space than either Frederick or Schutte-Lihotzky ever envisioned because today we don't think about how much space we need or how much space we actually inhabit, but how much space we desire and believe we deserve.<sup>17</sup> Space, particularly in Western, industrialised societies, is a commodity with an economic exchange value and consequently is a finite resource; because space is not equally available to all people for all possible uses, space will belong to some more than others and mean more to some than others. Feeding our desires for more space are the representations of kitchen spaces in advertising images, in celebrity chefs' television kitchens, in showrooms, and now in museums, of kitchens that are always bigger and better than the ones we inhabit in reality. In reality, increasingly large kitchen spaces are desired because, just as in media representations, such space 'speaks volumes' because it is a marker of the ability to own the space. The real kitchen consequently becomes a space where ownership of that space is 'acted out' and demonstrated to others. Space, as Rowan Moore (2012) contends, is political, and concentrating on the way the space looks means that we can avoid worrying about (or dealing with) who has (or doesn't have) space.<sup>18</sup>



Figure 5 (top): The island kitchen as spectacle and stage: the advertising for the Bulthaup b3 kitchen includes a rare image of a kitchen that is actually inhabited—albeit by children who are neither cooking nor eating in the cavernous performance space. Image by Hubertus Hamm, courtesy of Bulthaup.

Figure 6 (bottom): This image of Poggenpohl's Artesio kitchen in polar white glass and brushed pine was accompanied by copy reading 'Knowing what counts'. Spectacular and enormous, the kitchen also includes a lit display case. Devoid of people, it is free for us to imagine ourselves in and naturalise our desires for such space. Image courtesy of Poggenpohl.

Advertising images and copy reinforce the desire for both a magnificently sized and appointed kitchen and for the recognition of our ability to consume, our ownership of space, and our economic status. Poggenpohl tells us its *Artesio* kitchens (Fig. 6) are designed 'Knowing what Counts'.<sup>19</sup> What counts are that this Poggenpohl kitchen is spectacular, huge, and looks like an art gallery: note the lit display cabinet of food-related artefacts. The otherwise empty space of the kitchen is free for us to consume, imagine ourselves in, and to use as a tool to naturalise the desire for more space.

That the island kitchen is both a space for performance and an object of desire is reinforced by media messages such as those featured in *Wallpaper\** (2012). Ferruccio Laviani for Aran Cucine's *Beluga* kitchen's name refers to an expensive delicacy that requires no actual cooking beyond toasting some bread on which caviar is traditionally served. The advertorial copy reads 'We [*Wallpaper\**] also liked the performance aspect of the main work area [...] the substructure reminds us of a modernist church. After all, what's more sacred and cinematic than contemporary cuisine?'<sup>20</sup> The *Beluga* is not a kitchen, it's a work of art; an installation; a theatre stage; a monumental sculpture; and most of all, a sanctified and precious space into which we the audience have been invited and, where at any moment, the miraculous apparition of food might occur. To not 'worship' the *Beluga* kitchen, or indeed to fail to worship any contemporary fitted kitchen, would be sacrilegious, heretical, and potentially risk the same social isolation of Dan Miller's (1988) three men who refused to engage in 'doing up their kitchens'.<sup>21</sup> We must admire it, desire it, and recognise it because it represents much more than what June Freeman (2004) calls a 'meal machine'.<sup>22</sup>

Marketing the contemporary fitted kitchen as a space and site for visual spectacle or entertainment as opposed to actual work is not however confined to the high-end market or manufacturers. IKEA's 2012 television advert for its kitchens did not feature any cooking but instead, a series of spaces dedicated to entertainment, pleasure, and leisure.<sup>23</sup> Hunger is no longer for food but for the recognition and appreciation by others of our ownership of objects, something that is demonstrated by the actions of the party guest examining the display of objects in the cabinet.<sup>24</sup>

Since the kitchen space is also part of the home, some of the multiple meanings of the word 'home' must also be examined alongside the fitted kitchen. For example, the kitchen may serve as a sign of 'rootedness' and an articulation of fears of 'the nomadic', the transient, and indeed, the homeless, something that Dan Miller (1998) hints at in his references to 'moving on' but does not develop.<sup>25</sup> Themes of metaphorical and physical homelessness (and fears of homelessness especially for women) can be discerned in great deal of literary work from, amongst others, Jane Austen (1813) (the impeding homelessness of the Bennett family in *Pride and Prejudice*) to George Orwell's (1933) *Down and Out in Paris and London*. Additionally, there are the many factual works whose theme is homelessness, but generally in these texts, the focus is on the position in society of those who are already homeless rather than how the fears of homelessness itself are articulated.<sup>26</sup> For Martin Heidegger (1978) and John Berger (2005), the home is an extension of our being and part of our identity, and consequently homelessness marks not only the absence of a material existence, but an absence of identity.<sup>27</sup>

If the kitchen is so culturally significant as the 'heart of the home', then the contemporary fitted kitchen, by its virtue of being fixed in its place, allows us to be (or at least encourages us to believe that we are) also fixed and permanent in one place, as opposed to the homeless or migrant who apparently lack an identity. The defined lines and the rectangular and horizontal forms of the contemporary fitted kitchens are the visual signs of rootedness. In media representations, whether advertising images or showroom dummies, and in the forms of contemporary fitted kitchens, the rectilinear (the sign of the sedentary) and the horizontal aspects (Berger's 'road for all journeys' and Heidegger's 'bridge' that gives us a sense of space and place) are repeatedly reinforced. The fitted kitchen is a sign of our being and belonging, and the fitted kitchen is largely rectangular because, as Marshall McLuhan (1994) claims, it 'speaks the language of the sedentary specialist, while the round hut or igloo, like the conical wigwam, tells us of the integral nomadic ways of food gathering communities'.<sup>28</sup>

Although new digital and communicative technologies allow us to live lives that are highly mobile and 'technomadic', this is not the same as being nomadic, transient, or homeless.<sup>29</sup> The difference is that we can choose to be technomadic (and we can also afford to be technomadic). So deeply held are the ideologies of the home and the fitted kitchen's place within it, that to be wholly regarded as part of our civilised, settled society, it seems we must return to the kitchen after our wanderings. To move home is sanctioned but the kitchen must be left behind: it must be fixed so it, and we, can also be fixed and rooted. To not be fixed and rooted is to be a migrant or homeless, and consequently, to be outside mainstream normative society. The most recent 'kitchen as a sign in a museum' appearance was at the V&A's *Tomorrow* exhibition (1 October 2013–2 January 2014), wherein Michael Elmgreen and Ingmar Dragse created an apartment home of a fictitious, retired architect, Norman Swann. The installation included a large island kitchen in polished steel that didn't contain any evidence of any food being prepared or eaten there: it couldn't because the kitchen didn't actually 'work' despite it appearing as though it could. Instead the installation kitchen was there because it must be there to create a 'complete home'.

It might be argued that the fitted kitchen means not only 'home', but at the same time, the fitted, fixed in, immovable, and permanent form of the fitted kitchen gives an articulation to our fears of homelessness. When a fitted kitchen is replaced by a new one, the replacement reconfirms our ownership or existence in the domain of the settled. The word 'home' has multiple meanings and contains the concepts of family, of life, of a building, of belonging, and of shelter (both physical and spiritual). The ability of the term 'heart of the home' to mean so much makes it attractive to designers, manufacturers, and advertisers who can use it to add significance to their work, even if it is often never stated obviously.

It's not surprising therefore that so much importance is placed on the fitted kitchen: so much time, expense, and effort is made in its manufacture, advertising, and installation, and so much space is accorded to it in the home, that it is now, in its historical and contemporary manifestations, on

show in museums. Fundamentally, the contemporary fitted kitchen has evolved only in size and styling, but not in design. Its forms continue to be derived from those established nearly one hundred years ago with the attendant notions of function and efficiency now reduced to a myth. If, as David Harvey (1997) contends, capitalism continues to be a 'revolutionary mode of production in which the material practices and processes of social reproduction are always changing', then the fitted kitchen too should change. This change involves not only its forms, but also its spaces and its functions.<sup>30</sup>

To transform society through design was one of the fundamental principles of the Modernists, and it is a principle worth maintaining. Importantly, there must be a change in our conceptualisations and representations of space in order to affect the material organisations of space. Without such a change in thinking and designing, the same forms will be repeated, dead styles imitated, and design will remain 'imprisoned in the past [in a culture of] superficiality in the most literal sense'.<sup>31</sup>

## ENDNOTES

1. In 1910 Frederick wrote (albeit under a pen name of Isobel Brands) a series of articles for *Printers' Ink* on the widespread availability of trademarked and branded goods in New York department stores; in 1914, a year after the publication of her first book *The New Housekeeping: Efficiency Studies in Home Management*, Frederick wrote her first advertising pamphlets endorsing the Hoosier Manufacturing Company.
2. For Meyer's role and use of Frederick's ideas in the development of kitchens in the Weissenhofsiedlung in Stuttgart, see Karin Kirsch, *The Weissenhofsiedlung: Experimental Housing Built for the Deutsche Werkbund, Stuttgart, 1927* (New York: Rizzoli, 1989).
3. Jean Baudrillard, *For a Critique of the Political Economy of the Sign* (St. Louis: Telos Press, 1981), pp. 56-57.
4. Adrian Forty, *Objects of Desire: Design and Society Since 1750*. (London: Thames and Hudson, 010), p. 21.
5. Alvin Toffler, *The Third Wave* (New York: Bantam, 1980).
6. Schutte-Lihotzky's Frankfurt Kitchen was both a sign of avant-garde ideas in Germany before World War II and later in Kemalist Turkey. See Ezra Akca, 'Civilising Housewives versus Participatory Users: Margarete Schutte-Lihotzky in the Employ of the Turkish Nation State', in *Cold War Kitchen: Americanization, Technology and European Users*, ed. by R. Oldenziel and K. Zachman (Boston: MIT Press 2009).
7. In 1926 May launched *Das Neue Frankfurt: Monatszeitschrift für die Fragen der Grosstadtgestaltung*, a monthly publication on urban development devised as a guide for city inhabitants to show them how Frankfurt was to be transformed from the 'old' into the 'new'. May and the group working on the magazine also organised a series of travelling exhibitions on the theme of Neue Bauen: the setting up of citizen's groups for community involvement, courses at schools and guided tours of the Siedlungen that was under construction, and talks on Radio Frankfurt to publicise the thoughts not only of May, but of other Modernists such as Le Corbusier and Walter Gropius. In 1928 four short documentaries were directed by Paul Wolff were commissioned by May to coincide with the Congrès International d'Architecture Moderne (CIAM) in Frankfurt in 1929: *Die Frankfurter Kleinstwohnung (Minimum Housing)*; a two-part film, *Neues Bauen in Frankfurt am Maine* (part 1) and *Die Hausfabrik der Stadt Frankfurt* (part 2); and *Die Frankfurter Küche (The Frankfurt Kitchen)*. *The Frankfurt Kitchen* was intended to show the savings in time and work for women in the kitchen; the old, traditional kitchen that required 90m of movement was compared to Schutte-Lihotzky's new kitchen that reduced 'travel' to 8m. Wolff's films can be viewed on *Planum: The Journal of Urbanism* website at: <<http://vimeo.com/67820174>> (*Die Frankfurter Kleinstwohnung*), <<http://vimeo.com/67820175>> (*Die Frankfurter Küche*), and <<http://vimeo.com/67820286>> (*Die Häuserfabrik der Stadt Frankfurt*).
8. Jean Baudrillard, *The Consumer Society* (London: Sage, 1998), p. 25.
9. Heinz television advert for snap pot microwave beans (2012) available at: <[http://www.youtube.com/watch?v=6JkEZb\\_vfg](http://www.youtube.com/watch?v=6JkEZb_vfg)>.
10. EN1116:2004 is available from: <<http://www.standard.eu/csn-en-1116>>.
11. Jean Baudrillard, *For a Critique of the Political Economy of the Sign*, p. 75.
12. Fredrick Jameson, *The Ideologies of Theory Essays Vol. 2*. (London: Routledge, 1988), p. 105.
13. Steininger advertisement copy in *Wallpaper\** magazine 'Kitchen Digest Supplement', 160 (2012), 17.
14. Homebase *Kitchens* brochure, Winter 2012.
15. David Harvey, *The Condition of Postmodernity* (Oxford: Blackwell, 1997).
16. Rita Mielke, *The Kitchen: History, Culture, Design* (Berlin: Feierabend, 2004), p. 221. The majority of Mielke's book (231 pages of 240) consists of full-colour pack shots (studio set-ups of kitchens supplied by manufacturers: gleaming, polished, artfully, and artificially lit) that are visually spectacular. The kitchens portrayed are also largely uninhabited and devoid of ordinary food, either in preparation or cooked, but instead are dressed for example with carefully arranged rows of colour-coordinating kippers and bottles of oil. Food, when it does appear, is in quite large quantities but appears as mono-foods: a large bowl of tomatoes; strawberries (in a red bowl to coordinate with the food mixer and tea towel); dozens of limes (along with a curiously discarded pair of backless high heels); a line of coconuts, red cabbages, or boxes of leeks, all laid out on gleaming countertops next to artfully arranged still lives of clean glassware and ceramics.
17. Schutte-Lihotzky's Frankfurt Kitchen measured just short of 69 sq.ft (3.44m x 1.87m): 81 sq.ft.
18. Rowan Moore, *Why We Build* (London: Picador, 2012).
19. Poggenpohl 'Knowing what Counts' advertising for its Artesio kitchen in *Wallpaper\** magazine 'Kitchen Digest Supplement', 158.
20. Advertorial copy for Aran Cucine's Beluga kitchen in *Wallpaper\** magazine 'Kitchen Digest Supplement', 16.

21. Dan Miller, 'Appropriating the State on the Council Estate', in *Man, New Series*, 23.2 (1988), 353-372. In Miller's interviews with forty working-class tenants on a north London housing estate, three examples cited of kitchens that were 'conspicuous by marked conservation of the original kitchen features' (p. 361) were kitchens belonging to single men: one retiree who had lived in his bedsit for thirteen years and had no family, few friends, and never left the flat save to shop and visit the library; another described by Miller as appearing 'equally isolated socially' (p. 361); and a third, who did have friends round (to drink) and had a few decorations in the kitchen. In one short paragraph, these three men are identified and positioned as socially lacking and play no further part in his study.
22. June Freeman, *The Making of the Modern Kitchen: A Cultural History* (Oxford: Berg, 2004).
23. 'Sociotainment' is the term developed by *Stilwerk Trendstudie* to explain the growing consumer desire for more than 'cocooning' and 'homing' on the part of 'atomised individuals' who need to find an entertaining way of creating social intimacy. Cooking and eating alone only satisfies the 'empty stomach', not 'the hunger for appreciation and emotional feedback' that individuals desire. *Stilwerk Trendstudie* (Hamburg: Stilwerk AG, 2002).
24. IKEA 2010 'Always in the Kitchen at Parties' television advert, available at <<http://www.youtube.com/watch?v=2Gm9rxNxyDU>>.
25. Dan Miller, 'Appropriating the State on the Council Estate', 359-365. Miller makes it clear that the occupants of these kitchens are tenants, not owner-occupiers who believed they would have to remove all their alterations and return the kitchen to its original state 'before they went [...]'. Where, exactly, the tenants were going is not discussed, but underlying Miller's piece is a sense that he sees, and his subjects see themselves, as temporary inhabitants, with several claiming that what they really wanted was a 'real' fitted kitchen 'of their own' and not the existing estate kitchens that were already fitted with a selection of floor and wall units.
26. See for example, M. Ravenhill, *The Culture of Homelessness* (Vermont: Ashgate Publishing, 2008), or K. Hopper, *Reckoning with Homelessness: The Anthropology of Contemporary Issues* (Ithaca, NY: Cornell University Press, 2002), which deal with the 'nuts and bolts' of the issue, for instance, the factors that lead to homelessness and the rights of the homeless. See also K. R. Arnold, *Homelessness, Citizenship and Identity: The Uncanniness of Late Modernity* (New York: State University of New York, 2004), which examines homelessness in terms of the globalization of the economy, national identity, and citizenship, particularly in post-9/11 America. Arnold argues that the increased security of public spaces has been matched by a quest for increased security and surveillance of immigrants and the homeless, and that domestic homelessness and conditions of statelessness (refugees, exiles, and poor immigrants) are defined and addressed in similar ways by the political sphere in order to perpetuate their exclusion.
27. See Martin Heidegger, 'Building, dwelling, thinking', in *Basic Writings* (London: Routledge and Kegan Paul, 1978), pp. 343-364; and John Berger *And Our Faces, My Heart, Brief as Photos* (London: Bloomsbury, 2005).
28. Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, Mass: MIT Press, 1994), p. 125.
29. Technomadic is a term coined by Steven K. Roberts to describe the lifestyle of a nomadic person who remains 'connected' through communications media while travelling. See Steven K. Roberts, *Computing Across America: The Bicycle Odyssey of a High-Tech Nomad* (New Jersey: Learned Information, 1988).
30. David Harvey, *The Condition of Postmodernity*, p. 205.
31. Fredrick Jameson, *Postmodernism* (London: Verso, 1991), p. 60.