

TAKING STOCK

A potted history of the material life of the kitchen.

If I were to describe a place that bears the influence of Royalty, a place that employs the technologies of energy distribution, war, space travel, whose history is allied to the productions of the Model-T Ford, to Bronze age ironwork and 21st century carbonised steel, not to mention a space more concentrated than most in ordinary life with potential weapons of mayhem, the kitchen is surely not the first place that comes to mind.

And yet.

In this potted romp through the material history of our kitchens, let me reintroduce you to the heart of the home.

I feel that I lost out on something fundamental growing up in a kitchen that didn't have an Aga cooker. In my adult years, having still only had a few encounters with Agas, I'm nervous around them – well, more fearful of sustaining third degree burns to be exact. In spite of this, in my mind, the Aga is the source of gentle heat and would have been the ideal rescuer of our pet lambs in need of resuscitation. Growing up, we had the lambs from my uncle's flock that the sheep couldn't rear, and I knew from my deep reading of the James Herriot books that our lambs would have been happier, more thoroughly heated if we'd have been able to put them into an Aga if they were weak and needed reviving. A lamb in a big cardboard box beside a radiator is not the same thing at all. I expect that there aren't any instructions in Aga cooker booklets for reviving lambs, as Nils Gustaf Dalen didn't design the Aga with live lambs in mind in 1929. He probably didn't consider that one lady would rely on her cat to let her know when her Aga was giving trouble. The cat would abandon it when it lost heat. Many of the things that happen in kitchens are not reflected in the appliance brochures or kitchen plans or the main functions that are expected to go on there. Remove the beasties, discount the time spent in the kitchen nursing a cup of tea, daydreaming over a cookery book, struggling with homework, cast out all of the novelty gadgets now gummy and yellowing and unused, and the kitchen begins to *de-kitchen*. We don't often plan it, or see it or actively acknowledge it, but our kitchens are more than the space and activities within the boundaries established by the worktop and cabinet. And we almost never think about the profound changes that the kitchen has undergone in little over a century, or marvel at the unlikely origins of some of our essential kitchen equipment. What the kitchen actually is though, is another matter altogether.

Who Made My Kitchen, then?

Catherine Beecher, Frederick Winslow Taylor and Christine Frederick, to name but three of the influential thinkers who left an indelible imprint on the 20th Century kitchen. Ms. Beecher (1800-1878) was one of the one earliest exponents of home economics. She set forth her philosophy in

A Treatise on Domestic Economy for the Use of Young Ladies at Home and at School, published 1841. In this, Catherine Beecher was one of the first to reflect on how and where – rather than what – food was prepared in the kitchen. (Rybczynski 1986, p.158-59) Christine Frederick (1883–1970) was an American home economist who applied the doctrines of Taylorism to the domestic sphere. (*Answers.com*. Christine Frederick Biography.) And what would that do to you in the kitchen? Taylorism would make you work faster – much faster. Frederick Taylor originated the discipline of time and motion studies. He minutely investigated all aspects of manual labour, where every single operation was monitored and timed with a view to producing the greatest output from the most efficient input. Taylor (1856-1915) developed the production line and greatly influenced Henry Ford’s introduction of the first moving assembly line. In 1908, a Model-T chassis was completed every 93 minutes from a previous 11 hours. (*Inventors.com*. Henry Ford Biography.)

A young German architect Margarete Schütte-Lihotsky designed what became known as the ‘Frankfurt Kitchen’ in 1925. Based on the kitchens in the dining cars of Mitropa trains, her kitchen for a Frankfurt apartment scheme made the most use out of 70 square feet of space. The Bauhaus School of modern architecture and design in Germany was naturally interested in matters domestic and of the materials and technology that were used in kitchens. In 1923, the French architect Le Corbusier described the home as “a machine for living in”, and by 1928, German architect Bruno Taut described a kitchen that he referred to as “the factory of the home”. (Mielke, 2004, p.20) The organisation of a highly specified workspace is what concerned pioneering psychologist and industrial engineer Lillian Moller Gilbreth (1878–1972). (*Answers.com*. Lillian Moller Gilbreth Biography.) She produced further refinements of the nature of kitchen work and her most recognisable contribution is the work triangle that determined the layout of many modern kitchens. (Snodgrass 2004, p. 210) But the one single change that revolutionised the kitchen was the removal of the fire from the centre of the living space to a side wall of the dwelling place.

Controlling the Fire

The development of the chimney and the enclosure of fire was the first - but arguably, one of the most significant of many steps in the advancement of the kitchen and by extension, society. The open fire in the centre of a room was the mark of a hovel by the mid18th century. Until the fire was enclosed in early stoves, the *batterie de cuisine* existed only as a few iron pots that stood on three legs over the open fire or rested on trivets.

The Iron, Bronze, Copper, and Space Ages

The kitchen remained unchanged – unchangeable even, for centuries, revolving, as meat does on a spit, around the life-sustaining fire. Until that fire was contained and its heat controlled, stewed food in one pot remained the staple food of domestic life.

“With the chimney and the side hearth came a sophistication of cooking techniques with built-in ovens, side hobs, cranes and mechanical spits along with an increasing range of iron cooking pots, kettles and frying utensils. Even the humble fire grate allowed further subtleties like cooking at a slower rate, or keeping food warm, and encouraged the development of the saucepan.” (Vickery 2009, p.266)

Well-established and wealthier kitchens did facilitate the roasting of meat on a spit, indeed several spits, and these remained in place with the advent of more elaborate ovens. (The Prince Regent’s kitchen at the Royal Pavilion Brighton circa 1800 is a noted example.) A primitive stove was the norm for most kitchens until the turn of the 20th century. Women – and it was mostly women, continued to labour in their kitchens, or the kitchens of their employers, as their ancestors had for previous centuries.

The first electric kitchen was created by an Austrian industrialist F.W.Schindler in 1888, and was displayed at the *World's Columbian Exposition* - better known as the World’s Fair - in Chicago in 1893. Visitors alternated between awe and admiration when they viewed a fully-functioning electric stove, an oven, grill, a coffee-maker, egg-boiler, an immersion heater and an electric samovar. (Mielke 2004, p.16) Extraordinary then that the kitchen of antiquity persisted into the 20th century. Women continued to heft heavy and unwieldy vessels of cast iron and copper filled with boiling liquids, to endlessly draw water from the well. The full day of hard labour involved in laundry work continued, the challenge of keeping the fire stoked and burning or of regulating the heat in a stove remained a concern well into the 1940s. Even more remarkable is that many of us reading this have personal experience of people still working in such kitchens up until the 1970s and 1980s.

Microwave technology was developed during the years of World War II. The Pillsbury Company delivered HACCP regulations to NASA, the Hazard Analysis and Critical Control Point concept. It was initially to predict the kinds of food safety risks and problems that may jeopardise a space crew, such as the one en route to the moon in 1961. (*HACCP for Excellence*. 2009.) In 1938, DuPont invented a material that NASA applied to heat shields, space suits, and cargo-hold liners. It is the coating for non-stick frying pans and we know it as Teflon. (NASA Spinoff, 2011) Pyrex, a cherished cookware in many kitchens in the 1970s was made from the same substance applied to the nose cone of guided missiles. (Snodgrass 2004, p.211) The Christmas turkey was sawed with electric knives in 1963 while in my Irish childhood a decade later, an elderly neighbour, Mary-Ellen - ancient of course in my eyes, continued to cook in a bastible with the crane over the open hearth. She had a table under the window where she baked in a large white enamel basin that doubled up for washing dishes. A meal-bin, meat safe and a dresser completed her kitchen, which was without gas, electricity and running water in 1973. The Hoovermatic De Luxe *Twin Tub* replaced several generations of primitive washing machines to become a staple of the 1960s kitchen, and the dishwasher, designed by Josephine Cochrane - another first to be displayed at the World’s Fair in 1893, had assumed a normative place under seamless Formica countertops. (Snodgrass 2004) Yet again, in my childhood in the 1970s, other neighbours, a duo

of unmarried sisters living adjacent to our farm, refused my father's offer to organise an inside tap for running water. Maggie and Johanna didn't even have a tap in the yard, reverting as they did to drawing water from the well several times a day. As I think of it now, I marvel at the clear, pure water in the well, but I know too that clean water for drinking and cooking was not guaranteed and realise that this concern still affects an elderly relation who refuses to drink plain water.

Home, De-home.

Industrialisation is a word that inherently implies some degree of dehumanisation, that is factory based, anti-domestic. The kitchen however, is a veritable confection of industrial goods, of mass produced materials and of processes and discoveries that have nothing homey about them. On the contrary, once the method for cooking could be liberated from the fire, enclosed and controlled with solid fuel, then gas and later electricity, the kitchen changed profoundly. Gas cooking in urban areas became the norm in the 19th century: while the first cast iron gas stoves came on the market in England in the early 1830s, as with any change and all new technologies, it took time before it was widely acceptable and people overcame their fears of a flammable, explosive and lethal gaseous agent. Gas explosions were not unusual and the exchange of one known and reliable source of heat for a combustible and invisible one of heat and light did not always appear to be a wise trade. Gas technology was widespread and affordable, far more so in urbanised Europe than in the US by the 1880s. This partially explains the proliferation of electrical inventions that surged onto the American market so early in the 20th century.

Electricity was an expensive source of fuel, the cost of wiring a house all but prohibitive, such that only the wealthier - and indeed both wealthy and brave members of society were willing to adopt it initially. Unlike gas, which could be seen and heard and smelled, electricity was perceived as an insidious form of energy. It was not unusual when electricity was attempting to make inroads into the domestic market that electric cookers resembled as closely as possible the gas cookers they were attempting to replace. Early electrical exhibitions did not always help in promoting it as a force to welcome; more like a force to be reckoned with. Exhibitions, local, national and international were all the rage at the turn of the century and technologies were energetically demonstrated.

Shock and Awe: The Story of Electricity (Usborne 2011) illuminated some of Thomas Edison's early electrifying expositions in the 1880s, which were decidedly macabre; his team of engineers publicly electrocuted stray dogs, later a horse. The power on show must have caused those attending to have qualms - at the very least - at the prospect of wiring up a residence with a power invisible and so lethal. After all, gas exhibitions didn't resort to slaying creatures to make a point about the usefulness of a gas cooker. People had a fundamental understanding of the uses of fire and water in the home, but water and electricity in any proximity was another matter entirely. An inherent understanding was not sufficient to comprehend this force. Electricity demanded knowledge: electricity brought science into domestic life.

Planes, Trains and Automobiles. What are they doing in the Kitchen?

Art deco, the era of impossibly glamorous people doing marvellous things in exotic places. No marketing guru could ignore the roaring twenties when it came developing a vision of modernity. Architects at the 1900s along with proponents of germ-theory were seemingly professionally oblivious to the glamour of the age, and between them, created an austere, clinical, depersonalised version of home, which endured throughout the new century. Sparse doesn't sell things, or knowledge either, but glamour does.

Early electrical appliances were clumsy, ungainly objects, the products of innovators and engineers, neither of who had training in stylising, much less design. In fact, the only industry that paid serious attention to the discipline of design and skill of stylising was the transportation sector, initially in the design of locomotives, then motor cars and later again, aeroplanes. The profession recognised as Industrial Design was born after the Wall Street Crash in 1929, the designers frequently with a background in commercial art or theatre design. Talented designers like Raymond Lowey, working on contracts with Sears, Roebuck transferred the streamlining metaphor of Art Deco to domestic appliances, creating the 'Coldspot' refrigerator of 1935.

A gleaming white-enamelled unit was enlivened with chrome hardware, signalling that it was functional, safe and quite fabulous. (Heskett 1980, p.106-07) Designers shaped and clad ovens, irons and toasters in polished metal alloys; they rounded previously straight edges and corners; they applied dials, headlamps and speed lines to all manner of kitchen appliances, all in a successful effort to insist that domestic life, including that of the kitchen, was life lived in the fast lane. (*Smithsonian National Air and Space Museum*

National Air and Space Museum Image Details Streamline Design) Owning such appliances was an unequivocal statement of modernity in all of its fantastic possibilities. Sunbeam's electric mixer of 1958 featuring a car headlamp motif was a far cry from early domestic electric food mixers, scaled down versions of their commercial factory-based progenitors, brutish, clunky, unfriendly-looking pieces of industrial equipment. In 1955, the American industrial designer Henry Dreyfuss wrote that the impetus for change in modern kitchen design had been brought about:

'...by two things that had nothing to do with cooking a meal or taking a bath – the automobile and the aeroplane. Actually, the auto and the plane have become symbols of the nation's scientific imagination and a vital part to its psychology, establishing trends and influencing people in everything they buy.' (Forty 1986, p. 199)

This might explain why the famed car manufacturer Ferrari is bothering with salt and pepper mills, and why the desirable Porsche brand is designing a Porsche kitchen. That expensive and select car brands occupy a niche market in the manufacture of kitchens and kitchen appliances indicates that the relationship forged over seventy years ago never quite divorced.

Electricity gradually gained market share, and incomprehension and fear was replaced by comfort and complacency. But danger still lurks within the home, and the kitchen is without doubt, the most dangerous place there.

Mishaps and Murder.

The concentration of energy, weaponry and chemicals distinguish the kitchen as the most potentially dangerous place we are likely to occupy or involve ourselves in. So how bad can it be? A report in *The Guardian* (Chrisafis 2001) reviewing Department of Trade and Industry home accident surveillance reports in the UK, which draws on hospital statistics for 1999, found that 76 people were killed each week in domestic accidents - more than died in road accidents. The most vulnerable were pensioners and small children. Some of the biggest killers in the household were DIY tools, stairs, carpets and kettles of boiling water. Certain mundane objects were more dangerous than others. Glossy magazines caused four times more accidents than chainsaws. Beanbags did more harm than meat cleavers but injuries attributed to vegetable preparation remained unacceptably high at 13,132.

Accidents aside, in spite of the convenience and obviousness of blades and cleavers, the incidence of kitchen related murders historically favoured food as the lethal dispatcher. Poison laden comestibles guaranteed a high rate of success while remaining something of a subtle vehicle for murder. Historically, the very real threat of death by knife while dining brought about changes in cutlery from surprising sources. For this very reason, 'chopsticks replaced bladed instruments in China around 3,000 BCE to reduce the potential for violence at the table.' (Snodgrass 2004, p.96) Europe, though no less concerned about violent outbreaks at mealtimes, endured tension-laden repasts through to the 17th century. Until then, it had been the norm to carry one's dining instruments on one's person, typically a spoon and a sharp blade with a handle. It had become common practise to place a whetstone at the entrance to a banqueting hall to ensure that one's knife was adequately sharpened for any situation that may arise within. (Ibid., p.341) 'By the 1300s, steel blades were favoured as they produced a sharper edge, such that carving became a performance art. Writing in *IL Trinciante (The Carver)* in 1581, the Renaissance courtier Vincenzo Cervio described the intricacies of hoisting a whole turkey aloft on a fork to perform a theatrical mid-air carving.' (Ibid.)

The accession of King Henry XIII to the French throne brought an end to the presence of pointed, sharpened blades to the table. Unsurprisingly, the monarch was anxious to prevent an untimely – and avoidable – demise while dining, and it is said that it was the king's advisor, Cardinal Richelieu, who offered a knife with a rounded end to replace the sharp blades banned by the king. These are the ancestors of the standard table knife. (Ibid.)

The arguments about knives rage on, whether carbon steel is superior, how Julia Child detested stainless steel knives, what to make of the new ceramic knives, 50% sharper than stainless steel. Few actual knives though, either in terms of worthiness or usefulness can surpass that of one listed in Henry VIII's inventories, the knife case itself described as: "garnished with sundry

emeralds and pearls and rubies about the neck and divers amethysts, jacinths and balases upon the foot thereof furnished with knives, having diamonds at both ends.”(Ibid.) It must be noted though, that if your daily diet of 13 different dishes which included poultry, beef, venison, lamb, pork, rabbit, swans and guinea fowl, a bejewelled and precious knife might just be the vital kitchen tool necessary for the job. Including alcoholic drinks, bread and strawberries, Henry VIII’s weekly shopping bill came to around €600 in current money. (Noack, 2009)

It’s Modern, it’s new. It must be the Future!

It’s one thing to extol the virtues of a modern technology and the unprecedented changes it will bring to your life. It’s quite another issue to persuasively convey that message to the potential consumer. The track taken by promoters of domestic electricity was to emphasise the freedom from the burden of housework and the liberation of the housewife from the kitchen and home. Electricity meant more time to do things that weren’t housework, and of the work, the message was that electricity was a workforce in itself; washing, cooking and cleaning and the multitude of household chores automatically happened when electricity entered the home. Advertising of the period showcases immaculately and stylishly dressed women standing by gleaming cookers and dishwashers where ready to serve food and sparkling dishware was on hand. Everyone featuring in such advertisements gleamed and the only real evidence of labour was the arrival of a harried executive father from a day at the office. The opportunities offered by the modern kitchen never indicated that the burden of work had shifted solely onto the shoulders of the housewife, who now faced the additional challenges of raised expectations of her domestic skills. Well equipped homes removed a great deal of the effort of housework, but the time required to do it remained largely unchanged. A housewife of the 1950s had to perform all of her kitchen operations in full view of visiting guests who could enjoy all of the goings-on in the kitchen of contemporary open-plan houses. Middle class home-owners of the previous century had been able to isolate the kitchen from other rooms, and the sounds, smells and heat of the room no longer intruded into the living areas of the home. All of the kitchen equipment and range of utensils came to co-habit in one space. Manufacturers of electrical appliances recognized the benefit of standardized shapes that would conform to the dimensions of the fitted kitchen devised by the home economists, resulting in the seamless flow of units and equipment so beloved of contemporary avant-garde kitchen designers.

While the housewives featured in the advertising campaigns of the 1950s didn’t engage in actual kitchen work, the people who feature in contemporary kitchen advertising seem not to engage with anything, gliding as they do through the spaces, rarely touching any objects or surfaces. They have no demonstrable relationship with food other than a fetish for bowls of fruit. They appear to be a breed of slender, 21st century kitchen dwellers with straight, sleek hair. IKEA advertising, sporting great variety in coiffure, offers the most animated version of the kitchen where it’s portrayed as the ultimate party space. But these party zones and zen-like ethereal

spaces are not kitchens. They are theatres. It is here, in the theatre of domesticity, that Heston Blumenthal has returned science to the kitchen, where food transmutes into edible alchemy.

Home Sweet Home – the Irish Kitchen.

Home-made brown bread, a warm welcoming kitchen tenderly overseen by a warm and welcoming Irish mother is the dream conjured up in Calor Gas Ads. Unlike the dream kitchens of 1950s advertising, the Calor kitchen is one many of us are acquainted with. The best version of a kitchen is a space that transcends its functional requirements and is not the kitchen fantasy of a car manufacturer. The problem of defining an Irish kitchen was most acutely felt by the Irish Countrywomen's Association (ICA) in the 1950s. The Rural Electrification programme was underway and Minister for Agriculture James Dillon (he served from 1954–57) requested the ICA to design a kitchen that would both educate and encourage rural Irish housewives as to the life-altering possibilities of introducing water and electricity into Irish farmhouses. The ICA contracted architect Eleanor Butler (1915–1997) to realise a kitchen that was simultaneously modern and traditional. Ms. Butler incorporated what was perceived to be the key elements of modern life with the symbol of a welcoming home, the open hearth. Her 1957 kitchen was in two parts, one side incorporating an electric cooker, sink area, a fold-away ironing board, and built-in cupboards. A shelf-unit doubled as room divider and on the other side, Ms. Butler included a traditional hearth and a four-legged version of the creepie. The Model Farm kitchen was first displayed at the Spring Show in Dublin in 1957 where it was well received, commended for its modernity which it achieved without losing its traditional core. (Sheedy, 1957, p.24) The Model Farm Kitchen was modified, expanded and exhibited until the early 1960s, when it took to the road and travelled the Irish countryside for many years subsequently. 'On the fairday in Tullamore in May 1959, a farmer called in to the kitchen....and offered £1,000 in cash for it as it stood.' (Shiel, 1984, p.191) The Rural Electrification Scheme began in 1947, and had connected 2,227 consumers by the end of the year. At the time of the ICA's second year showcasing electricity in the home, 215,243 consumers were connected. This is not the picture of easy, glamorous living advertised in other campaigns for electricity, but the relief from centuries of toil, of time-consuming, back-breaking work that dominated the lives of housewives, urban and rural, was no less delicious for all of that.

Our kitchens are concentrations of a long century of extraordinary, surprising and ongoing change. We don't think about them like that because a good kitchen is a timeless place of ordinary things, constancy, and the unspoken belief that at the heart of the matter, the very best of things don't really change much, if at all.

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